**On approval of state mandatory standards for preschool education and training, primary, basic secondary and general secondary, technical and vocational, and post-secondary education**

Order of the Minister of Education of the Republic of Kazakhstan dated August 3, 2022 No. 348. Registered in the Ministry of Justice of the Republic of Kazakhstan on August 5, 2022 No. 29031.

In accordance with subparagraph 14) of Article 5 of the Law of the Republic of Kazakhstan "On Education" **I ORDER:**

Footnote. Preamble - as amended by Order No. 74 of the Minister of Education of the Republic of Kazakhstan dated April 15, 2025 (shall enter into force ten calendar days after the date of its first official publication).

1. Approve:

1) State compulsory standard of preschool education and training in accordance with Appendix 1 to this order;

2) The state compulsory standard of primary education in accordance with Appendix 2 to this order;

3) State compulsory standard of basic secondary education in accordance with Appendix 3 to this order;

4) State compulsory standard of general secondary education in accordance with Appendix 4 to this order;

5) State compulsory standard of technical and vocational education in accordance with Appendix 5 to this order;

6) State compulsory standard of post-secondary education in accordance with Appendix 6 to this order.

2. To declare certain orders of the Ministry of Education and Science of the Republic of Kazakhstan to be no longer in force in accordance with Appendix 7 to this order.

3. The Committee for Preschool and Secondary Education of the Ministry of Education of the Republic of Kazakhstan, in accordance with the procedure established by the legislation of the Republic of Kazakhstan, shall ensure:

1) state registration of this order in the Ministry of Justice of the Republic of Kazakhstan;

2) posting this order on the Internet resource of the Ministry of Science and Higher Education of the Republic of Kazakhstan after its official publication;

3) within ten working days after the state registration of this order, submission to the Legal Department of the Ministry of Science and Higher Education of the Republic of

Kazakhstan of information on the implementation of the measures provided for in subparagraphs 1) and 2) of this paragraph.

4. Control over the implementation of this order shall be assigned to the supervising Vice Minister of Education of the Republic of Kazakhstan.

5. This order shall come into effect upon expiry of ten calendar days after the date of its first official publication, with the exception of paragraphs 24, 29, 34, 44 of the State Compulsory Standard of Basic Secondary Education, which shall come into effect on September 1, 2024.

Footnote. Clause 5 has been amended in the Kazakh language; the Russian text remains unchanged by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (effective from the day of its first official publication).

*Minister of Education*

*A. Aimagambetov*

*Republic of Kazakhstan*

Appendix 1
to the Order of the Minister of Education
of the Republic of Kazakhstan
dated August 3, 2022 No. 348

**State Compulsory Standard of Preschool Education and Training**

**Chapter 1. General Provisions**

1. This State Compulsory Standard of Preschool Education and Training (hereinafter referred to as the standard) has been developed in accordance with Article 56 of the Law of the Republic of Kazakhstan "On Education", subparagraph 4) of paragraph 15 of the Regulation on the Ministry of Education of the Republic of Kazakhstan, approved by Resolution of the Government of the Republic of Kazakhstan dated August 19, 2022 No. 581 "Some Issues of the Ministry of Education of the Republic of Kazakhstan", and defines the requirements for:

1) the content of preschool education and training with a focus on the results of education and training;

2) the maximum volume of the students' academic workload;

3) the period of education and training.

Footnote. Clause 1 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

2. The standard is the basis for:

1) development of standard and variable curricula for preschool education and training in order to ensure variability of educational programs;
2) development of standard and educational (variable, individual, adapted, additional) programs for preschool education and training;
3) development of methodological materials for the organization of the educational process in pre-school organizations and pre-school classes of schools (lyceums, gymnasiums) (hereinafter referred to as pre-school classes), regardless of types, departmental subordination and forms of ownership;
4) development of a daily routine for age groups of a preschool organization;
5) creating favorable conditions for the holistic development and realization of the potential of each child;
6) creation of socio-psychological and pedagogical conditions for the upbringing and education of children, including special conditions for children with special educational needs and disabilities;
7) creation of a developing subject-spatial environment, including a special environment aimed at supporting the individuality and subjectivity of the child;
8) organization of the educational process for the upbringing and education of children.
3. The following terms and their definitions are used in this Standard:
1) special conditions for obtaining education - conditions that include educational, as well as special, individually developing and correctional-developmental programs and teaching methods, technical, educational and other means, living environment, psychological and pedagogical support, medical, social and other services, without which it is impossible for individuals (children) with special educational needs, as well as children with disabilities, to master educational programs;
2) a developmental environment - an environment with a variety of materials, designed to support children's initiative, providing free access to objects and toys and the opportunity to independently choose activities and implement their ideas throughout the day;
3) children with special educational needs (hereinafter referred to as children with SEN) – children who experience permanent or temporary needs for special conditions to receive education of the appropriate level and additional education;
4) the holistic development of the child – the physical, psychological, social, emotional health and safety of the child, ensured through the creation of conditions for physical activity, healthy and nutritious nutrition, friendly relationships and the organization of a developing environment;

5) curriculum – a program that determines the content and scope of knowledge, skills, abilities and competencies to be mastered.

**Chapter 2. Requirements for the content of preschool education and training with a focus on the results of education and training**

4. Pre-school organizations and pre-school classes carry out educational and upbringing activities in accordance with:

1) this standard;

2) Appendix 1 of the Model Rules for the Activities of Pre-School, Secondary, Technical and Vocational, Post-Secondary Education Organizations, Additional Education of the Relevant Types and Kinds, approved by Order of the Minister of Education of the Republic of Kazakhstan dated August 31, 2022 No. 385 "On Approval of the Model Rules for the Activities of Pre-School, Secondary, Technical and Vocational, Post-Secondary Education Organizations, Additional Education of the Relevant Types and Kinds" (registered in the Register of State Registration of Regulatory Legal Acts under No. 29329) (hereinafter referred to as the Model Rules);

3) Model curricula for preschool education and training, approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated December 20, 2012 No. 557 (registered in the Register of state registration of regulatory legal acts under No. 8275) (hereinafter referred to as the Model Curricula);

4) The standard curriculum for preschool education and training, approved by the order of the Acting Minister of Education and Science of the Republic of Kazakhstan dated August 12, 2016 No. 499 (registered in the Register of state registration of regulatory legal acts under No. 14235) (hereinafter referred to as the Standard Curriculum);

5) educational programs developed for preschool organizations.

Footnote. Clause 4 as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

5. In the educational process:

the holistic development and disclosure of the potential of each child is carried out on the basis of universal and national values, taking into account his interests, characteristics and needs;

the protection of rights, life safety, and strengthening of health of pupils is ensured;

the foundations of a healthy lifestyle, life safety skills, motor, adaptive, communicative, social-emotional, cognitive skills, a humane attitude towards oneself, family, peers, the surrounding world, a culture of communication among pupils, the foundations of national self-identity, citizenship, patriotism are formed;

the physical, intellectual, cognitive-speech, artistic-aesthetic, and creative abilities of pupils are developed;
love for the Motherland and native language is cultivated;
Equal starting opportunities are created for the child's physical, psychological, emotional, and social readiness for school.
6. The development of competencies, physical and personal qualities of pupils is carried out through the formation of skills and abilities in accordance with age characteristics.
7. Physical development.
Physical development involves raising a physically healthy child, developing a conscious attitude towards their health, the basics of a healthy lifestyle, and life safety skills.
The physical development of children is aimed at assisting parents in acquiring skills for the care and development of children from an early age; developing cultural and hygienic skills in pupils, as well as motor experience through the mastery of basic types of movement; developing physical qualities and the need for physical activity; conducting various games, including national, outdoor, and competitive team games; performing sports exercises; familiarizing with the elements of sports games; developing creative abilities and teamwork skills.
8. Development of communication skills.
The development of communication skills involves developing oral speech, vocabulary, mastering communication skills in various life situations, developing fine motor skills, and developing teamwork skills, taking into account the individual characteristics and needs of children.
The development of communication skills addresses the development of students' oral coherent speech in various types of children's activities, as well as through familiarization with children's fiction, the culture, customs, and traditions of the people of Kazakhstan, reading, retelling, and analysis of works, the formation of a sound culture of speech, enrichment of active vocabulary, and mastery of speech norms and communication culture.
9. Development of cognitive and intellectual skills.
The development of cognitive and intellectual skills involves students acquiring basic cognitive and research skills necessary for interacting with the world around them.
The development of cognitive and intellectual skills involves developing understanding of sensory standards, elementary mathematical concepts and ideas, mastering constructive activity techniques, developing creative and critical thinking, and fostering civic responsibility, patriotism, and respect for national culture.

10. Development of creative skills and research activities of children.

The development of creative skills and research activities of students includes tasks to develop the abilities and skills of perceiving and understanding works of art, emotional cognition of the surrounding world, and ideas about types of art.

To develop creative skills and research abilities, conditions are created for the development of creative imagination, emotional-sensory sphere, worldview, thinking, artistic-aesthetic taste, and the cultivation of patriotism through familiarization with national culture, taking into account the individual characteristics and needs of students.

11. Formation of social-emotional skills.

The goal of developing social-emotional skills is the positive socialization of students, including children with special educational needs, introducing them to socio-cultural norms and traditions of the family, society and state, and developing spiritual and moral values.

The development of social and emotional skills includes tasks related to familiarization with social and ethical traditions and norms of society, universal values, fostering independence, resolving life situations, developing a respectful attitude towards others, a sense of belonging to one's family, emotional responsiveness, empathy, developing the student's ability and readiness to demonstrate moral qualities, active actions, and actions that meet the requirements of moral standards, developing knowledge and respect for the history and culture of the Motherland, expanding ideas about the native land, developing a respectful attitude towards various types of work and people of different professions, expanding knowledge of objects and phenomena of animate and inanimate nature, and developing creative thinking.

The development of children's social and emotional skills is achieved through:

1) acceptance, recognition and support of children’s feelings and emotions;
2) articulating the feelings of the child and those around him;
3) support for expressing care for oneself and others;
4) creating high-quality, meaningful interactions with children;
5) teamwork;
6) support for communication in a group, initiative and independence of children in various types of children's activities;
7) meaningful dialogues with children;
8) providing children with opportunities to express their opinions during free play.

12. The development of children's communication, cognitive, intellectual, creative skills, research abilities, their physical development, and the formation of social and emotional skills are realized through the integration of organized activities for:
1) physical education (adaptive physical education for children with special educational needs);
2) swimming (if there is a swimming pool);
3) speech development;
4) fiction;
5) basic literacy;
6) Kazakh language;
7) sensorics;
8) the basics of mathematics;
9) design;
10) familiarization with the surrounding world;
11) drawing;
12) modeling;
13) applications;
14) music.
Footnote. Clause 12 – as amended by Order No. 12 of the Minister of Education of the Republic of Kazakhstan dated January 23, 2025 (shall enter into force ten calendar days after the date of its first official publication).

13. When planning the educational process, the variability and use of various forms, methods and techniques for organizing children's activities are taken into account.
When organizing and conducting the educational process, the interests, needs, age and individual characteristics of the pupils are taken into account.
14. When raising and educating children with special educational needs and disabilities, standard, educational, special, and individual/adapted educational programs are used in accordance with the educational needs of the child.
15. The content of the Model Curriculum includes:
1) implementation of the objectives of the educational process;
2) the content of organized activities;
3) effective integration of educational activities;
4) ensuring the principles of continuity and continuity of education and training;
5) the expected result of organized activity.
16. Educational programs (variable, individual, adapted, additional) are developed on the basis of the Model Curriculum and provide for:

1) achievement of the goals and objectives defined in the content of the Model Curriculum;
2) content corresponding to the direction chosen by the preschool organization and the educational needs of the child;
3) ensuring the principles of continuity and continuity of the content of education and training;
4) the expected result of organized activities;
5) effective integration of educational activities;
6) the use of proven and adapted innovative methods and technologies of education and training.
17. In the educational process, according to the daily routine of the preschool organization, which includes activities (reception of children, morning exercises, meals, walks, daytime sleep, hardening procedures, children going home), types of children's activities are provided (organized, play, cognitive, communicative, creative, experimental, work, subject, motor, visual).
18. To ensure the emotional well-being, comprehensive and holistic development of pupils, the opportunity for children to choose the types of activities and participants in joint activities, the richness, accessibility, variability and safety of play areas, a developmental environment is created.
19. Indicators for assessing the development of skills and abilities of children with special educational needs are the basis for developing an educational trajectory and planning corrective work.
20. The level of mastery of the content of preschool education and training is focused on target results that determine the possible achievements of the child according to the list of skills and abilities from birth to admission to the 1st grade, presented in the appendix to the Model Curriculum.
21. A graduate of a preschool organization and preschool class has the following qualities:
physically developed;
curious;
initiative;
persistent;
adaptable, sociable;
self-confident;
able to work in a team;
emotionally responsive;

having primary ideas about oneself, family, society (immediate social group), state (country), the world and nature.

**Chapter 3. Requirements for the maximum volume of academic workload for students**

22. The maximum volume of the educational workload for pupils is determined in the Standard Curricula for Preschool Education and Training for Children of Nursery Age (1-2 years old) and for Children of Preschool Age (3-5 years old).

23. When developing variable curricula for preschool education and training, the maximum volume of the educational workload of pupils is observed, taking into account the age, psychophysiological capabilities and characteristics of the pupils.

**Chapter 4. Requirements for the period of education and training**

24. The age division is as follows:

1) nursery age – children 0 (newborn children) - 2 years;

2) preschool age – children 3-5 years old.

25. Age groups are formed in the preschool organization at the beginning of the school year, taking into account the age of children who have reached full age in the calendar year:

early age group – children 1 year old;

younger group – children 2 years old;

middle group – children 3 years old;

senior group – children 4 years old;

pre-school group, pre-school class of school (lyceum, gymnasium) – children aged 5 years.

26. The period for mastering the content of the Standard Curriculum is 5 years, in one age group – 1 year.

Note FROM!

Appendix 2 is provided for in the version of the order of the Minister of Education of the Republic of Kazakhstan dated 23.01.2025 No. 12 (shall come into force on 01.09.2026 for grades 1, 5, on 01.09.2027 for grades 2, 6, on 01.09.2028 for grades 3, 7, on 01.09.2029 for grades 4, 8, on 01.09.2030 for grade 9).

Appendix 2
to the Order of the Minister of Education
of the Republic of Kazakhstan
dated August 3, 2022 No. 348

**State Compulsory Standard of Primary Education**

**Chapter 1. General Provisions**

1. This state compulsory standard of primary education (hereinafter referred to as the Standard) has been developed in accordance with Article 56 of the Law of the Republic of Kazakhstan "On Education" (hereinafter referred to as the Law),

subparagraph 4) of paragraph 15 of the Regulation on the Ministry of Education of the Republic of Kazakhstan, approved by Resolution of the Government of the Republic of Kazakhstan dated August 19, 2022 No. 581 "Some issues of the Ministry of Education of the Republic of Kazakhstan", and defines the requirements for the content, maximum volume of academic workload, level of preparation of students and the duration of study.

Footnote. Clause 1 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

2. The Standard uses terms and definitions in accordance with the Law. In addition, the following terms and definitions are included:

1) the basic content of primary education - the composition, structure and volume of the content of primary education, subject to compulsory study in educational organizations, regardless of their type, kind and form of ownership, as well as the language of instruction;

2) assessment – the process of comparing the learning outcomes achieved by students with the expected outcomes based on developed criteria;

3) assessment criteria – specific indicators on the basis of which the assessment of students' academic achievements is carried out;

4) monitoring of the educational process – systematic observation, diagnosis, analysis, assessment and forecast of the state, dynamics of changes in the results and conditions for the implementation of the educational process in educational organizations;

5) educational values – guidelines in constructing a system of educational goals, which serve as the basis for determining the content of education and are the leading factor in the formation of the student's personality;

6) educational activity – a process of purposeful, pedagogically sound, consistent interaction of educational subjects, during which the tasks of teaching, development and education of the individual are solved, including taking into account the special educational needs and individual capabilities of students;

7) educational area – a component of the basic content of primary education, including a set of related academic subjects;

8) summative assessment – a type of assessment that is carried out at the end of a certain academic period (quarter), as well as the study of sections/cross-cutting topics in accordance with the curriculum;

9) inclusive education – creation of conditions for equal access to education for all students, taking into account special educational needs and individual capabilities;

10) the invariant component of the academic load is a component of the standard curriculum that defines the academic subjects that are mandatory for study by all students in educational organizations, regardless of their type, kind and form of ownership, as well as the language of instruction;
11) variable component of the academic load – a component of the standard curriculum, which is determined by the educational organization in accordance with the educational needs of students;
12) expected learning outcomes – a set of competencies expressing what exactly the student will know, understand, and demonstrate upon completion of the learning process, including taking into account special educational needs and individual capabilities
13) extracurricular activities are an integral part of the integrated educational process in an educational organization, one of the forms of organizing students' free time, implemented in addition to the academic workload determined by the standard curriculum;
14) standard curriculum – a document regulating the list of academic disciplines (subjects) and determining the volume of the invariant and variable components of the academic load of the corresponding level of education;
15) formative assessment – a type of assessment that is carried out during everyday work in the classroom, is a current indicator of students' academic performance, ensures operational communication between the student and the teacher during the learning process, feedback between the student and the teacher and allows for the improvement of the educational process;
16) elective course – a course chosen by students, an integral part of the variable component of the curriculum, aimed at expanding the educational preparation of students.
3. The application of the Standard is aimed at:
1) improving the quality of teaching and education by achieving a system of goals for primary education, presented in the form of expected learning outcomes;
2) creating conditions for studying Kazakh, Russian and foreign languages;
3) a combination of academic and practical focus of primary education, which provides for students to acquire the basics of theoretical knowledge and develop the ability to apply the acquired knowledge to solve problems of an applied nature;
4) a gradual increase in subject knowledge and skills, ensuring the depth and complexity of the content of academic subjects, taking into account the age capabilities of students;

5) the implementation of the principle of the unity of education and training, based on the interconnectedness and interdependence of the values of education and the system of expected learning outcomes that determine the substantive basis of the daily educational process;
6) ensuring the protection of children's health, as well as the creation of favorable conditions for meeting the special educational needs of students and their needs for receiving additional educational services;
7) ensuring the equivalence of primary education in the context of the diversity of types and kinds of secondary education organizations;
8) support and development of innovative practices in educational organizations;
9) organization of an objective assessment of the activities of educational organizations to ensure the quality of education
4. The scope of knowledge and the content of the academic subjects of the invariant component in educational organizations for students with mild mental retardation and moderate mental retardation are implemented in accordance with the standard curricula (hereinafter referred to as the SCC) approved by the order of the Minister of Education and Science of the Republic of Kazakhstan dated November 8, 2012 No. 500 "On approval of standard curricula for primary, basic secondary, general secondary education of the Republic of Kazakhstan" (registered in the Register of state registration of regulatory legal acts of the Republic of Kazakhstan under No. 8170) and the programs approved by the order of the Minister of Education and Science of the Republic of Kazakhstan dated April 3, 2013 No. 115 "On approval of standard curricula in general education subjects, elective courses and electives for general education organizations" (registered in the Register of state registration of regulatory legal acts under No. 8424).

**Chapter 2. Requirements for the content of education with a focus on learning outcomes**

5. The following are defined as basic values in the content of primary education:
1) Kazakhstani patriotism and civic responsibility;
2) respect;
3) cooperation;
4) work and creativity;
5) openness;
6) lifelong education.
6. The goal of primary education is to create an educational environment conducive to the harmonious development of the student's personality, possessing the basics of the following broad range of skills:
1) functional and creative application of knowledge;
2) critical thinking;

3) conducting research work;
4) use of digital technologies;
5) the use of various communication methods, including language skills;
6) ability to work in a group and individually.
Footnote. Clause 6 as amended by Order No. 182-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 (effective from July 12, 2026 ).

7. The content of primary education is oriented towards learning outcomes and is determined taking into account the following aspects:
1) compliance with the dynamic demands of modern society;
2) the need to develop critical, creative and positive thinking;
3) the feasibility of strengthening the integration of the content of academic subjects;
4) ensuring the unity of training, education and development.
8. Primary education is implemented within the framework of the trilingual education policy. The goal of trilingual education is to develop a multilingual individual—a citizen of Kazakhstan who speaks at least three languages, is able to engage in dialogue in various fields, values the culture of their own people, and understands and respects the cultures of other peoples.
9. Trilingual education is practically implemented through:
1) ensuring the level of acquisition of Kazakh, Russian and foreign languages in accordance with international standards;
2) organization of extracurricular activities in Kazakh, Russian and foreign languages.
10. The content of the educational area "Language and Literature" is implemented in the following subjects:
1) “Teaching literacy”, “Kazakh language” in classes with the Kazakh language of instruction, “Russian language” in classes with the Russian language of instruction, “Kazakh language” in classes with a non-Kazakh language of instruction, “Russian language” in classes with a non-Russian language of instruction, “Literary reading”, “Foreign language”;
2) In educational institutions with the language of instruction of ethnic groups residing compactly within Kazakhstan, the "Language and Literature" curriculum additionally includes the subject "Native Tongue" of that ethnic group. For educational institutions with Uyghur/Uzbek/Tajik as the language of instruction, the subject "Native Tongue" is included as an invariant component of the standard curriculum.
11. The tasks of the pre-primer and primer periods of the subjects "Alippe", "Ana tili" are implemented by the textbook "Alippe" in the first half of the year, the post-primer period by the textbook "Ana tili" in the second half of the year for students with

Kazakh as the language of instruction; "ABC", "Literacy training" are implemented by the textbook "ABC" in the first half of the year, the post-primer period by the textbook "Literacy training" in the second half of the year for students with Russian as the language of instruction.

12. The content of the subjects in the "Language and Literature" educational area involves developing understanding of the unity and diversity of Kazakhstan's national cultures, the state language as the foundation of national self-awareness, and a communicative approach aimed at developing skills in four types of speech activity. The content of language subjects is aimed at developing students' interest and a positive attitude toward language learning through playful and cognitive activities, as well as developing initial communication skills for information exchange, developing the ability to work with text as speech material, and using phrases and expressions from the text in specific situations.

13. The study of the Kazakh language/Russian language/native language as a language of instruction is based on the use of literary texts to develop students' speaking skills and the ability to independently work with different types and kinds of texts.

14. Teaching the second (Kazakh/Russian – depending on the language of instruction) and third (foreign) language is aimed at organizing the level-by-level acquisition of the language.

15. The content of the educational field "Mathematics and Computer Science" is implemented in the academic subjects: "Mathematics", "Digital Literacy".

16. The content of the educational area "Mathematics and Computer Science" is aimed at developing students' basic mathematical knowledge for describing various objects and phenomena of the surrounding reality; mastering oral and written computational algorithms; developing general problem-solving techniques, the ability to build logical judgments based on measurement and computational skills; developing skills in using basic digital technology tools, the ability to search, select, and transmit information, design objects and processes, and apply simple methods of working with tables, charts, graphs, and diagrams for analyzing, interpreting, and presenting data.

Footnote. Clause 16 as amended by the order of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 No. 182-НҚ (comes into effect on July 12, 2026 ).

17. The content of the educational field "Natural Science" is implemented in the academic subject "Natural Science".

18. The content of the "Natural Science" subject should provide a basic level of scientific knowledge within the "Man-Nature" system. This subject aims to develop students' natural curiosity, research skills, and a scientific understanding and

perspective on the world around them. The content of the subject is structured according to the principle of "from simple to complex, from familiar to unfamiliar." Understanding the causes and relationships between the phenomena and processes of living and nonliving nature, and appreciating the diversity and complexity of the surrounding world, will broaden students' horizons. The "Natural Science" subject serves as a propaedeutic course for the study of the independent subjects of "Biology," "Physics," "Geography," and "Chemistry" at subsequent levels of education, and also lays the foundation for research skills essential for any field of knowledge.

19. The content of the educational area "Man and Society" is implemented in the academic subjects "Knowledge of the World".

20. The content of the subjects in the educational area "Man and Society" is aimed at providing propaedeutic knowledge within the framework of the "Man - Society" system. The content of the academic subjects is aimed at studying social phenomena of the past and present and their interrelationships, relationships between people in the family and society; at developing a sense of pride in one's homeland, an awareness of one's place in the family, local, regional, national and global community; at understanding the values of Kazakhstani society and universal human values; at revealing by each student their natural abilities and creative potential; at developing a respectful attitude towards the culture of one's own and other peoples, personal responsibility for one's actions, and the development of empathy towards the feelings of others; at fostering a humane attitude towards people and the environment.

21. The content of the educational area "Technology and Art" is represented by the academic subjects "Music", "Artistic Work", "Labor Training", "Fine Arts".

22. The content of the subjects in the educational field "Technology and Art" is aimed at developing a holistic perception of the surrounding world, understanding it through visual art and music; developing initial ideas about the role of fine arts, applied arts and music in human life, a respectful attitude towards Kazakh national decorative and applied arts, musical traditions and customs, and the art of other peoples of the world; fostering a moral and aesthetic attitude towards various forms of art as a reflection of human life, aimed at the artistic and musical-creative development of primary school students.

23. The content of the educational area "Physical Education" is implemented in the academic subject "Physical Education".

24. The content of the subject "Physical Education" is aimed at developing physical qualities, an interest in the independent performance of general developmental exercises; at instilling a culture of a healthy lifestyle; at forming ideas about the role of physical education in human life, the ability to independently find information about

sports, national sports and use it to improve health; at developing a culture of communication with peers in the context of educational, game and competitive activities.

25. In grades 1-4, the course "Fundamentals of Life Safety" is mandatory. This course is taught within the "Exploring the World" subject: in grades 1-3, with a 6-hour annual teaching load, and in grade 4, with a 10-hour annual teaching load by primary school teachers.

26. The content of the course "Traffic Rules" is implemented in grades 1-4 - 6 hours in each class by class teachers at the expense of class hours and outside of class time, with the topic and date indicated in the annual work plan of the class teacher.

27. The educational organization carries out educational activities in accordance with the received license and, throughout the entire period of its validity, complies with the qualification requirements imposed on educational activities and the list of documents confirming compliance with them, approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated June 17, 2015 No. 391 (registered in the Register of Regulatory Legal Acts under No. 11716).

**Chapter 3. Requirements for the maximum volume of students' academic workload**

28. The maximum weekly academic workload for students in primary school is no more than 27 hours.

29. The total volume of the students' academic workload, including the invariant and variable components, as well as the weekly and annual academic workload by class, are established by the standard curriculum.

30. Dividing a class into two groups is carried out in urban general education organizations when classes are filled with 24 or more students, and in rural ones – with 20 or more students according to:

1) the Kazakh language in classes with a non-Kazakh language of instruction;

2) foreign language;

3) digital literacy (except for grade 1).

Dividing a class into two groups is permitted in urban general education institutions when classes are filled with 24 or more students, and in rural institutions when classes are filled with 20 or more students in Russian in classes with a non-Russian language of instruction.

In cases of restrictive measures implemented by relevant government agencies, the introduction of quarantine, or emergency situations of a social, natural, or man-made nature, the division of the class into groups is carried out for all academic subjects with a maximum of 15 students in one class.

Footnote. Clause 30 – as amended by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (comes into effect after the day

of its first official publication).

31. Within the framework of inclusive education, the division of a class into groups according to the criteria listed in paragraphs 30 of this Standard is carried out by reducing the class size (the total number of students) by three per child with special educational needs.

**Chapter 4. Requirements for the level of training of students**

32. The level of preparation of students is determined through the expected learning outcomes, which are designed taking into account the specifics of each educational area, which unites several related academic subjects: "Language and Literature", "Mathematics and Computer Science", "Natural Science", "Man and Society", "Technology and Art", "Physical Education".

33. Expected results upon completion of primary education in the educational field "Language and Literature".

"Kazakh language" / "Russian language" / "Native language", "Literary reading":

1) listening and speaking:

The student understands and conveys the main content of a conversation, a read or heard text; determines how the speaker's point of view is presented, draws conclusions; understands the topic of discussion and participates in the discussion, observing speech norms; consciously uses synonyms, antonyms, homonyms, words with direct and figurative meaning in speech; uses various techniques of retelling the content of narrative and descriptive texts, using emotionally colored means of expression; applies various techniques of retelling the content of works of fiction; reasons about what has been read and heard, shares his thoughts and emotions; argues his point of view, observing logical sequence; independently composes coherent, logical, reasoned statements in accordance with the proposed topic and the communicatively given setting; participates in dialogue, using various techniques of verbal communication; analyzes ideas about spiritual and moral values based on the information read and heard;

2) reading:

The student reads works of oral folklore and children's literature, analyzes the characters' personalities and evaluates their actions; distinguishes fiction from non-fiction texts; determines the main idea and composition of works of fiction; determines the genre of the work and justifies their answer/choice; identifies the expressive means used by the author to create the image; draws conclusions about the writer's attitude towards his characters; reads texts using certain types and strategies of reading; predicts the course of events in works; determines the types of text

(description, narration and reasoning); reads stories/poems expressively; recites poems expressively from memory; determines universal human values in works of fiction;
3) letter:
The student writes their own texts of various types, genres, and styles, selecting appropriate words; writes in accordance with the studied grammatical, spelling, and punctuation norms; writes texts using various forms of presentation (pictures, diagrams, graphs, tables); maintains hygienic and calligraphic writing skills; synthesizes short texts on topics related to the culture and customs of the people of Kazakhstan, expressing their moral position.
"Kazakh language" (in classes with a language of instruction other than Kazakh) / "Russian language" (in classes with a language of instruction other than Russian):
1) listening:
The student understands the meaning of audiovisual material relevant to the social, everyday, and socio-cultural spheres of communication; understands the theme, main idea, primary and secondary information of the text with sufficient completeness, depth, and accuracy; understands how the style of speech changes depending on the communication situation, the place of communication, and the participants in the communication (communication), predicts the content of the story/narrative, taking into account various opinions;
2) speaking:
The learner conveys the content of stories and anecdotes, including using preliminary notes and a plan; formulates questions and expresses his or her point of view regarding what has been read and heard; independently composes coherent, logical statements in accordance with the proposed topic and the communicatively specified setting; participates in dialogue, expressing his or her communicative intention in various speech situations in the social, everyday, and socio-cultural spheres of communication;
3) reading:
The student reads texts using different types and strategies of reading; understands key information, conclusions, and the author's assessments in texts containing unfamiliar words; distinguishes between fiction and non-fiction texts; finds necessary information in various sources; demonstrates an understanding of ideas, events, and motives for the characters' actions; clarifies the meaning of unfamiliar words and phrases using dictionaries and reference books; identifies universal human values in works of Kazakh and world literature;
4) letter:

The student makes short notes of texts heard, information read, and events observed (headlines, individual facts, opinions); uses appropriate lexical units to create narrative/non-narrative texts, taking into account grammatical, spelling, and punctuation norms.

"Foreign Language":

1) listening:

The learner understands the main content of a short conversation on a familiar topic, recognizing the sound of familiar words and phrases; understands short questions about colors and numbers; uses context clues to predict the content and meaning of a short conversation on a familiar topic; understands the general meaning of short stories told slowly and clearly;

2) speaking:

The student formulates basic statements and statements about himself, formulates questions; answers questions; pronounces basic words and phrases with the correct intonation and stress when describing objects and events; expresses what he likes and dislikes;

3) reading:

The student uses an illustrated dictionary; reads and understands short fiction and non-fiction texts on social and everyday topics; determines the main meaning of short texts; identifies specific information and details in short texts;

4) letter:

The student correctly spells frequently used words, demonstrating knowledge of the differences between their spelling and pronunciation; writes short sentences from dictation; and correctly places punctuation marks at the end of sentences.

34. Expected learning outcomes in the educational field "Mathematics and Computer Science":

Upon completion of primary education, the student:

1) knows the meaning of the concepts: "digit", "number", "coordinate ray", "fraction of a number", "common fraction", "mixed number", "numeric expression", "letter expression", "equation", "inequality", "degree measure of an angle", "percentage", "set", "symmetry", "information", "object", "file", "folder", "shortcut", "model", "computer network", "Internet"; the meaning of units of place in the decimal number system; flat and spatial geometric figures and their elements; formulas for calculating the perimeter, area of a square and a rectangle; rules for adding and subtracting fractions with the same denominators; purpose of operating system objects; types of representation and units of measurement of information; main parts of a computer;

input and output devices; purpose of application, service programs and the operating system, safety rules when working at a computer;
2) understands the meaning and order of arithmetic operations on natural numbers, quantities and the relationships between them; simple relationships between quantities; the meaning of the operations "intersection" and "union" of sets; conversion of percentages to fractions, fractions to percentages; the difference between constants and variables; the purpose of the main parts of a computer, input and output devices, elements of the operating system interface; the impact of computer technology on human health; the importance of protecting information and devices from malicious programs; the need to accompany information with references to the authors;
3) applies mathematical symbols, arithmetic operations and their properties to write expressions, transform numerical expressions, and solve problems; oral and written techniques for calculating with natural numbers; standard and non-standard units of measurement (length, area, volume, mass, time); instruments for measuring quantities; mathematical language and graphical models for recording problem conditions; algorithms for solving equations and inequalities; formulas for calculating the perimeter and area (of a square, rectangle, right triangle); Euler-Venn diagrams for representing relationships between sets of elements; the ability to find a part of a number and a number from its part; digital technology tools for collecting, storing, processing and transmitting information; application programs for working with various types of information, for creating models; Internet services for solving assigned problems; rules for working on a computer;
4) analyzes rational techniques of oral and written counting; features of geometric figures; results of comparison of values of numerical expressions and expressions with variables; dependencies between different quantities (quantity, cost, speed, time, distance, duration of work, volume of work); patterns of finding missing elements of a sequence; simple combinatorial and logical problems; recording problem conditions in the form of a diagram, drawing, table; data and results related to counting, measurement; capabilities of application programs; consequences of violating ethical and legal standards on the network; information from various sources, selected in accordance with the stated requirements;
5) synthesizes and classifies objects by their characteristics and spatial arrangement; a mathematical model of the relationship between quantities; the simplest models of real objects and processes of the real world in the form of images and drawings; a problem and its inverse problem based on the proposed data or mathematical model; a sequence according to a given pattern; models of objects and situations for solving practical

problems using digital technologies; knowledge of the capabilities of application programs and network services for solving various problems;
6) evaluates the measurement result; the truth or falsity of simple statements about numbers, quantities, geometric figures; data presented in the form of a graph, table, diagram; the conformity of the model to the specified criteria; the possibility of using application programs and network services to solve problems.
Footnote. Clause 34 as amended by the order of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 No. 182-НҚ (comes into effect on July 12, 2026 ).

35. Expected learning outcomes in the educational field "Natural Science".
Upon completion of primary education, the student:
1) knows the planets of the solar system and their features; basic natural science concepts about the Earth and its nature, the Universe; methods of scientific knowledge: observation, experiment, experience; basics of safety precautions when planning and conducting research; rules of conduct during natural disasters; the life cycle of humans, plants, animals and fungi; features of the structure and location of the main organs of humans, plants, animals and fungi and their functions; classification of plants, animals and fungi; basics of the process of photosynthesis; individual properties of light; some physical forces and the reasons for their occurrence; individual types of energy; composition and properties of the most common substances on Earth; properties of various bodies and some areas of their application; the main types of minerals and their importance, the main deposits of minerals in the Republic of Kazakhstan;
2) understands the importance of caring for the environment and preserving biodiversity on Earth; the need to maintain personal hygiene; the protective functions of the body; the importance of natural components for living organisms; the characteristics of organisms as a means of adaptation to the environment; simple differences between vertebrates and invertebrates; the need for rational use of natural resources;
3) applies individual research methods to study natural objects, processes and phenomena; standard and non-standard units of measurement of natural objects, processes and phenomena; simple instruments for measuring certain characteristics of natural objects, processes and phenomena; appropriate scientific terminology to explain the research conducted; knowledge of simple characteristics of plant and animal species in one's area to compile their classification;
4) analyzes the cause-and-effect relationships between the components of nature; the properties of materials to determine the possibilities of their application; the animal

and plant world of a certain territory; similar and distinctive features of different habitats; data from own research and materials from various sources;
5) synthesizes acquired knowledge and skills for planning and conducting research on objects and phenomena of animate and inanimate nature; information materials in the form of drawings, diagrams, graphs, charts, tables; ideas on environmental protection issues; simulation and graphic models of objects, phenomena and processes of the micro- and macroworld;
6) evaluates the factors of development and the state of natural objects, phenomena and processes; human activity and the impact of scientific and technological progress on the state of the environment; the impact of scientific and technological progress on human life; the correspondence of the obtained results of one's own research to the forecast made.
36. Expected learning outcomes in the educational field "Man and Society".
Upon completion of primary education, the student:
1) knows the structure, composition and functions of the family, school community, where the daily life of the student takes place; the main social functions of a person; basic information about the relationship "man - society"; the concepts of "safety", "health" and their leading features; characteristics of the individual, family, community and society as a whole, their meaning and role in human life; the main types of household items, their composition, properties and sources; general information about the geography and history of Kazakhstan; the main traditions and folklore of the people of Kazakhstan; the role and place of Kazakhstan in the world; state symbols of Kazakhstan; universal values; rules of positive and friendly communication, rules of etiquette, the rights and responsibilities of a schoolchild, rules of a healthy lifestyle;
2) understands their civic identity in the form of awareness of themselves as a young citizen of Kazakhstan and their belonging to a certain ethnic group; the value of family, small homeland and Fatherland; the values of the multinational Kazakhstani society; the meaning of the state symbols of Kazakhstan; the norms of moral behavior of a person in society; their involvement in the life of a school, village, city, country; the importance of serving society; the functional and structural features of different types of settlements; the importance of conformity of thoughts, words and actions, responsibility for them; the importance of national traditions, customs; the role of travel in people's lives and the development of society; the importance of self-knowledge and self-development of a person; the content of the concepts of "labor", "mutual understanding", "cheerfulness", "optimism", "goodwill", "generosity", "magnanimity", "patriotism", "creativity" and their significance; the need to lead a

healthy lifestyle; the importance of nature as a source of life; the importance of careful attitude to nature;
3) applies cognitive methods to study social processes and phenomena, perform educational assignments and work of a creative, educational, research, and design nature; personal experience and knowledge in the field of travel, simple financial relations; knowledge of a healthy lifestyle, personal hygiene, nutrition, and daily routine; basic knowledge in providing first aid; personal and social experience in adapting to the surrounding world; rules of etiquette; rules of communication to maintain positive, friendly relationships in the family and team;
4) analyzes the position of Kazakhstan in the world; the role and significance of the studied social phenomena and processes in people's lives; similarities and differences in the cultural and ritual traditions of the people of Kazakhstan; factors in the development of personality, family, school community; the importance of basic resources in human life; health and safety factors; manifestations of human feelings and actions of people, their causes and consequences; own emotional state;
5) synthesizes knowledge and skills for systematization and classification of social phenomena and processes; knowledge and skills for identifying individual current problems of society; own solutions for orientation in space (place), time (chronology), social environment (society); communication models in the family, interpersonal and social spheres; own projects on life safety, travel organization; solutions for own spiritual and moral development;
6) evaluates one's own behavior and the actions of those around one from the standpoint of moral standards; the importance of family, society, and country in the life of each person; the role of traditions and folklore in modern life; the importance of consumer goods by degree of significance and cost; the degree of satisfaction with one's work in the classroom; the level of one's progress in the sphere of interpersonal, social, and financial-economic relations; one's own emotional and physical state; the behavior of people from the standpoint of generally accepted moral standards.
Footnote. Clause 36 as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (effective after the day of its first official publication).

37. Expected learning outcomes in the educational field "Technology and Art".
Upon completion of primary education, the student:
1) knows the main types and genres of art; the main types of lines and shapes; primary and secondary colors; the main materials and tools for drawing and decorative art work; the main techniques and methods of work in various types of art; the best examples of works by world and domestic artists; expressive means and techniques for

conveying creative ideas; the basics of musical literacy; the rules for performing songs and listening to music; the main types, genres and styles of Kazakh traditional music; the names and classification of musical instruments of the folk and symphony orchestra; types of choirs and orchestras; the best examples and famous performers of Kazakh traditional and classical music, music of composers of Kazakhstan and music of the peoples of the world; basic computer music programs;
2) understands the connection between art and life; the relationship between performance technique and the corresponding type, style, and genre of art; the characteristics and significance of national traditions and customs in the decorative and applied arts of Kazakhstan; the significance of works of art in the culture of the Kazakh people and other peoples of the world; the role of music in human life; the relationship between music and other forms of art; traditional music as a reflection of the culture of the Kazakh people and other peoples of the world; the fundamental role of folk music in composers' music;
3) applies the laws of composition in the depiction of objects; expressive means of art; various sources of information and digital technologies for the development of ideas; various art materials, tools and techniques for creating creative works; knowledge of the types, styles and genres of art in the creation of creative works; safety regulations; knowledge of the basics of musical literacy to convey feelings, mood when singing, playing musical instruments individually and in an ensemble, choir / orchestra, to create simple compositions, improvisations, creative projects, including the use of computer music programs; knowledge of the types, styles and genres of music when explaining musical phenomena, phenomena of the surrounding reality through the language of sounds;
4) analyzes information from various sources to plan their activities; styles and genres of art of the Kazakh people and other peoples of the world; materials and techniques used to create works of art; properties and qualities of art materials and instruments when conducting experimental, research work; the process and results of their own creative activity; the role and significance of music in people's lives; similarities and differences, as well as the content of traditional Kazakh music and music of the peoples of the world; features of musical instruments of folk and symphony orchestras; various sounds and sound effects for composing and improvising their own musical and creative works;
5) synthesizes methods and techniques, properties and capabilities of materials for the creation of creative works; information from various sources, including the use of digital technologies for the development of ideas; knowledge, skills, information for the implementation of creative projects and the realization of ideas, including the use

of computer music programs; elements of different types of art for the creation of creative work;
6) evaluates the main concept, images and ideas in artistic and musical works; expressive means and properties of materials for creating creative work; independently/collectively completed works on artistic work; the moral and aesthetic side of the studied music, the obtained results of creative activity, the role of music and artistic creativity in life.
Footnote. Clause 37 as amended by Order No. 182-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 (effective from July 12, 2026 ).

38. Expected results in the educational field "Physical Education".
Upon completion of primary education, the student:
1) knows the basic physical exercises that promote body development, the rules and techniques for performing them; safety rules when performing physical exercises; rules for performing a warm-up and cool-down; ways to monitor physical changes in the body during physical exercises; techniques for developing body parts and muscles to improve physical fitness;
2) understands the importance of physical education for improving health; the role of physical education and sports in the development of the country and the formation of pride in it; the levels of difficulty of the exercises performed; the need to achieve the required intensity of various physical activities; the importance of maintaining physical, mental and emotional health; the risks that arise during the performance of various physical exercises;
3) applies skills in performing independent/collaborative work to achieve agreed goals; knowledge of rules and compositional techniques during the performance of a set of physical exercises; the correct sequence of performing physical exercises, demonstrating an understanding of time, space and motor coordination skills; specific exercises to eliminate physical development deficiencies and potential health risks; basic principles of healthy eating and exercise regimen;
4) analyzes one's own achievements and experience in performing physical exercises to manage future learning and behavior in a group; improving individual abilities and the degree of confidence in various types of physical activity; situations of cooperation and fair competition in achieving common goals;
5) synthesizes certain combinations of movements from types of movements, as well as strategies, using various sports tactics; knowledge and skills to adapt to various situations of physical activity;

6) evaluates the difficulties and risks that arise during the performance of various physical activities; their own and others' physical capabilities; their ability to participate in sports events inside and outside of school.

39. Homework is given to students taking into account their ability to complete it (in astronomical hours): in the 2nd grade - no more than 50 minutes, in the 3rd-4th grades - no more than 1 hour 10 minutes.

40. The assessment of students' academic achievements is carried out using criteria for assessing their knowledge. These criteria are used to measure the level of students' academic achievement, including taking into account the students' special educational needs and individual abilities.

41. Assessment is carried out in accordance with the system of learning objectives presented in the curriculum for each subject, based on monitoring the academic achievements of students in a specific section/cross-cutting topic.

42. Assessment of students' academic achievements is carried out in the form of formative, summative assessment.

43. Assessment at the primary education level is carried out from the 2nd grade using formative and summative assessment.

44. The procedure for criteria-based assessment of the academic achievements of students in educational organizations implementing primary education curricula shall be determined by the authorized body in the field of education.

45. For students with special educational needs, conditions are created for them to receive an education, correct developmental disabilities, and social adaptation.

**Chapter 5. Requirements for the duration of study**

46. The period for mastering the general educational curriculum of primary education is four years.

47. The duration of the academic year in grades 1 is 33 academic weeks, in grades 2-4 – 34 academic weeks.

Footnote. Clause 47 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

48. The duration of vacation time in a calendar year is at least 115 days, of which at least 25 days are during the academic year.

49. Vacations are provided three times per academic year: in the fall, winter, and spring. First-grade students receive an additional one-week vacation in the third quarter.

Note FROM!

Appendix 3 is provided for in the version of the order of the Minister of Education of

the Republic of Kazakhstan dated 23.01.2025 No. 12 (shall come into effect from 01.09.2026 for grades 1, 5, from 01.09.2027 for grades 2, 6, from 01.09.2028 for grades 3, 7, from 01.09.2029 for grades 4, 8, from 01.09.2030 for grade 9).

Appendix 3
to the order of the Minister of Education
of the Republic of Kazakhstan
dated August 3, 2022 No. 348

**State Compulsory Standard of Basic Secondary Education**

**Chapter 1. General Provisions**

1. This state compulsory standard of basic secondary education (hereinafter referred to as the Standard) has been developed in accordance with Article 56 of the Law of the Republic of Kazakhstan "On Education" (hereinafter referred to as the Law), subparagraph 4) of paragraph 15 of the Regulation on the Ministry of Education of the Republic of Kazakhstan, approved by Resolution of the Government of the Republic of Kazakhstan dated August 19, 2022 No. 581 "Some issues of the Ministry of Education of the Republic of Kazakhstan", and defines the requirements for the content, maximum volume of academic workload, level of preparation of students and the duration of study.

Footnote. Clause 1 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

2. The Standard uses terms and definitions in accordance with the Law. In addition, the following terms and definitions are included:

1) assessment – the process of comparing the learning outcomes achieved by students with the expected outcomes based on developed criteria;

2) assessment criteria – specific indicators on the basis of which the assessment of students' academic achievements is carried out;

3) educational area – a component of the basic content of basic secondary education, including a set of related academic subjects;

4) educational values – guidelines in constructing a system of educational goals based on universal human values, which are the leading factor in the formation of the student's personality;

5) the level of preparation of the student - the degree of mastery of the content of secondary education by the student, expressed in personal, system-activity and subject results;

6) basic level of mastery of educational content - the level of mastery by students of the required minimum volume of knowledge, skills and abilities;

7) advanced level of mastering the educational content – the level of mastery by students of an expanded and in-depth volume of knowledge, skills and abilities.
8) special educational needs – the needs of children experiencing permanent or temporary difficulties in obtaining an education due to health, requiring special, general educational programs and educational programs of additional education;
9) summative assessment – a type of assessment that is carried out at the end of a certain academic period (quarter), as well as the study of sections in accordance with the curriculum;
10) working curriculum - a document developed by a general education organization based on a standard curriculum, taking into account the educational needs of students.
11) inclusive education – creation of conditions for equal access to education for all students, taking into account special educational needs and individual capabilities;
12) basic content of basic secondary education - the composition, structure and volume of content of basic secondary education, subject to compulsory study in educational organizations, regardless of their type, kind and form of ownership, as well as the language of instruction;
13) the invariant component of the academic workload is a component of the standard curriculum that defines the academic subjects that are mandatory for study by all students in educational organizations, regardless of their type, kind and form of ownership, as well as the language of instruction;
14) variable component of the academic load – a component of the standard curriculum, which is determined by the educational organization in accordance with the educational needs of students;
15) maximum volume of academic workload - the volume of academic time required to master the content of academic subjects of the invariant and variable (school and student) components of the standard curriculum and established for levels of basic secondary education and academic years.
16) expected learning outcomes – a set of competencies expressing what exactly the student will know, understand, and demonstrate upon completion of the learning process, including taking into account the special educational needs and individual capabilities of students;
17) extracurricular activities – an integral part of the holistic educational process, a form of organizing students' free time;
18) standard curriculum – a document regulating the list of academic disciplines (subjects) and determining the volume of the invariant and variable components of the academic load of the corresponding level of education;

19) formative assessment – a type of assessment that is carried out during everyday work in the classroom, is a current indicator of students' academic performance, ensures operational communication between the student and the teacher during the learning process, feedback between the student and the teacher and allows for the improvement of the educational process;
20) elective course – a course chosen by students, an integral part of the variable component of the curriculum, aimed at expanding the educational preparation of students.
3. The application of the Standard is aimed at:
1) improving the quality of teaching and education through achieving a system of goals of basic secondary education, presented in the form of expected learning outcomes;
2) creating conditions for studying Kazakh, Russian and foreign languages;
3) a combination of academic and practical focus of basic secondary education, which provides for students to acquire the fundamentals of theoretical knowledge and develop the ability to apply the acquired knowledge to solve problems of an applied nature;
4) ensuring a gradual deepening of subject knowledge and skills, taking into account the age capabilities of students;
5) the implementation of the principle of the unity of teaching and education, based on the interconnectedness and interdependence of the values of education and the system of expected learning outcomes that determine the substantive basis of the educational process;
6) ensuring the protection of children's health, as well as the creation of favorable conditions for meeting the special educational needs of students and the need to receive additional educational services;
7) ensuring the equivalence of basic secondary education in the context of the diversity of types and kinds of secondary education organizations;
8) support and development of innovative practices in educational organizations;
9) organization of an objective assessment of the activities of educational organizations to ensure the quality of education.
4. Educational organizations ensure a health-preserving environment through the use of various pedagogical technologies for teaching, upbringing and development.
5. The scope of knowledge and the content of the academic subjects of the invariant component in educational organizations for students with mild mental retardation and moderate mental retardation are carried out in accordance with the standard curricula (hereinafter referred to as the SCC) approved by the order of the Minister of Education

and Science of the Republic of Kazakhstan dated November 8, 2012 No. 500 "On approval of standard curricula for primary, basic secondary, general secondary education of the Republic of Kazakhstan" (registered in the Register of state registration of regulatory legal acts under No. 8170) and standard curricula approved by the order of the Minister of Education and Science of the Republic of Kazakhstan dated April 3, 2013 No. 115 "On approval of standard curricula in general education subjects, elective courses and electives for general education organizations" (registered in the Register of state registration of regulatory legal acts under No. 8424).

6. Special educational programs are developed on the basis of the Model educational programs and are aimed at the education and development of individuals (children) with special educational needs, taking into account the psychophysical characteristics and cognitive abilities of students and pupils, determined taking into account the recommendations of psychological, medical and pedagogical consultations.

**Chapter 2. Requirements for the content of education with a focus on learning outcomes**

7. The following are defined as basic values in the content of basic secondary education:

1) Kazakhstani patriotism and civic responsibility;
2) respect;
3) cooperation;
4) work and creativity;
5) openness;
6) lifelong education.

8. Based on the instillation of educational values, students should develop:

1) readiness to serve the interests of Kazakhstan;
2) respect for the norms of the Constitution and laws of the Republic of Kazakhstan and their observance;
3) social responsibility and decision-making skills;
4) motivation to master the state language;
5) respect for the culture and traditions of the people of Kazakhstan, the cultural diversity of the world;
6) commitment to the ideas of spiritual harmony and tolerance;
7) a positive attitude towards the surrounding world and maintaining ecological balance;
8) creative and critical thinking;
9) communication skills and ability to effectively use digital technologies;
10) motivation for learning and self-improvement throughout life.

Footnote. Clause 8 as amended by Order No. 182-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 (comes into effect on July 12, 2026 ).

9. The goal of basic secondary education is to form a general culture of the individual, adapt the individual to life in society, and create a basis for an informed choice and mastery of a profession or specialty, including taking into account the special educational needs and individual capabilities of students.

10. The main objectives of basic secondary education are to form and develop in students:

1) spiritual and moral qualities;

2) systems of basic knowledge on the fundamentals of science;

3) skills of independent learning and personal development;

4) skills in carrying out educational, project, and research activities;

5) critical and creative thinking skills;

6) skills of self-realization and interaction in society.

11. The content of basic secondary education is oriented towards learning outcomes and is determined by the curricula for academic subjects, which are developed on the basis of the requirements of the Standard.

12. The content of basic secondary education should be established on the basis of the integration of academic training, the development of student independence and spiritual and moral education, which is implemented through a combination of educational, project and research activities with purposefully organized educational work.

13. The content of basic secondary education is determined taking into account the following guidelines:

1) compliance with the dynamic demands of modern society;

2) the need to develop critical, creative and positive thinking;

3) the feasibility of strengthening the integration of the content of academic subjects;

4) ensuring compliance with the principle of continuity and succession of the content of education between the levels of primary education and basic secondary education;

5) maintaining a balance between the academic and practical focus of educational content;

6) ensuring the unity of training, education and development.

14. The organization of the educational process at the basic secondary education level is focused on the principle of the unity of teaching and upbringing, including taking into account the special educational needs and individual capabilities of students. In organizing education, priority is given to learning as the leading activity of students.

15. During the learning process, educational issues are addressed through each subject. All types of educational work are aimed at addressing issues of students' cognition and acquisition of subjectively new knowledge, the study of national traditions and culture, and the instillation of universal human values.
16. The organization of various forms of extracurricular activities in combination ensures the implementation of spiritual and moral, civic and patriotic, artistic and aesthetic, labor and physical education of students.
17. The organization of the educational process involves the use of interactive teaching methods, which are based on the organization of the acquisition of experience by the student himself through the demonstration of activity in the discussion of issues, in arguing a point of view, and the initiative to search for and adopt a constructive solution.
18. Along with teaching compulsory subjects, provision is made for elective courses, extracurricular activities, and participation of students in scientific projects.
19. Ensuring consistency in the development of project and research skills of students is one of the main principles of organizing the educational process in educational organizations.
20. The core content of basic secondary education is implemented within the framework of the trilingual education policy. The goal of trilingual education is to develop a multilingual individual—a citizen of Kazakhstan who speaks at least three languages, is able to successfully engage in dialogue in various fields, values the culture of their own people, and understands and respects the cultures of other peoples.
21. Trilingual education is practically implemented through:
1) level-by-level acquisition of Kazakh, Russian and foreign languages;
2) organization of the study of individual subjects in Kazakh, Russian, or a foreign language, regardless of the language of instruction;
3) organization of extracurricular activities and elective courses in Kazakh, Russian and foreign languages.
22. The basic content of each educational area of basic secondary education is determined taking into account the need not only to teach the fundamentals of science, but also to ensure the further development of spirituality, social and cultural experience, which will contribute to effective socialization.
23. The content of the educational area "Language and Literature" is implemented in the following subjects:
1) "Kazakh language", "Kazakh literature" for classes with Kazakh language of instruction, "Russian language", "Russian literature" for classes with Russian language of instruction;

2) “Kazakh language and literature” for classes with non-Kazakh language of instruction, “Russian language and literature” for classes with non-Russian language of instruction;
3) "Foreign language";
4) In educational institutions with the language of instruction of ethnic groups residing compactly within Kazakhstan, the educational area "Language and Literature" additionally includes the native language and literature of that ethnic group. The subjects "Native Language" for classes with Uyghur/Uzbek/Tajik as the language of instruction and "Literature" ("Uyghur Literature," "Uzbek Literature," "Tajik Literature") are included in the invariant component of the standard curriculum.
24. Excluded by the order of the Minister of Education of the Republic of Kazakhstan dated 04.10.2023 No. 303 (comes into force after the day of its first official publication).

25. The content of the educational area "Language and Literature" ensures the use of interdisciplinary links with other linguistic and non-linguistic academic disciplines; successful socialization of students; development of language skills of students in accordance with their age characteristics, needs and interests; understanding of the importance of learning languages in the modern world; development of spiritual and moral values; understanding of the holistic picture of the multilingual and multicultural world; establishment of interpersonal and intercultural contacts in the process of communication; fostering respect for different points of view through familiarization with the cultures of other countries; the ability to independently work with various information sources in the studied language, including Internet resources; development and use of creative and critical thinking.
26. The content of the educational area "Mathematics and Computer Science" is implemented in the academic subjects "Mathematics", "Algebra", "Geometry", "Computer Science".
27. The content of the educational field "Mathematics and Computer Science" ensures the development of the ability to define and understand the role of mathematics and computer science in the world; ideas about mathematics as a universal language of science, a means of modeling phenomena and processes; ensure the continuity of the levels of secondary education, interdisciplinary and intradisciplinary connections in the study of mathematics and computer science; mastery of basic mathematical knowledge and skills necessary for continuing education at the level of general secondary education and the study of related disciplines, their application in everyday life; mastery of a system of basic knowledge on the theoretical foundations of programming technology and modern digital technologies, the development of skills

to apply and transform models of real objects and processes using digital and telecommunication technologies in the study of computer science and other subjects; development of functional literacy, logical, algorithmic and operational thinking, spatial imagination, the ability to use various languages of mathematics and computer science (verbal, symbolic, analytical, graphical), to perceive and critically analyze information presented in various forms.

Footnote. Clause 27 – as amended by the order of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 No. 182-НҚ (comes into effect on July 12, 2026 ).

28. The content of the educational field "Natural Science" is implemented in the academic subjects "Natural Science", "Physics", "Chemistry", "Biology", "Geography"

29 The content of the educational field "Natural Science" is implemented in the academic subjects "Natural Science", "Physics", "Chemistry", "Biology", "Geography", "Geography. Geography of Kazakhstan".

30. The content of the educational field "Natural Science" ensures the formation of functional knowledge and skills, skills of planning, analysis and processing, interpretation, systematization, work according to an algorithm, improvement of research, experimental skills, evaluation and formulation of conclusions; deepening the understanding of the fundamental concepts, patterns, theories and principles underlying the modern natural scientific picture of the world, methods of scientific knowledge of nature, global and local problems of humanity based on a comprehensive study of nature, economics and society; development of environmental culture, scientific, project and spatial thinking; fostering patriotic feelings, a responsible and careful attitude towards the environment; implementation of professional orientation of students in natural science areas.

31. The content of the academic subjects of the educational area "Man and Society" is implemented in the academic subjects "History of Kazakhstan", "World History", "Fundamentals of Law".

32. The content of the educational area "Man and Society" is aimed at developing in students a basic knowledge of the social and humanitarian sciences within the framework of the "Man - Society" system. The content of the academic subjects is focused on developing in students the skills of historical thinking, understanding and comprehending the past and the present and their interrelationships, the abilities to study, analyze and make substantiated conclusions based on historical, legal, economic, political and sociological sources of information and, on their basis, to build independent judgments and make their own informed decisions; on fostering

patriotism, developing legal literacy, understanding the ideals and values of a democratic legal society, an active civic position for the implementation of effective interaction and the choice of communication tools in the context of socio-cultural communication; on developing the skills to determine a personal attitude to the system of universal, ethnocultural values, to the socio-economic and political situation, to observe and evaluate social phenomena and events necessary for making a moral choice.

33. The content of the educational area "Technology and Art" is implemented in the academic subjects "Music" and "Artistic Work".

34. The content of the educational area "Technology and Art" is implemented in the academic subjects "Music", "Technology", "Fine Arts".

35. The content of the educational field "Technology and Art" is aimed at forming a holistic perception of the picture of the surrounding world, the general culture of the younger generation, the development of the aesthetic, spiritual, moral and emotional sphere of students based on the national and world artistic values of society, the development of basic ideas about the role of art and technology in human life, understanding and respectful attitude to the traditions, customs, culture and various forms of art of the Kazakh people and other peoples of the world; the further development of knowledge, skills and abilities in the implementation of artistic, musical and project activities in various forms of art; basic technological knowledge, skills and abilities, including the use of computer digital technologies; the development of vocal and instrumental skills, including various musical digital technologies; the independent mastery of various ways of knowing the world through artistic and musical means of expression and modern technologies.

36. The content of the educational area "Physical Education" is implemented in the academic subject "Physical Education".

37. The content of the educational area "Physical Education" is aimed at strengthening health, developing basic physical qualities and increasing the functional capabilities of the body; developing a culture of movement, enriching motor experience with physical exercises with a general developmental and corrective focus; teaching skills and abilities in physical education and sports and fitness activities, independent organization of physical exercise classes; mastering technical actions and techniques of basic and national sports; fostering patriotism, love for one's homeland and the development of moral and volitional qualities.

38. The course "Traffic Rules" in grades 5-8 is taught for 10 hours in each class during class hours and outside of class time, with the topic and date of the classes indicated on a separate page of the class journal.

39. The educational organization carries out educational activities in accordance with the received license and, throughout the entire period of its validity, complies with the qualification requirements imposed on educational activities and the list of documents confirming compliance with them, approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated June 17, 2015 No. 391 (registered in the Register of Regulatory Legal Acts under No. 11716).

**Chapter 3. Requirements for the maximum volume of students' academic workload**

40. The maximum weekly academic workload for students at the basic secondary education level is no more than: in grade 5 – 30.5 hours, in grade 6 – 30.5 hours, in grade 7 – 33.5 hours, in grade 8 – 34.5 hours, in grade 9 – 36 hours.

Footnote. Clause 40 – as amended by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (comes into effect after the day of its first official publication).

41. The total volume of the students' academic workload, which constitutes the invariant and variable components, as well as the weekly and annual academic workload by class, are established by the TUP.

42. The weekly academic workload includes all types of academic work defined by the standard curriculum (invariant and variable components). The curricula of special education institutions include a mandatory remedial component, taking into account the type of developmental disability. The invariant, remedial, and variable components in the curricula of special education institutions are established taking into account the special educational needs of students.

For elective subjects of the variable component, selected from the invariant component, a pass/fail grade is given.

43. Dividing a class into two groups is carried out in urban general education organizations when classes are filled with 24 or more students, and in rural ones – with 20 or more students according to:

1) Kazakh language and literature – in classes with a non-Kazakh language of instruction;

2) foreign language;

3) artistic work;

4) computer science.

Dividing a class into two groups is permitted in urban general education institutions when classes are filled with 24 or more students, and in rural institutions when classes are filled with 20 or more students in Russian language and literature – in classes with a non-Russian language of instruction.

In educational institutions, it is permissible to divide a class into two groups for artistic work, regardless of the size of the class, whether it is for boys or girls.
Footnote. Clause 43 – as amended by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (comes into effect after the day of its first official publication).

44. The division of a class into two groups in educational organizations is carried out in urban general education organizations when classes are filled with 24 or more students, and in rural organizations when classes are filled with 20 or more students:
1) Kazakh language and literature – in classes with a non-Kazakh language of instruction;
2) foreign language;
3) technologies;
4) computer science.
Dividing a class into two groups is permitted in urban general education institutions when classes are filled with 24 or more students, and in rural institutions when classes are filled with 20 or more students in Russian language and literature – in classes with a non-Russian language of instruction.
In educational institutions, it is permissible to divide a class into two groups for artistic work, regardless of the size of the class, whether it is for boys or girls.
Footnote. Clause 44 as amended by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (effective from September 1, 2024).

45. Within the framework of inclusive education, the division of a class into groups for the subjects listed above is carried out by reducing the total number of students by three per child with special educational needs.

**Chapter 4. Requirements for the level of training of students**

46. General educational curricula for basic secondary education are aimed at mastering by students, including students with special educational needs, the basic foundations of the system of sciences, developing in them a high culture of interpersonal and interethnic communication, personal self-determination and professional orientation, as well as pre-profile training of students.
47. The level of preparation of students is determined through the expected learning outcomes, which are designed taking into account the specifics of each educational area, which unites several related academic subjects: "Language and Literature", "Mathematics and Computer Science", "Natural Science", "Man and Society", "Technology and Art", "Physical Education".

48. Expected learning outcomes in educational areas (and subjects) serve as the basis for determining the basic content of basic secondary education.
49. In the curricula of basic secondary education, the expected learning outcomes in educational areas (and academic subjects) are specified in the learning objectives for the sections of each academic subject.
50. The system of expected learning outcomes creates the opportunity to build individual development trajectories for students, including students with special educational needs, and to gradually move them towards achieving long-term learning goals.
51. Expected results upon completion of basic secondary education in the educational field "Language and Literature".
"Kazakh language" (for classes with Kazakh as the language of instruction) / "Russian language" (for classes with Russian as the language of instruction) / "Native language" (for classes with Uyghur/Uzbek/Tajik as the language of instruction):
1) listening and speaking:
The student understands texts from social, everyday, socio-cultural and educational-professional spheres of communication; recognizes openly and covertly expressed forms of speech behavior, evaluation; carries out oral speech communication in various life situations; initiates and maintains a dialogue, using a variety of linguistic means to achieve various goals and tactics of speech communication; constructs a monologue, synthesizing information of a problematic nature; defends and argues his own opinion; evaluates the speaker's attitude to the subject of speech, expressing his own opinion; predicts the content of the text based on its title/beginning/end; observes grammatical and stylistic norms when formatting his own statements;
2) reading:
The student understands and interprets the main and detailed information (text, numerical, graphic) of texts of various types, genres and styles; recognizes the hidden meaning of the text; uses reading strategies, including exploratory, annotated, selective reading with notes, reading with the purpose of extracting special information, analytical reading, reading with a specific purpose; extracts the necessary information from various sources, analyzing and synthesizing it; compares the structural, linguistic and stylistic features of texts in the social, everyday, socio-cultural and educational-cognitive spheres of communication; evaluates the text in terms of the relevance and value of information, distinguishing between fact and opinion;
3) letter:
The student creates texts of various types, genres, and styles, synthesizing information heard and read; creates texts (including printed ones), using various forms of

information presentation; writes their own problem-based text (article, essay, letter, etc.), demonstrating the ability to analyze and evaluate the provided information; compares the structural, compositional, and linguistic features of texts of different types, genres, and styles; corrects and edits texts using reference material; creates a simple, complex, and detailed plan on a specific topic; observes grammatical, spelling, punctuation, and stylistic norms.

“Kazakh language and literature” (for classes with a non-Kazakh language of instruction) / “Russian language and literature” (for classes with a non-Russian language of instruction):

1) listening:

The learner understands the main content of the text, as well as functionally significant semantic information reflecting the speaker's intentions; extracts specific information from the text; understands the meaning of terms and key units of the text in the social, socio-cultural, and educational-cognitive spheres; evaluates the content of the text, distinguishing between fact and opinion; identifies the main problems in texts of different styles and genres; analyzes the text, revealing the connections and relationships between facts and phenomena, events discussed in the text; predicts the content of the statement based on illustrations/keywords/title/beginning;

2) speaking:

The student maintains a dialogue within the framework of the topics being studied, reasoning, expressing their own opinion and evaluating events, opinions and problems; constructs a monologue, using techniques to attract attention and taking into account the target audience; analyzes and synthesizes information on the proposed topic; evaluates statements on a specific topic; uses lexical and grammatical means of language, observing speech norms;

3) reading:

The student understands the content of continuous and non-continuous texts of a certain complexity within the framework of the studied topics; identifies the features of texts of different types, styles and genres; recognizes the explicit and hidden meaning of words, the significance of artistic devices; extracts the necessary information from various sources, determining its relevance, reliability, usefulness and value; analyzes and synthesizes the content of the text, formulating substantiated conclusions and a critical assessment of what has been read; compares texts, determining the theme, idea, problems of a work of art, the position of the author; uses certain reading strategies;

4) letter:

The student writes texts of various types, genres, and styles of speech based on what they have heard and read, using a variety of linguistic means; writes problem-based texts, extracting information from various sources; creates graphs, tables, and diagrams based on continuous texts; creates a simple, complex, and detailed plan on a specific topic; compares, analyzes, and evaluates the content of texts of different types and styles; observes grammatical, spelling, and punctuation norms; uses tropes and artistic and figurative language means.

"Kazakh Literature" / "Russian Literature" / "Uyghur Literature" / "Uzbek Literature" / "Tajik Literature".

Upon completion of basic secondary education, the student:

1) knows the main stages of literary development; the content of works of different genres, the features of reflection of everyday life and traditions of the people in folklore; literary terms and literary trends, types and genres, the figurative nature of works of art, memorizes poetic texts and fragments of prose texts (optional), quotes from the works studied;

2) understands the significance of national artistic heritage in world culture; the role of literature as one of the most important cultural achievements, the significance of fiction in human life; literary terms and literary movements, types and genres, theme, idea, problematic of the work, the author's position in the work, the figurative nature of works of art; the overtly expressed and hidden meanings of works;

3) applies acquired knowledge, skills and abilities when preparing a message, report, essay, interview on a literary topic; dialogue of literary characters (based on what has been read) to create a written story - characteristics of one of the characters or a group of characters (group characteristics), two characters (comparative characteristics), when preparing a short written review of a book read independently; when creating their own analytical text, in the process of creating their own interpretation of the studied text using digital technologies; to determine their relevant reading circle and evaluate works of fiction, participate in debates or public speaking; to search for the necessary information; special terms and concepts for the analysis of the works studied; knowledge gained during the discussion of current issues; acquired skills, methods of creative activity for self-expression, participation in cultural events;

4) analyzes works of various genres, reasonably formulating their attitude to what they have read; the theme, idea and features of the composition, plot of the work, the linguistic features of the work, key episodes, actions and deeds of the characters; features of the writer's style; compares them with works of world literature and works of other forms of art;

5) synthesizes the acquired knowledge, skills and abilities to select a path of analysis of a work that is adequate to the genre and generic nature of the artistic text; to compare facts and details with historical facts; to create different types of plans; to create written texts using various resources; to correlate the value component of works with the values of the Kazakh and other peoples;
6) evaluates the studied works from the point of view of compositional and stylistic unity, linguistic design and the effectiveness of achieving the set communicative objectives; interpretation of the artistic text created by means of other types of art.
"Foreign Language":
1) Listening: the learner understands the main content of texts within the topics covered; identifies the main facts, omitting secondary ones; understands detailed information within the topics covered; formulates complex questions based on what has been heard in order to obtain additional information; extracts the meaning of what has been heard, relying on context clues; distinguishes specific information within the topics covered; recognizes inconsistencies in the arguments presented within the topics covered;
2) speaking:
The student conveys the main content of the text within the framework of the studied topics, constructing a logical course of events; uses formal and informal styles; presents information within the framework of the studied topics; predicts the possible content of the text based on the title, illustration, keywords, excerpts from the text within the framework of the studied topics; asks simple and complex questions to obtain specific information; interacts with peers (in pairs, groups) to complete educational tasks; compares and contrasts texts within the framework of the studied topics; expresses an opinion, justifying his point of view;
3) reading:
The student identifies the main content of texts of different styles and genres within the studied topics; distinguishes detailed information in texts of different styles and genres within the studied topics; uses various digital resources (reference materials, dictionaries, the Internet, etc.); recognizes specific information in the text and different styles and genres of texts within the studied topics; predicts the content of the text based on the title, text fragment, illustrations, keywords; determines the attitude or opinion of the author; evaluates information from various texts;
4) letter:
The student completes tables, diagrams, charts, questionnaires, and forms; plans, writes, edits, and proofreads text within the topics covered; makes excerpts from the text in accordance with communicative objectives; describes real and/or fictional

events from the past, present, and future, drawing on knowledge of previously covered topics; connects and coordinates sentences and paragraphs within the text within the topics covered; correctly and appropriately places punctuation marks within the topics covered; creates texts of various styles and genres, adhering to the relevant rules and format.

Footnote. Clause 51 as amended by the order of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 No. 182-НҚ (comes into effect on July 12, 2026 ).

52. Expected learning outcomes in the educational field "Mathematics and Computer Science".

Upon completion of basic secondary education, the student:

1) knows the basic concepts of elementary mathematics, statistics and probability theory; classification of numbers; computational operations on real numbers; basic formulas of elementary mathematics; the concept of a function, its properties and graph; methods for solving algebraic equations, inequalities and their systems; classification of polygons; properties and characteristics of the main types of plane figures; rules of combinatorics; classical, statistical and geometric definitions of the probability of an event; methods of collecting and processing statistical data;

An algorithm for using a mathematical model to solve an applied problem; the fundamentals of scientific concepts about information, digital processes, technologies, and models; the role of digital technologies in modern society and the life of each person; the fundamentals of constructing computer systems and networks, as well as their interaction with software; methods for solving problems through modeling, algorithmization, and programming; rules for the correct and safe operation of various digital devices;

2) understands the academic language of mathematics; the method of writing a number in standard form; the relationship between the roots and coefficients of a square trinomial; the importance of using mathematical models to solve various applied problems; the meaning of such mathematical categories as axioms and theorems; the principles of geometric constructions and measurements on a plane; the meaning of numerical characteristics of a sample and a general population; the role of graphical representation of statistical data in conducting quantitative and qualitative analysis;

interaction of the main computer devices; the need for software for the user to work with the system; the use of binary code by the computer to represent all data and instructions; the relationship between units of measurement of information; economic, legal and ethical aspects of the use of information and digital technologies;

3) applies mathematical knowledge to solve practical problems; algorithms for solving mathematical problems; mathematical terminology in appropriate contexts; computational operations on real numbers; exact and approximate calculations in oral and written form; properties of plane figures in solving geometric problems; mathematical models for solving various applied problems; computing equipment and software for solving mathematical problems;
Modern digital software tools for collecting, presenting, processing, storing and transmitting necessary information; computer models of objects and processes (physical, biological, economic and informational) for their visualization and conducting research; basic rules for recording algorithms and the capabilities of programming languages for solving practical problems; the capabilities of local and global networks for collaborative work on the creation, viewing and editing of documents;
4) analyzes patterns and creates mathematical models based on them; statistical data, using various forms of their presentation; transformations performed on rational and irrational expressions; solutions of equations, inequalities and their systems; mutual arrangement of geometric figures; properties of functions; conditions of text problems for creating mathematical models; data presented in the form of graphs, diagrams and various schemes;
Computer models for studying real and imaginary objects and processes; various ways of solving a problem on a computer to determine the most rational one; program code in a programming language to identify existing errors and their subsequent correction;
5) synthesizes algorithms for solving mathematical problems; conclusions based on the results of processing and analysis of statistical data; evidential reasoning using axioms and theorems; methods for solving construction problems using geometric transformations;
information in the form of texts, tables, databases, graphics and multimedia for presenting and implementing your ideas; models of objects and processes (physical, biological, economic) in spreadsheets, 3D editors, and programming environments;
6) evaluates the results of calculations in the context of the problem; the location of the function graph depending on the values of the specified parameters; approximate values of quantities and their recording in standard form; the absolute and relative frequency of an event with an increase in the number of experiments conducted; the quality, importance, usefulness and effectiveness of information; the choice of computer configuration and software depending on the user's needs; a computer model for compliance with real objects; the effectiveness of an algorithm and the results of its execution; the negative impact of digital technology on human health.

Footnote. Clause 52 as amended by the order of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 No. 182-НҚ (comes into effect on July 12, 2026 ).

53. Expected learning outcomes in the educational field "Natural Science".
Upon completion of basic secondary education, the student:
1) knows the basic geographical, biological, physical and chemical concepts; the role of natural sciences in modern life; the essence of the basic biological, physical and chemical laws and theories; the contribution of outstanding scientists to the formation and development of natural sciences; energy sources, its types and common areas of their application, safety regulations for experimental and practical work; units of measurement of physical and chemical quantities; concepts, formulas, laws and physical constants of the following sections: mechanics (kinematics, dynamics, statics, conservation laws), thermal physics (molecular physics and thermodynamics), electricity and magnetism (electrostatics, direct and alternating electric current, magnetic field, electromagnetic induction), optics (geometric and wave), elements of quantum physics, atomic physics, astronomy; atomic and molecular theory, the structure of the atom and the properties of the elements; chemical symbols; classification of substances; biological, chemical and physical phenomena; types of chemical bonds and the structure of matter; types, features and patterns of chemical reactions; The most important classes of inorganic and organic compounds and their properties; the theory of electrolytic dissociation; the periodic law and the structure of the periodic table of chemical elements; the most important branches of the chemical and metallurgical industry of Kazakhstan; fundamentals of microbiology, molecular, cellular biology; components of the internal environment and organ systems of plants and animals; the main groups of plants and animals; the importance of living organisms for humans and the natural complex; fundamentals and patterns of evolutionary development; selection methods; the structure of biogeocenoses and agrocenoses; the influence of environmental factors on living organisms, the impact of human activity on the environment; methods of geographical research; territorial complexes; the essence, classification, features of distribution and location of geographical objects, processes and phenomena; features of functioning and scope of application of modern geographic information systems; composition, properties, structure, patterns, main stages of development of the geographic envelope and geographic environment, geospheres; types, classification and elements of maps; features of the nature of continents and oceans, individual territories, countries and the Republic of Kazakhstan; territorial and sectoral structure, conditions and factors of development of the modern world economy, individual regions, countries and the

Republic of Kazakhstan; goals, forms of international economic relations; types, structure, functions, factors of placement and dynamics of development of settlements; global and regional demographic problems, features of demographic policy in individual regions, countries and the Republic of Kazakhstan; economic and political-geographical position, administrative-territorial division of the Republic of Kazakhstan; natural resource potential of the regions of Kazakhstan; typology of countries; models of economic systems; types of international relations; measures for nature conservation and sustainable development;

2) understands the physical meaning of quantities, basic terms and laws of mechanics, electricity and magnetism, optics, atomic physics, astronomy; the importance of biological, physical and chemical phenomena, processes in human life; conditions for chemical reactions; oxidation and reduction processes; the difference between classes of organic and inorganic substances; international nomenclature International Union of Pure and Applied Chemistry IUPAC; technologies and scientific principles of production of substances and their derivatives; the importance of microbiology in medicine, agriculture and industry; processes occurring in cells at the level of molecules and organelles; the structure of the internal environment and functions of organ systems of plants and animals, principles of classification of the main groups of plants and animals; metabolic processes; global and local environmental problems; the role of the Red Book in preserving biodiversity on Earth; the essence of natural and socio-economic patterns, processes and phenomena; features of modern geographical space, territorial complexes; the interrelationships of geographical objects, processes and phenomena; causes, stages, consequences, significance of processes in the geographic shell and geographic environment; geopolitical processes, role and spheres of influence, nature of interaction of geopolitical subjects; regional and international significance of the Baikonur cosmodrome;

3) applies basic physical, chemical, biological, geographical concepts and terms to describe objects, processes and phenomena in living and inanimate nature; methods for safely conducting experimental and research work; laws and formulas of physics, chemistry, biology, geography when solving educational and applied problems, performing practical and laboratory work; graphical methods of presenting results; the International System of Units of Measurement; the acquired knowledge to explain the conditions of physical and chemical phenomena and processes; binary nomenclature when describing various groups of organisms; methods for determining the quantitative and qualitative characteristics of the components of the geographic envelope and the geographic environment; cartography techniques, orientation and navigation skills;

4) analyzes the data obtained as a result of a natural science experiment; information presented in graphical and tabular form; dependence of the properties of a substance on its qualitative and quantitative composition and structure; cause-and-effect relationships between the properties and areas of application of substances; the importance of microelements and macroelements for the proper functioning of the human body; patterns of biological processes and phenomena; the structure and functions of organ systems of living organisms; problems associated with the use of transgenic technologies; processes of substance circulation in a biogeocenosis; cause-and-effect relationships between processes and phenomena occurring in the geographic shell and geographic environment; achievements in the field of natural sciences and the areas of use of scientific discoveries; factors of the location of geographic objects; natural scientific, socio-economic foundations of social production; geographical and geopolitical position, features and factors of political, economic and social development of Kazakhstan, its role and place in the world;
5) synthesizes collected and processed data and information for presentation in the form of a table, graph, message, report, or presentation; scientific models and evidence for putting forward hypotheses, arguments, and explanations; a plan for conducting an experiment and research; knowledge of the processes occurring in living and inanimate nature for systematization, classification, and identification of empirical rules, principles, and patterns;
6) evaluates the results of the experiment; risks associated with laboratory work; the impact of various physical and chemical processes on human life and the environment; the state of natural biogeocenoses and agrocenoses; the impact of technological production principles on maintaining a balance between the components of living nature; the importance of the proper use of minerals and natural resources; the degree of suitability and use of geographical objects, processes and phenomena for various purposes and activities.
54. Expected learning outcomes in the educational field "Man and Society".
Upon completion of basic secondary education, the student:
1) knows the periodization of national and world history; the main events, phenomena, processes in the history of Kazakhstan and the world from ancient times to the present day; historical figures who played an important role in national and world history; the most important achievements of national and world culture in the course of historical development; basic concepts of historical science; types of historical sources; the concept and subject of law; modern legal systems; fundamental legal and social values: human rights, democracy, civil society and the rule of law, legality and law and order; basic concepts and content of the basic branches of Kazakhstan law;

sources of law; the significance of values and norms based on humanism, honesty, duty to the fatherland and tolerance; the foundations of moral behavior, socially significant orientations that determine a person's attitude towards himself, the world around him, and humanity as a whole; has an idea of positive and negative qualities, emotions and feelings of a person;

2) understands the essence of the main events, phenomena and processes that characterize the integrity and continuity of the development of national and world history throughout all periods of history; the characteristic features of the socio-political, economic and socio-cultural development of Kazakhstan and various countries of the world; the historical determinacy of modern social processes, the cultural diversity of mankind; features of the historical path of Kazakhstan, its role and place in world history; the role and place of outstanding personalities in national and world history; their civil and national identity in the form of awareness of oneself as a citizen of the Republic of Kazakhstan; the need for a respectful attitude towards national and world history, towards culture, traditions, rights and freedoms of people, democratic principles of public life; the origin of the state and law, their relationship; the content of the main concepts and categories of the basic branches of Kazakhstan law; the content of the rights, duties and responsibilities of a citizen as a participant in specific legal relations; the need for legal regulation of public relations in the main spheres of social life; the need to respect individual rights; the need for constant self-knowledge and self-development of a person; the relationship of universal, ethnocultural and national values; responsibility for one's own words and actions; one's role in the family, team, and society; the importance of a conscious choice of future profession; the significance of mutual assistance in life; the value of life and health, the importance of putting into practice knowledge about a healthy lifestyle;

3) applies the skills of historical thinking: to solve life's tasks and problems; when determining the location of various objects, identifying changes on the historical map; when comparing historical figures, events, phenomena, processes; when characterizing the political, socio-economic and cultural development of Kazakhstan and other countries of the world; when determining one's own position in relation to the phenomena of modern life, based on their historical determinacy; when working with historical materials; legal information in practical activities and everyday life; when choosing legally appropriate forms of behavior and actions in typical life situations regulated by law; when determining ways to implement rights and freedoms, as well as the protection of violated rights; when applying to the relevant authorities and organizations for qualified legal assistance; when participating in discussions on current social and legal issues; a creative approach to solving problems aimed at

serving society; for a constructive solution of various issues in accordance with moral standards; when building friendly relationships with other people and the world around us;
4) analyzes historical events, phenomena, processes in order to determine cause-and-effect relationships; historical development of Kazakhstan and other countries, defining common features and characteristics; motives and results of the activities of historical figures; social, economic, political and cultural processes, development trends of Kazakhstan and individual countries of the world by drawing historical parallels; various types of historical sources to answer problematic questions; different points of view on the same historical events, phenomena and processes; information presented in different sign systems (text, map, table, diagram, audiovisual series); norms and mechanisms regulating legal relations in society; basic rights and obligations of subjects of legal relations; simple practical situations related to legal relations in society; features of the legal status and legal liability of minors; legal information obtained from various sources; forms and methods of developing people's ability to personal self-determination, self-realization, self-control; material and non-material needs and their commensurability with desires and capabilities;
5) synthesizes information from various sources for classification, systematization, generalization and differentiation of the studied phenomena, objects and processes, determination of characteristic features of historical phenomena, processes with identification of general patterns; historical information for orientation in modern political, socio-economic and cultural processes occurring in society; a model of behavior in various practical situations taking into account legal and moral norms for social adaptation in society;
6) evaluates historical events, processes, phenomena, personalities in the context of their influence on national and world history, their various interpretations; the reliability of various types of historical sources; the prospects of modern civilization, its problems and difficulties of development, the role of modern Kazakhstani society in the global economy, politics and culture; the activities of state and legal institutions of society, their own possible contribution to their development; positive and negative phenomena in the life of society; the importance of law and order and legality; their ability to demonstrate creative activity in solving specific issues; their ability to cooperate in a team for the constructive solution of the intended tasks in accordance with moral standards.
55. Expected learning outcomes in the educational field "Technology and Art".
Upon completion of basic secondary education, the student:

1) knows the classification and features of various styles, trends and genres of art; visual and expressive means of art and music; the history of the origin of styles and genres of art; traditions and customs in the decorative and applied arts of the Kazakh people and other peoples of the world; masterpieces of world and national art and music; classification of folk and classical musical instruments; the main types and properties of natural, artificial, artistic materials; the main technologies of manual, mechanical, artistic processing of individual materials; basic technologies of food preparation; general characteristics of the main types of electrical work; classification of electrical materials; classification of technological machines, devices, apparatus and tools; operational and functional characteristics of technological machines and equipment; basics of designing, modeling and processing textiles; modern digital technologies and software used in the field of art; safety rules when working with equipment and tools;
2) understands the significance and role of various types of art, technology and engineering in the life of individuals and society, in the protection and conservation of the environment; the value of works of musical and fine art of the Kazakh people and other peoples of the world; the connection between styles and trends of art forms and the historical era; the specifics of conveying creative ideas through various means of art; the influence of the properties of natural and artificial materials on the functional and aesthetic quality of products; the importance of collective and group work for decision-making, development of ideas and creation of creative products;
3) applies methods and techniques for creating creative projects in various forms of art, when carrying out simple electrical installation work; artistic methods and techniques for conveying the characteristics of images, objects and phenomena of the surrounding world, including the use of computer programs and applications; knowledge of the various properties of artistic, structural materials in the creation and manufacture of products, as well as works of art; basic technologies for processing materials to create prototypes of new products, including the use of digital technologies; various ways of promoting creative products to implement their ideas in the commercial sphere; ways of planning and organizing their work; ways of conveying environmental problems of the surrounding world through art;
4) analyzes creative ideas and concepts in works of various types of art; methods, techniques and materials used in the works of artists and their own works; created prototypes of products with the aim of their qualitative improvement; consumer possibilities of the results of creative work; the influence of socio-historical, regional, scientific, technical, cultural factors on works of art; the influence of art, technology and production on the environment and human life;

5) synthesizes creative projects in various forms of art, including the use of digital technologies; methods and techniques of working in various techniques using various materials and tools; various ideas for composing improvisations and arrangements in various styles and genres; knowledge and skills in the humanities and natural sciences for the creation of creative works; engineering and design solutions for the creation of products taking into account the technological and operational properties of materials;
6) evaluates the basic concept, images and ideas in works of various types of art; the artistic and aesthetic value of works of national and world art; independently/collectively completed artistic and technical works; the capabilities of products in terms of functionality, ergonomics and efficiency; consumer qualities of the product of labor and the service capabilities of performing technological operations.

Footnote. Clause 55 as amended by Order No. 182-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 (effective from July 12, 2026 ).

56. Expected results in the educational field "Physical Education".
Upon completion of basic secondary education, the student:
1) knows the rules and safety precautions for physical education classes; rules and techniques for performing motor actions, sets of physical exercises of various types; methods and ways of monitoring current well-being during classes (based on external and internal signs) and physical activity regimens (based on heart rate);
2) understands the need to maintain and strengthen health in order to improve performance; the role of physical exercise in the daily routine; the influence of physical education on the functional state of the body's systems; the need to lead a healthy lifestyle; the levels of complexity of the motor actions performed; the need to achieve the required intensity of various physical activities at different stages of physical fitness;
3) applies motor skills in a wide range of activities to achieve physical improvement; forecasting individual and joint physical education classes taking into account their own and team interests; knowledge and skills to enrich their own experience of physical exercise and the experience of others; tactics and strategies in sports games and cyclic sports specified in the curriculum; knowledge of the rules for judging school competitions in program sports;
4) analyzes achievements and experience in physical exercises to manage future learning and behavior in a team; readiness and ability for self-development and self-education based on optimization of activities; various methods of managing physical changes in the body during short-term and long-term exercises;

5) synthesizes types of movements and their sequence into improved combinations of movements; knowledge and skills for maintaining a healthy and safe lifestyle; knowledge and tools of critical thinking for research and problem solving within the framework of physical education classes; assimilation of rules of individual and collective safe behavior in emergency situations that threaten the life and health of people;

6) evaluates their own physical abilities and the abilities of others; the difficulties and risks that arise during the performance of various physical exercises; the impact of physical exercises on various aspects of health; their potential for participation in active creative activities when choosing and forming a healthy lifestyle and participating in sports events inside and outside of school.

The "Life Safety Fundamentals" curriculum for grades 5-9 is taught as part of the "Physical Education" curriculum, with 15 hours of instruction per year taught by physical education teachers. Life Safety Fundamentals classes are mandatory and are held during school hours.

57. The assessment of students' academic achievements is carried out using criteria for assessing students' knowledge. Assessment criteria are used to measure the level of students' academic achievement.

58. Assessment criteria are developed in accordance with the learning objectives of each curriculum, including taking into account the special educational needs and individual capabilities of students.

59. Assessment of students' academic achievements is carried out in the form of formative and summative assessment.

60. Criteria for assessing students' knowledge are developed and approved by the authorized body in the field of education.

61. For students with special educational needs, conditions are created for them to receive an education, correct developmental disabilities, and social adaptation.

**Chapter 5. Requirements for the duration of study**

62. The period for mastering the general educational curriculum of basic secondary education is five years.

63. The duration of the academic year is 34 academic weeks.

Footnote. Clause 63 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

64. The duration of vacation time in a calendar year is at least 115 days, of which at least 25 days are during the academic year.

Vacations are provided three times during the academic year – in autumn, winter and spring.

Appendix 4
to the order of the Minister of Education
of the Republic of Kazakhstan
dated August 3, 2022 No. 348

**State Compulsory Standard of General Secondary Education**

**Chapter 1. General Provisions**

1. This state compulsory standard of general secondary education (hereinafter referred to as the Standard) has been developed in accordance with Article 56 of the Law of the Republic of Kazakhstan "On Education" (hereinafter referred to as the Law), subparagraph 4) of paragraph 15 of the Regulation on the Ministry of Education of the Republic of Kazakhstan, approved by Resolution of the Government of the Republic of Kazakhstan dated August 19, 2022 No. 581 "Some issues of the Ministry of Education of the Republic of Kazakhstan", and defines the requirements for the content, maximum volume of academic workload, level of preparation of students and the duration of study.

Footnote. Clause 1 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

2. The Standard uses terms and definitions in accordance with the Law. In addition, the following terms and definitions are included:

1) assessment – the process of comparing the learning outcomes achieved by students with the expected outcomes based on developed criteria;

2) assessment criteria – specific indicators on the basis of which the assessment of students' academic achievements is carried out;

3) final assessment of students – a procedure carried out with the aim of determining the degree of their mastery of the volume of academic disciplines provided for by the state compulsory standard of the corresponding level of education;

4) educational values – guidelines in constructing a system of educational goals based on universal human values, which are the leading factor in the formation of the student's personality;

5) special educational needs – the needs of children experiencing permanent or temporary difficulties in obtaining an education due to health, requiring special, general educational programs and educational programs of additional education;

6) basic content of general secondary education - the composition, structure and volume of content of general secondary education subject to compulsory study in

educational organizations, regardless of their type, kind and form of ownership, as well as the language of instruction;
7) summative assessment – a type of assessment that is carried out at the end of a certain academic period (quarter, trimester, academic year), as well as the study of sections in accordance with the curriculum;
8) inclusive education – creating conditions for equal access to education for all students, taking into account special educational needs and individual capabilities;
9) the invariant component of the academic load is a component of the standard curriculum that defines the academic subjects that are mandatory for study by all students in educational organizations, regardless of their type, kind and form of ownership, as well as the language of instruction;
10) variable component of the academic workload – a component of the standard curriculum, which is determined by the educational organization in accordance with the educational needs of students;
11) expected learning outcomes – a set of competencies expressing what exactly the learner will know, understand, and demonstrate upon completion of the learning process;
12) extracurricular activities – an integral part of the holistic educational process, a form of organizing students' free time;
13) standard curriculum – a document regulating the list of academic disciplines (subjects) and determining the volume of the invariant and variable components of the academic load of the corresponding level of education;
14) formative assessment – a type of assessment that is carried out during everyday work in the classroom, is a current indicator of students' academic performance, provides feedback between the student and the teacher and allows for the improvement of the educational process.
3. The application of the standard is aimed at:
1) improving the quality of teaching and education through achieving a system of goals for general secondary education, presented in the form of expected learning outcomes;
2) implementation of the trilingual education policy by creating the necessary conditions for organizing the educational process in Kazakh, Russian and foreign languages;
3) a combination of academic and practical focus of general secondary education, which provides for the acquisition of theoretical knowledge by students and the development of skills to apply the acquired knowledge to solve problems of an applied nature;

4) ensuring a gradual deepening of subject knowledge and skills, taking into account the age capabilities of students;
5) the implementation of the principle of the unity of teaching and education, based on the interconnectedness and interdependence of the values of education and the system of expected learning outcomes that determine the substantive basis of the educational process;
6) ensuring the protection of children's health, creating favorable conditions for meeting the special educational needs of students and the need to receive additional educational services;
7) ensuring the equivalence of general secondary education in the context of the diversity of types and kinds of secondary education organizations;
8) support and development of innovative practices in educational organizations;
9) organization of an objective assessment of the activities of educational organizations to ensure the quality of education.

**Chapter 2. Requirements for the content of education with a focus on learning outcomes**

4. General secondary education is aimed at instilling in students national and universal human values that are common to all levels of education and are intended to become stable personal guidelines for the student, motivating his behavior and activities.
5. The following are defined as basic values in the content of general secondary education:
1) Kazakhstani patriotism and civic responsibility;
2) respect;
3) cooperation;
4) work and creativity;
5) openness;
6) lifelong education.
6. Based on the instillation of educational values, students should develop:
1) readiness to serve the interests of Kazakhstan;
2) respect and compliance with the norms of the Constitution and laws of the Republic of Kazakhstan;
3) social responsibility and decision-making ability;
4) motivation to master the state language;
5) respect for the culture and traditions of the people of Kazakhstan, the cultural diversity of the world;
6) commitment to the ideas of spiritual harmony and tolerance;
7) a positive attitude towards the surrounding world and maintaining ecological balance;
8) creative and critical thinking;

9) communication skills and ability to effectively use digital technologies;
10) motivation for learning and self-improvement throughout life.
Footnote. Clause 6 as amended by Order No. 182-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 (effective from July 12, 2026 ).

7. The purpose of general secondary education:
creation of an educational environment conducive to ensuring the academic preparation of students for continuing their education at a university and professional self-determination based on the development of a wide range of skills:
1) functional and creative application of knowledge;
2) critical thinking;
3) conducting research work;
4) use of digital technologies;
5) use of various methods of communication;
6) ability to work in a group and individually;
7) problem solving and decision making.
Footnote. Clause 7 as amended by Order No. 182-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 (effective from July 12, 2026 ).

8. Broad-spectrum skills as outcomes at the general secondary education level enable students to harmoniously combine national and universal human values, demonstrate functional literacy and competitiveness in any life situation, and solve educational and applied problems.
9. The main objectives of general secondary education are:
1) implementation of specialized education in the natural sciences, mathematics, social sciences and humanities based on a combination of compulsory subjects and specialized elective subjects;
2) ensuring academic preparation of students for admission to higher educational institutions based on a combination of advanced and standard levels of instruction in academic subjects;
3) targeted development of spiritual and moral qualities, communication, social, research skills and problem-solving abilities based on universal human values, positively directed critical and creative thinking;
4) promoting professional self-determination of graduates in accordance with their interests and abilities;

5) promoting the development of positive motivation in graduates to continue education throughout their lives, readiness to regulate the process of learning and career growth in life.

10. The content of general secondary education is established on the basis of the integration of the academic preparation of students for admission to higher and/or postgraduate education institutions and the targeted development of students' independence.

11. The academic preparation of students is ensured by strengthening the fundamental nature of education, aimed at mastering scientific methods of understanding the world.

12. The content of general secondary education is oriented towards learning outcomes and is determined taking into account the following aspects:

1) compliance with the dynamic demands of modern society and the level of scientific development;

2) development of critical, creative and positive thinking;

3) strengthening the integration of the content of academic subjects based on interdisciplinary and interdisciplinary approaches;

4) compliance with the principle of continuity and succession of the content of education between the levels of basic secondary education and general secondary education;

5) maintaining a balance between the academic and practical focus of educational content;

6) ensuring the unity of training, education and development.

13. Along with teaching compulsory subjects, students are provided with a choice of specialized subjects at the advanced and standard levels of education in the invariant component.

14. Profiled education is based on the individual interests and needs of students. Therefore, a flexible system of subject selection is offered at two levels of education. Students can choose their own personalized subjects at the advanced and standard levels. More hours are devoted to specialized subjects at the advanced level than to subjects at the standard level. Non-core subjects are studied at the standard level.

15. The organization of the educational process at the general secondary education level is focused on the implementation of the principle of the unity of instruction, upbringing, and development. In organizing the educational process, priority is given to learning as the leading activity of students. Learning involves the use of interactive teaching methods based on the student's own acquisition of experience through proactive inquiry, active discussion of issues, argumentation of points of view, and constructive decision-making.

16. During the learning process, educational issues are addressed through each subject. All types of educational work are aimed at addressing issues of students' cognition and acquisition of subjective new knowledge, the study of national traditions and culture, and an awareness of universal human values.
17. The organization of various forms of extracurricular activities in combination ensures the implementation of spiritual and moral, civic and patriotic, artistic and aesthetic, labor and physical education of students.
18. Ensuring consistency in the development of students' project and research skills is one of the main principles of organizing the educational process in educational organizations.
19. The content of general secondary education is implemented within the framework of the trilingual education policy. The goal of trilingual education is to develop a multilingual individual—a citizen of Kazakhstan who speaks at least three languages, is able to successfully engage in dialogue in various fields, values the culture of their own people, and understands and respects the cultures of other peoples.
20. Trilingual education is practically implemented through:
1) level-by-level acquisition of Kazakh, Russian and foreign languages;
2) organization of the study of individual academic subjects in Kazakh, Russian and foreign languages, regardless of the language of instruction;
3) organization of extracurricular activities for students and various extracurricular events in Kazakh, Russian and foreign languages.
21. The practical focus of general secondary education is realized through the development of educational, communicative, social, and research skills during the educational process and educational activities.
22. The basic content of general secondary education is specified by curricula, which are developed in accordance with the expected learning outcomes established taking into account the characteristics of specialized education: compulsory subjects and specialized subjects in the natural sciences, mathematics, and social sciences.
23. Contents of compulsory subjects for all areas of specialized education.
1) "Kazakh language", "Kazakh literature" (for classes with Kazakh as the language of instruction) / "Russian language", "Russian literature" (for classes with Russian as the language of instruction) / "Native language", "Native literature" (for classes with Uyghur/Uzbek/Tajik as the language of instruction).
The curriculum focuses on developing communication skills that ensure fluency in various contexts and situations; developing speech and critical thinking; and developing the ability to conduct information searches, extract, and transform necessary information. Language learning fosters high-level thinking skills, such as

comparison, analysis, synthesis, information evaluation, and the application of acquired knowledge in real-life situations.

The content is aimed at developing figurative and analytical thinking, creative imagination, reading culture, and an understanding of the author's position; developing students' oral and written speech; mastering literary texts in the unity of form and content, basic historical and literary information, and theoretical and literary concepts.

During the study process, the analysis of works of art is deepened with the use of literary concepts and necessary information on the history of literature.

Studying academic subjects involves expanding knowledge about the structure and functioning of language in various spheres and communication situations; stylistic resources, the basic norms of literary language, and speech etiquette; enriching vocabulary; and expanding the range of grammatical devices used. The skills acquired during language study, effectively using linguistic units at various levels, will enable students to evaluate language in terms of its normative nature and appropriateness to the sphere and situation of communication.

Important components of the subject content are the education of a spiritually developed individual, the formation of a humanistic worldview, civic consciousness, a sense of patriotism, love and respect for literature and the values of national and world culture;

2) “Kazakh language and literature” (for classes with non-Kazakh language of instruction) / “Russian language and literature” (for classes with non-Russian language of instruction).

The content of the subjects pursues goals determined by the status of the Kazakh language as the state language and the status of the Russian language as a language officially used on an equal basis with the Kazakh language.

The study of these subjects promotes the use of language in educational activities and everyday life, introduces students to the culture of the peoples of Kazakhstan, and ensures their readiness for interethnic communication.

The content of the academic subjects is based on the focus on mastering all types of speech activity and the basics of oral and written speech culture, skills and abilities in using language in various areas and communication situations corresponding to experience and interests.

In the process of studying language and literature, students acquire knowledge about language as a sign system and a social phenomenon, its structure, and knowledge about the development of literature.

The study of language and literature is aimed at further improving the mastery of the norms of the literary language, enriching the vocabulary and grammatical structure of

speech of students; further developing the ability to analyze and evaluate linguistic phenomena and facts and literary works;

3) "Foreign language".

The content of the "Foreign Language" subject should be aimed at developing a multilingual, multicultural personality; at improving communicative competence by enriching vocabulary through the use of authentic texts of various styles, which allows for the sociocultural enrichment of worldviews and worldviews in the process of developing foreign language communicative competence; and at developing research skills and a creative approach to solving various educational problems.

The content of the "Foreign Language" course provides for the development of skills in analyzing, generalizing, and classifying professionally significant information, effectively using language for communication in scientific and professional activities, as well as skills in personal and business correspondence, resume writing, and essay writing on a given topic, which together contribute to increasing motivation for learning a foreign language.

Students are given the opportunity to integrate the content of the subject "Foreign Language" with other academic subjects through interdisciplinary connections to develop the ability to establish cause-and-effect relationships between facts, to work with information, extracting basic and fragmentary parts from foreign-language sources.

The Foreign Language subject should be used to develop spiritual and moral values, foster a patriotic attitude towards one's homeland, one's people and a tolerant attitude towards representatives of other cultures, as well as foster the ethics of interpersonal relationships in the family and school through the development of skills in using socio-cultural material when communicating with peers, teachers, and native speakers;

4) "Algebra and Elements of Analysis", "Geometry".

The curriculum of the "Algebra and Elements of Analysis" and "Geometry" courses should be aimed at developing students' mathematical culture and a system of mathematical knowledge and skills necessary for successful learning at subsequent levels of education, as well as for solving practical problems. The mathematics course promotes the development of functional literacy, abstract and logical thinking, spatial imagination, and an understanding of the role of mathematics in shaping a person's overall culture.

The content lines of the mathematics course are aimed at systematizing and developing students' understanding of the mathematical laws of the surrounding world, and their awareness that mathematical tools and methods are used to describe and study phenomena and processes in virtually all areas of knowledge.

The curriculum provides for the further development of academic, cognitive, and general intellectual skills. Skills such as comparison, classification, generalization, analysis, synthesis, abstraction, and concretization are used to formulate problems and develop and test hypotheses while understanding mathematical principles.

The content of the academic subjects is structured according to the main sections of mathematics, covering the topics of the school mathematics course: "Numbers", "Algebra", "Statistics and Probability Theory", "Mathematical Modeling and Analysis", "Geometry";

5) "Computer science".

The "Computer Science" course focuses on developing skills in searching, analyzing, critically evaluating, selecting, organizing, transmitting, and processing information; modeling objects and processes; and mastering the methods and tools of digital technology and problem-solving techniques.

The curriculum for this course provides for the development of skills in the application, analysis, and transformation of information models of real objects and processes; algorithmic and computational thinking; and the development of intellectual and creative abilities using computer models.

The content of the academic subject includes consideration of the implementation of information processes through computer technologies, work with computer systems and models, the study of information security methods, systemic approaches to modeling, formalization and visualization using interactive computer models.

The course contains the following content lines: "Computer systems", "Information and information processes", "Algorithmization and programming" and "Health and safety";

6) "History of Kazakhstan".

The content of the "History of Kazakhstan" course is aimed at developing in-depth knowledge of key issues in the ethnic, political, socio-economic, and cultural history of Kazakhstan.

This course expands and deepens students' understanding of the essence and characteristics of Kazakhstan's cultural and historical development in different historical periods.

The "History of Kazakhstan" course develops historical thinking skills necessary for analyzing, classifying, systematizing, generalizing, and evaluating events, phenomena, and processes in the history of Kazakhstan. The axiological function of this course is to foster patriotism and instill respect for national and universal values.

7) "Physical education".

The content of the subject "Physical Education" should ensure: expansion of knowledge about the patterns of motor activity, sports training, the importance of physical education for future work, preparation for military service; improvement of the functional capabilities of the body in accordance with the age and gender characteristics of students; improvement of technical and tactical actions and techniques in basic sports; development of competence in individual and collective forms of physical education and sports and health activities, development of creative skills in the organization of active recreation and sports competitions; formation of adequate self-esteem of the individual, moral self-awareness, worldview, collectivism, development of purposefulness, confidence, endurance, self-control; creation of conditions for the development and formation of the Olympic reserve in various sports.

Studying the subject "Physical Education" will enable students to apply subject knowledge, skills, and abilities in everyday life; assess the need to improve motor skills and physical development; develop moral qualities and recognize the need for fair play and continuous self-improvement; understand the need to observe personal hygiene rules; evaluate the degree of influence of physical exercise on the human physical and energy system, levels of their own physical development and motor fitness, the functional state of the body and physical performance;

8) "Basic military training".

The content of the academic subject shall ensure that students develop a systematic understanding of the fundamentals of military affairs, the current structure and capabilities of the Defence Forces of the Republic of Kazakhstan; knowledge of service in the Armed Forces of the Republic of Kazakhstan as a form of service to the state and society; strong practical skills in the safe handling of training weapons and protective equipment; basic tactical skills for operating as part of a small unit in various environmental conditions; terrain orientation skills using traditional and digital navigation systems; the development of a worldview of civic responsibility and patriotism; the development of personal resilience, strong-willed qualities and leadership skills; an understanding of the role of modern technologies, such as drones, artificial intelligence, GIS and digital control systems, in ensuring the defence capability of the state; the preparation of students for an informed choice of military service; the development of a culture of safety and responsibility for decisions made. Practical training necessarily includes the use of 3D simulators (geotactical platforms) for the safe modelling of tactical actions, drone control and the development of team coordination. Consolidation of acquired knowledge and skills in real conditions is ensured through mandatory field training sessions.

This subject occupies an important place in the system of military-patriotic education and the development of digital and functional literacy among students in the military sphere.
The course aims to develop a strong-willed, decisive, physically healthy, and militarily competent individual by introducing the history of the Kazakh army and studying its current state.
Footnote. Clause 23 as amended by orders of the Acting Minister of Education of the Republic of Kazakhstan dated 25.05.2026 No. 137-НҚ (shall enter into force upon expiry of ten calendar days after the date of its first official publication); dated 26.06.2026 No. 182-НҚ (shall enter into force on 12.07.2026 ).

24. Content of education in academic subjects of the advanced level of study in the natural sciences and mathematics field.
1) "Biology".
The curriculum of the Biology course is aimed at deepening students' knowledge of the diversity of living organisms, the evolution of the natural world, and the laws and patterns of natural phenomena. It also aims to develop practical skills in observation, classification, systematization, comparison, contrast, analysis, and evaluation of objects and information, as well as establishing cause-and-effect relationships.
The advanced course in Biology aims to develop a deeper understanding of natural biological phenomena and processes, as well as the impact of human activity on flora and fauna, and human health. Understanding the characteristics of living nature and the nature of evolutionary processes will enable students to assess the environmental situation and understand the need to respect the natural world.
The basis for structuring the content of the subject "Biology" at the level of general secondary education is formed by the leading system-forming ideas: diversity, structure and functions of living organisms; reproduction, heredity, variability and evolutionary development; organisms and the environment; applied integrated sciences;
2) "Chemistry".
The chemistry course aims to deepen students' understanding of the importance of the diversity of chemical substances and their transformations, develop the careful use of natural resources, and broaden students' understanding of the diversity of natural substances by deepening their knowledge of the chemistry of natural phenomena, developing a wide range of experimental and practical skills, and utilizing critical thinking and a creative approach to the processes being studied.

The subject reveals the possibilities of creating new substances, teaches how to evaluate the ecological situation of the environment based on available data, and thus provides a deep connection with life.

The content of this advanced course provides students with an understanding of the essence of chemical phenomena and processes occurring around them and encourages them to lead a healthy lifestyle. It also provides the opportunity to use chemical knowledge to select high-quality products and products in daily practice, improving the quality of daily life.

The content of general secondary education in the subject "Chemistry" is structured according to the following sections: "Particles and their structure", "Patterns of chemical reactions", "Energy in chemistry", "Chemistry around us", "Chemistry and life";

3) "Physics".

The advanced physics course is aimed at developing students' understanding of physics as a science of nature, methods and methodology of scientific knowledge, and the role and relationship of theory and experiment in the process of knowledge.

The curriculum aims to deepen students' knowledge of the laws of mechanics, thermal physics, electricity and magnetism, optics, and atomic physics as general laws of nature. Using scientific methods of learning, students' understanding of the physical worldview is expanded and their scientific worldview is shaped.

The physics course involves developing skills in observing natural phenomena, describing and summarizing results, and using measuring instruments to study physical phenomena.

The content of the advanced course provides the opportunity to plan and conduct experiments aimed at identifying empirical relationships based on the collection and analysis of experimental results.

In-depth general education training of students in physics involves the application of acquired knowledge to explain the causes of various natural phenomena and processes, the operating principles of the most important technical devices, putting forward hypotheses and constructing models;

4) "Geography".

The advanced geography course aims to enrich students' knowledge of the patterns of development of nature, population, geopolitics, and economics, and to develop a comprehensive understanding of the world, necessary for an objective understanding of the characteristics of natural, social, economic, and political processes.

The content of the subject involves the development of geographical thinking, a sense of personal responsibility for the current and future state of the environment and humanity, which together contribute to the formation of value orientations in students.
The content of geographical education is aimed at developing understanding of the spatial diversity of the modern world, its general and regional characteristics and dynamics; at analyzing and synthesizing the spatiotemporal patterns of interaction and interrelationships between society and nature; at developing an understanding of cause-and-effect relationships and spatiotemporal patterns between geographical phenomena and processes; at developing skills in using geographical knowledge to explain and evaluate a variety of natural, socioeconomic, and environmental phenomena and processes; and at interpreting and using geographical information in everyday practice.
25. Content of education in standard-level subjects in the natural sciences and mathematics field
1) "Graphics and design".
The course "Graphics and Design" is aimed at studying the fundamentals of graphic image theory and mastering the methods of geometric and graphic modeling, developing students' creative project-based activities, and shaping their graphic culture.
The entire content of the subject is determined by the following educational lines: "Graphic methods and means of visualizing information", "Basic types of images and their construction. Image transformation", "Form formation and design. Form transformation", "Elements of technical, architectural, construction and information graphics", "Design. Project graphics. Creative tasks";
2) "World History".
The content of the academic subject "World History" is aimed at developing knowledge on key issues of ethnogenesis, political genesis, and cultural genesis of human civilization.
This course is aimed at deepening students' understanding of the essence of the global cultural and historical process in its unity and diversity.
The subject "World History" provides for the development of historical thinking skills necessary for the analysis, classification, systematization, generalization, and evaluation of events, phenomena, and processes in world history.
The axiological goal of this subject is to instill in students respect for national and universal values;
3) "Fundamentals of Law".

The content of the course "Fundamentals of Law" is aimed at developing legal literacy and understanding the ideals and values of a democratic legal society.
This course deepens students' understanding of the nature and characteristics of various legal areas.
The course "Fundamentals of Law" develops legal thinking skills necessary for analyzing, classifying, systematizing, summarizing, and evaluating processes based on legal norms, laws, and regulations. The axiological function of this course is based on developing legal literacy and the values of legal consciousness.
26. Content of education in academic subjects of the advanced level of study in the social and humanitarian field.
1) "World History".
The content of the academic subject "World History" is aimed at developing in-depth knowledge of key issues of ethnogenesis, political genesis, and cultural genesis of human civilization.
This course is aimed at deepening students' understanding of the essence of the global cultural and historical process in its unity and diversity.
The advanced course in the subject "World History" provides for the development of historical thinking skills necessary for the analysis, classification, systematization, generalization, and evaluation of events, phenomena, and processes in world history.
The axiological goal of this subject is to instill in students respect for national and universal values
2) "Geography".
The content of the subject "Geography" is aimed at forming a geographical picture of the world as a dynamically developing system of fundamental geographical laws and patterns.
The content is based on a regional geographic approach, which allows for an understanding of modern geographical features and regional characteristics.
The geography course is aimed at developing students' scientific worldviews based on an understanding of the inseparability of nature and society and the role of geography in harmonizing the relationship between man and nature.
This course develops an understanding of the interaction between nature and society through the study of contemporary global human challenges and their solutions; an understanding of the importance of environmental protection and rational nature management; and geographic approaches to sustainable development within Kazakhstan and globally.
The content of the subject "Geography" includes knowledge about the spatio-temporal patterns and features of the functioning and development of geographical objects,

processes and phenomena, skills in the functional application of geographical knowledge to explain and evaluate natural, socio-economic and geopolitical phenomena and processes;

3) "Fundamentals of Law".

The content of the course "Fundamentals of Law" is aimed at developing legal literacy and understanding the ideals and values of a democratic legal society.

This course deepens students' understanding of the nature and characteristics of various legal areas.

The course "Fundamentals of Law" develops legal thinking skills necessary for analyzing, classifying, systematizing, generalizing, and evaluating processes based on legal norms, laws, and regulatory legal acts. The axiological function of this course is based on the development of legal literacy and the values of legal consciousness;

4) "Foreign language".

The Foreign Language course aims to develop students' language skills in four areas of speech activity (listening, speaking, reading, and writing). Upon completion of general secondary education, students should achieve language level B1 (intermediate – B1.2) in accordance with the Common European Framework of Reference for Languages (CEFR).

This course increases students' confidence in communicating in various life situations, provides access to higher education not only in Kazakhstan but also abroad, and expands access to authentic literary texts in the original language.

This course is aimed at developing intercultural communicative competencies, a positive attitude towards another language and another culture, improving general culture, broadening horizons and knowledge about the country of the studied language, developing linguistic abilities and linguistic insight, a culture of speech behavior, an interest in learning a foreign language, and mastering the basic characteristics of a secondary linguistic personality, capable and ready for independent foreign language communication.

27. Content of education in academic subjects of the standard level of education in the social and humanitarian field.

1) "Physics".

The course is aimed at developing students' understanding of physics as a science of nature, methods and methodology of scientific knowledge, and the role and relationship of theory and experiment in the process of knowledge.

The content of the subject is aimed at expanding the understanding of the physical picture of the world and developing the scientific worldview of students.

The physics course involves developing skills in observing natural phenomena, describing and summarizing results, and using measuring instruments to study physical phenomena.
General education training of students in physics involves the application of acquired knowledge to explain the causes of various natural phenomena and processes, and the operating principles of the most important technical devices;
2) "Chemistry".
The chemistry course aims to develop students' understanding of the importance of the diversity of chemical substances and their transformations, promote the careful use of natural resources, and broaden students' understanding of the diversity of natural substances by deepening their knowledge of the chemistry of natural phenomena, developing practical skills, and utilizing critical thinking and a creative approach to the processes being studied.
The subject teaches how to assess the ecological situation of the environment based on available data and thus provides a connection with life.
The curriculum's content provides students with an understanding of the nature of chemical phenomena and processes occurring around them and encourages them to lead a healthy lifestyle; it provides the opportunity to use chemical knowledge to select high-quality products and tools in daily practice, improving the quality of daily life;
3) "Biology".
The content of the subject "Biology" is aimed at developing students' knowledge about the diversity of living organisms, the evolution of the surrounding world, the laws and patterns of natural phenomena;
to develop practical skills of observation, classification, systematization, comparison, contrast, analysis, evaluation of objects and information, and establishment of cause-and-effect relationships.
The curriculum of the Biology course aims to develop students' understanding of the essence of natural biological phenomena and processes, the impact of human activity on flora and fauna, and human health. Understanding the characteristics of living nature and the nature of evolutionary processes will enable students to assess the environmental situation and understand the need to respect the living world.
The basis for structuring the content of the subject "Biology" at the level of general secondary education consists of the leading system-forming ideas: diversity, structure and functions of living organisms; reproduction, heredity, variability and evolutionary development; organisms and the environment; applied integrated sciences.

28. Content of education in academic subjects of the standard level of education in the natural sciences, mathematics, and social sciences and humanities.

1) "Fundamentals of entrepreneurship and business".

The course "Fundamentals of Entrepreneurship and Business" is aimed at studying the basic concepts and laws of entrepreneurship, taking into account Kazakhstani and international practices. It has a practice-oriented teaching model that promotes the development of entrepreneurial thinking and the acquisition of 21st-century skills by students.

This subject has been developed for schools in the Republic of Kazakhstan in accordance with the message of the President of the Republic of Kazakhstan "The Third Modernization of Kazakhstan: Global Competitiveness" in the context of one of the declared priorities - the radical improvement and expansion of the business environment through the implementation of the Productive Employment and Mass Entrepreneurship Development Program.

The curriculum is a completely new course that integrates material on entrepreneurship and business with coaching and training elements.

This course is designed to develop students' business acumen and acquire fundamental knowledge of entrepreneurship, business, and economics; instill responsibility for their own choices and foster an entrepreneurial mindset and proactive approach to life; and develop a practical skills base for future independent work in today's marketplace.

29. The educational organization carries out educational activities in accordance with the license received and, throughout the entire period of its validity, complies with the qualification requirements for educational activities and the list of documents confirming compliance with them, approved by Order of the Minister of Education of the Republic of Kazakhstan dated November 24, 2022 No. 473 "On approval of qualification requirements for the educational activities of organizations providing primary, basic secondary, general secondary, technical and vocational, post-secondary, spiritual education, and the list of documents confirming compliance with them" (registered in the Register of state registration of regulatory legal acts under No. 30721).

Footnote. Clause 29 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

**Chapter 3. Requirements for the maximum volume of students' academic workload**

30. The maximum weekly academic workload for students at the general secondary education level in each class is no more than 36 hours per week.

Footnote. Clause 30 – as amended by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (comes into effect after the day of its first official publication).

31. The total volume of the students' academic workload, which constitutes the invariant and variable components, as well as the weekly and annual academic workload by class, are established by the standard curriculum.

32. The weekly academic workload includes all types of academic work defined by the standard curriculum (invariant and variable components). The curricula of special (correctional) educational institutions include a mandatory remedial component, taking into account the type of developmental disability. The invariant, remedial, and variable components in the curricula of special (correctional) educational institutions are established taking into account the special educational needs of students.

33. The division of a class into two groups in educational organizations is carried out in urban general education organizations when classes are filled with 24 or more students, and in rural ones – with 20 or more students according to:

1) Kazakh language and literature – in classes with a non-Kazakh language of instruction;

2) foreign language;

3) computer science.

Dividing a class into two groups is permissible in educational organizations in urban general education organizations when classes are filled with 24 or more students, and in rural organizations when classes are filled with 20 or more students in Russian language and literature – in classes with a non-Russian language of instruction.

Footnote. Clause 33 – as amended by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (comes into effect after the day of its first official publication).

34. Dividing a class into groups is permitted in urban and rural educational organizations, in small schools, regardless of the number of students, when conducting lessons on subjects of the invariant component, except for the subjects specified in paragraph 33.

Footnote. Clause 34 – as amended by Order No. 406 of the Minister of Education of the Republic of Kazakhstan dated September 23, 2022 (comes into effect after the day of its first official publication).

**Chapter 4. Requirements for the level of training of students**

35. Standard curricula for general secondary education are developed on the basis of differentiation, integration and professional orientation of educational content with the introduction of specialized training in the natural sciences, mathematics and social sciences.

36 The level of training of students, including students with special educational needs, is determined through the expected learning outcomes, which are designed taking into account the direction of specialized education: compulsory subjects and specialized subjects in the natural sciences, mathematics, and social sciences.

37. The expected learning outcomes in compulsory subjects serve as the basis for determining the basic content of general secondary education.

38. Compulsory subjects include: "Kazakh language" and "Kazakh literature" (for classes with Kazakh as the language of instruction), "Russian language" and "Russian literature" (for classes with Russian as the language of instruction), "Native language", "Native literature" (for classes with Uyghur/Uzbek/Tajik as the language of instruction), "Kazakh language and literature" (for classes with a non-Kazakh language of instruction), "Russian language and literature" (for classes with a non-Russian language of instruction), "Foreign language", "Algebra and principles of analysis", "Geometry", "Computer science", "History of Kazakhstan", "Physical education", "Basic military training".

Footnote. Clause 38 – as amended by Order No. 137-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated May 25, 2026 (shall enter into force ten calendar days after the date of its first official publication).

39. The expected learning outcomes for the core subjects of each program are presented in accordance with the standard and advanced levels of education and serve as the basis for determining the content of the subjects, taking into account the specific features of the education profile.

40. Advanced-level subjects in the natural sciences and mathematics program include: Biology, Chemistry, Physics, and Geography. Standard-level subjects in this specialized program include: World History, Fundamentals of Law, Fundamentals of Entrepreneurship and Business, and Graphics and Design.

41. The advanced level subjects in the social and humanities program include: "Foreign Language," "World History," "Geography," and "Fundamentals of Law." In this specialized program, the standard level subjects include: "Physics," "Chemistry," "Biology," and "Fundamentals of Entrepreneurship and Business."

42. In the curricula of general secondary education, the expected learning outcomes are specified in the learning objectives for the sections of each subject.

43. The system of expected learning outcomes creates the opportunity to build individual development trajectories for students, including students with special educational needs, and to gradually advance them towards achieving long-term learning goals at the general secondary education level.
44. Expected learning outcomes upon completion of general secondary education in compulsory subjects.
"Kazakh language" (for classes with Kazakh as the language of instruction)/ "Russian language" (for classes with Russian as the language of instruction):
1) listening and speaking:
The student understands texts related to various spheres of communication and styles, analyzing openly and covertly expressed forms of speech behavior, evaluation; achieves various communication goals in situations of prepared and unprepared monologue and dialogic communication, including public; implements speech behavior tactics, striving to influence the listener; analyzes and critically evaluates information from the text heard, expressing his point of view; predicts the content of the text; observes the structure and norms of use of linguistic units, taking into account their stylistic differentiation;
2) reading:
The student understands and interprets the content of texts of various types, styles and genres, including scientific and technical topics; recognizes the hidden meaning of the text and the significance of the artistic devices introduced into the text; identifies the linguistic, compositional and genre features of complex texts; uses various reading strategies depending on the tasks facing the reader; carries out information search, extracts and transforms the necessary information; compares the compositional, linguistic, genre and stylistic features of texts of different genres and styles; critically evaluates the content of a problematic text, drawing conclusions and proposing solutions;
3) letter:
The student creates texts of various types, genres, and styles, including those of an impactful nature; creates continuous and discontinuous texts, using techniques of collapsing and expanding information; writes creative and academic texts, essays on global issues, arguing their opinions and using research skills; synthesizes information obtained from various written or oral sources and presents it in the form of a clearly argued, coherent message; proofreads and edits texts; creates various types of plans; adheres to grammatical, spelling, punctuation, and stylistic norms.
"Kazakh Literature" (for classes with Kazakh as the language of instruction)/ "Russian Literature" (for classes with Russian as the language of instruction):

1) knows the basic patterns of the historical and literary process; memorizes poetry and fragments of prose texts (optional); historical and literary information and theoretical and literary concepts within the framework of the topics studied; the historical and cultural context of the works studied and the main facts of the life and creative path of their authors;
2) understands the spiritual, moral and aesthetic significance of literature; the connection between literature and history and art; a work of art in the unity of form and content; the theme, idea, and problematic of a work, the author's position in a work; the figurative nature and hidden meaning of works of art; nationally determined differences and similarities between works of Russian, Kazakh and world literature;
3) applies artistic and visual means and stylistic devices in oral or written expression on a literary topic, when creating one's own analytical text, interpreting the studied text, in debates, public speaking, expressing an active civic position and demonstrating spiritual and moral qualities; the conceptual language of literary criticism when analyzing the content of works of art;
4) analyzes various literary works and their critical and artistic interpretations; features of plot, composition, the role of pictorial and expressive means, key episodes, actions and deeds of the characters, features of the writer's style; ideas about the moral ideal of the Kazakh and other peoples in works of art and folklore;
5) synthesizes written texts using various resources to generalize works of art, compare the content of works with historical facts; reasoned judgment on the problems of a work of art, the spiritual and moral content of the content of the work;
6) evaluates works from the point of view of the relevance of the content and its significance for the formation of spiritual and moral qualities of a person; oral and written statements from the point of view of compositional, stylistic unity and linguistic design; interpretations of a work of art created by means of other types of art; works of art to determine the range of reading that is relevant to oneself.
"Native language", "Native literature" (for classes with Uighur / Uzbek / Tajik language of instruction):
1) listening and speaking:
The student understands texts related to various spheres of communication and styles, analyzing openly and covertly expressed forms of speech behavior, evaluation; achieves various communication goals in situations of prepared and unprepared monologue and dialogic communication, including public; implements speech behavior tactics, striving to influence the listener; analyzes and critically evaluates information from the text heard, expressing his point of view; predicts the content of

the text; observes the structure and norms of use of linguistic units, taking into account their stylistic differentiation;
2) reading:
The student understands and interprets the content of texts of various types, styles and genres, including scientific and technical topics; recognizes the hidden meaning of the text and the significance of the artistic devices introduced into the text; identifies the linguistic, compositional and genre features of complex texts; uses various reading strategies depending on the tasks facing the reader; carries out information search, extracts and transforms the necessary information; compares the compositional, linguistic, genre and stylistic features of texts of different genres and styles; critically evaluates the content of a problematic text, drawing conclusions and proposing solutions;
3) letter:
The student creates texts of various types, genres and styles, including those of an impactful nature; creates continuous and non-continuous texts, using techniques of folding and unfolding information; writes creative and academic texts, essays on global issues, arguing their opinions and using research skills; synthesizes information obtained from various written or oral sources and presents it in the form of a clearly argued coherent message; corrects and edits texts; makes different types of plans; observes grammatical, spelling, punctuation and stylistic norms;
4) knows the main trends in the development of literature, its connection with the history of the development of society; biographical information about outstanding literary figures, the main stages in the development of world literature; the main theoretical literary concepts; the content of works intended for detailed and overview study, and reproduces their specific content (main characters, main plot lines and events);
5) understands the place and role of works in the historical, cultural and literary processes; national values reflected in fiction; the process of functioning of literature in its historical development; the ideological meaning of works and the ways of its embodiment, the artistic structure of the work and the means used by the author; the meaning of the structural elements of the work (plot and composition, the polysemy of artistic detail, its connection with the problems of the text, figurative and expressive means of artistic speech, etc.); the author's intent, the writer's attitude to the characters and events, the author's position; the mood with which the work is imbued;
6) applies acquired knowledge and skills in preparing an oral or written statement on a literary topic, in creating one's own analytical text, interpreting the studied text; to determine the range of reading that is relevant to oneself and to evaluate works of art

from the point of view of ideological and thematic originality; in debates, public speaking, expressing an active civic position and demonstrating spiritual and moral qualities; for independent analysis of works of art;
7) analyzes a literary work as an artistic whole, conceptually comprehending it and interpreting the content; works of different genres and generic nature, identifying the universal, concrete historical and current view of the reflected era; the problems laid down by the author in the work, and reflects on them;
8) synthesizes the content of works to create annotations, reviews; information from various sources, including the Internet, to create creative works, generalizing their own ideas and extracted information; approaches to identifying the spiritual and moral content of the content of works to correlate it with the values of the Kazakh and other peoples; methods of analyzing a work that are adequate to the genre-generic nature of the artistic text;
9) evaluates the artistic merit of works; the uniqueness of national literature and its significance in the context of world culture; a work from the point of view of the relevance of the content and its significance for the formation of spiritual and moral qualities of a person; oral and written statements from the point of view of compositional, stylistic unity, linguistic design, the effectiveness of achieving the set communicative objectives; interpretation of a literary text created by means of other types of art.
“Kazakh language and literature” (for classes with a non-Kazakh language of instruction) / “Russian language and literature” (for classes with a non-Russian language of instruction):
1) listening:
The student fully understands the content of texts from various areas of communication, communicative intentions, as well as the social and emotional-expressive features of the speaker's speech; perceives information at the level of critical understanding; evaluates the text heard in terms of its expressiveness and imagery;
2) speaking:
The student effectively uses a variety of linguistic means in accordance with the communicative setting, creating a reasoned monologue or dialogic statement; discusses the themes of works of art, expresses his or her attitude towards the characters of the works and their actions; critically evaluates various statements; observes the norms of language, speech behavior and etiquette; predicts the causes and consequences of a problem; synthesizes ideas related to the socio-economic, spiritual-

moral, patriotic, cultural-historical development of society, proposing possible solutions to problems;

3) reading:

The student understands the content of continuous and non-continuous texts in detail, identifying hidden meanings; determines the meaning of unfamiliar words from context; identifies the features of academic texts within the framework of the topics studied; extracts information from various sources; compares works of literature with their reflection in other forms of art, analyzing ideas about the moral ideal of the Kazakh and other peoples in works of art and folklore; uses various reading strategies depending on the tasks set;

4) letter:

The student creates texts of various types and styles in accordance with the topic, purpose, problematic, and communicative situation, adhering to grammatical, spelling, punctuation, and stylistic norms; creates continuous and non-continuous texts on various topics based on research and synthesis of the obtained information; creates various types of text plans; writes creative works based on works of fiction, evaluating issues of cultural and linguistic diversity, patriotism, and spiritual and moral development of the individual; uses artistic tropes and stylistic devices to more precisely express thoughts and feelings.

"Foreign language":

1) listening:

The student understands the main content of authentic texts of various genres, dialogues on familiar and partially familiar topics; extracts the most functionally significant semantic information, including detailed and specific, to fill out forms, tables, and diagrams; understands the meaning of terms and key units of texts from various educational fields, as well as other areas of communication; distinguishes between fact and opinion; extracts and compares inconsistencies in medium-length texts of different genres and styles within the framework of the topics studied, guesses the meaning of unfamiliar words from the context;

2) speaking:

The student conducts dialogue in situations of formal and informal everyday communication; correctly formulates his/her own statements, using lexical and grammatical means of the language; expresses an emotional and evaluative attitude to the surrounding reality, implementing a pre-proposed speech communication tactic; analyzes and compares texts, arguing his/her point of view; reasons, giving an assessment of events, opinions and problems; draws conclusions and proposes his/her own solutions to a given problem;

3) reading:
The student understands the main content of journalistic, popular science, and fiction texts of a certain complexity; uses various reading strategies; determines the temporal and cause-and-effect relationships of events and phenomena; analyzes and compares the meanings of words using book and electronic resources; critically evaluates the content of texts of different genres and styles;
4) letter:
The student creates a plan and outline for a written communication, edits and proofreads texts of various genres and styles; adheres to grammatical, spelling, punctuation and stylistic norms; writes an argumentative text based on media information; writes problematic texts, expressing their own attitude to the problem; creates business letters and documents; writes essays on various topics (150-200 words).
"Algebra and Elements of Analysis", "Geometry":
1) knows the definitions of exponential and logarithmic functions, their properties and graphs; the concept of a composite function; the concept of an inverse function; definitions of inverse trigonometric functions; methods for solving trigonometric, exponential, and logarithmic equations and inequalities; methods for solving rational and irrational equations; methods for solving rational inequalities; types of polyhedra, solids of revolution, and their development; formulas for the area and volume of polyhedra and solids of revolution; axioms of stereometry and their consequences; the concept of a vector in space; the equation of a sphere; basic concepts of statistics; concepts of discrete and continuous random variables; definitions of the limit of a function at a point and at infinity; definitions of the continuity of a function at a point and on a set; definition of the derivative of a function; equation of the tangent to the graph of a function; definitions of an antiderivative function, an indefinite and definite integral; formulas for finding the area of a plane figure and the volume of a solid using a definite integral.
For the natural-mathematical direction, he additionally knows methods for solving irrational inequalities; formulas for addition and multiplication of probabilities; Bernoulli's formula; types of distribution of discrete random variables; equations of a line and a plane in space; definition of the differential of a function;
2) understands the notation of a polynomial with one variable in standard form; the terms "population", "sample", "variance", "standard deviation"; the geometric and physical meaning of the derivative; integration as a process inverse to differentiation, the system of axioms of stereometry and consequences from the axioms, methods of proof and solutions of geometric problems.

For the natural-mathematical direction, he additionally understands the essence of the coordinate method; the essence of formulas for the number of permutations, combinations, and arrangements with repetitions;
3) applies algorithms for solving trigonometric, exponential, logarithmic equations and inequalities; algorithms for solving irrational equations; techniques for performing simple stereometric drawings; signs and properties of parallel, intersecting and perpendicular lines, parallel and perpendicular planes when solving problems; formulas for finding surface areas and volumes of geometric bodies; rules for operations with vectors for solving geometric problems; conditions for collinearity and coplanarity of vectors; methods for finding critical points and extremum points, intervals of increasing (decreasing) function; differentiation techniques and a table of derivatives for finding derivatives; a table of integrals and the Newton-Leibniz formula for finding a definite integral.
For the natural-mathematical direction, it additionally applies algorithms for solving irrational inequalities; Newton's binomial theorem for approximate calculations; Bernoulli's formula; methods for finding asymptotes to the graph of a function;
4) analyzes the relative positions of lines in space, lines and planes in space, planes in space, planes and solids of revolution; sections of solids of revolution by a plane; the difference in types of random variables and calculates the numerical characteristics of discrete random variables; properties of a function based on its graph; problems of geometric and physical content and solves them using a derivative and (or) an integral.
For the natural-mathematical direction, it additionally analyzes the section of polyhedrons by a plane (cube, rectangular parallelepiped, pyramid);
5) synthesizes various methods for solving trigonometric, exponential, logarithmic equations and inequalities; methods for solving irrational equations; models of developments of polyhedra and solids of revolution; probabilistic models of real phenomena and processes.
For the natural-mathematical direction, he additionally synthesizes combinatorics formulas for finding the probability of an event; various methods for solving irrational inequalities; properties of inverse trigonometric functions based on their definition and properties of mutually inverse functions;
6) evaluates the solution of trigonometric, exponential, logarithmic equations and inequalities; solution of irrational equations; values of variation indicators of statistical data.
For the natural-mathematical direction, it additionally evaluates the solution of irrational inequalities.
"Informatics":

1) knows the purpose and basic functions of system and application software; the basics of working with database management systems; life cycle models for software development; the basics of web programming, database theory for creating websites; programs for developing mobile applications; network protocols and principles of the Internet; security measures developed to ensure the security of data and a computer system;
2) understands the principles of organizing relational databases; the basic principles of functioning of network technologies; the principles of processing audio and video information; the main trends in the development of digital technologies;
3) applies digital technologies to create digital objects and present the results of their work; rules for compiling queries in databases; cloud technologies for editing and storing documents; elements of programming in the development of websites and mobile applications; rules of personal safety on the Internet and netiquette; software for processing sound and video;
4) analyzes queries using several criteria and relational operators to search for information; a task to determine appropriate methods and approaches to solving it through modeling, algorithmization and programming; the results of processing and computer calculations for compliance with the task; ways of solving the problem in various ways to determine the most effective;
5) synthesizes information in various forms to express ideas and thoughts; databases using forms and controls; websites to solve user problems;
6) evaluates the results of his/her activities according to the goals set during modeling and development of the project (specificity, measurability, achievability, realism, relevance); advantages and disadvantages of the software used, including programming tools.
"History of Kazakhstan":
1) knows the ancient Central Asian centers of culture and the places of their localization; historical types of nomadism; stages of formation and development of the Eurasian steppe civilization; centers of development of urban culture on the territory of Kazakhstan in different historical periods; achievements of the peoples of Central Asia, which significantly influenced the world cultural and historical progress; the ethnic history of the Kazakh people; the ethnosocial structure of traditional Kazakh society; the history of the formation of the multiethnic society of Kazakhstan; historical stages of development of the statehood of Kazakhstan; historical figures who made a significant contribution to the development of political thought in Kazakhstan; the most important achievements of national culture and science in different historical periods; the main historical sources and scientific works on the history of Kazakhstan;

2) understands the essence of the main events, phenomena and processes of the historical development of Kazakhstan; the characteristic features of the ancient Central Asian centers of civilization, various types and forms of nomadism, urban and nomadic culture on the territory of Kazakhstan; the significance of the achievements of the peoples of Central Asia for world cultural and historical progress; the influence of the geographical factor on the formation and development of the life support system of the population of Kazakhstan in different historical periods; the influence of external and internal factors on political, socio-economic, cultural changes in Kazakhstan in different historical periods; features of the ethnosocial organization of traditional Kazakh society; historical aspects of the development of political thought in Kazakhstan; the contribution of historical figures to the political, socio-economic and cultural development of Kazakhstan; the importance of the cultural heritage of the Kazakhs for the preservation of national identity; the need for a respectful attitude towards the culture and traditions of the ethnic groups of Kazakhstan to maintain peace and harmony in society;
3) applies the skills of historical thinking in identifying the Central Asian centers of culture, the states that existed on the territory of Central Asia and Kazakhstan, in time and space; identifying the features of the formation and development of the culture of the nomads of Central Asia; determining the features of the political, socio-economic and cultural development of Kazakhstan in various historical periods; determining the role of historical figures in the development of Kazakhstan; determining one's own position in relation to the events and phenomena of the past and present of Kazakhstan;
4) analyzes the historical development of Kazakhstan in the context of world history, identifying common features and peculiarities; the influence of various factors (geographical, demographic, migration, political, socio-economic, cultural) on the formation and development of civilizations and states on the territory of Kazakhstan in different historical periods; historical events, phenomena, processes in the history of Kazakhstan in order to determine cause-and-effect relationships; motives and results of the activities of historical figures of Kazakhstan; sources and works of scientists on the history of Kazakhstan; the main scientific theories concerning the process of ethnogenesis, politogenesis and cultural genesis on the territory of Kazakhstan; trends and prospects for the development of modern Kazakhstan;
5) synthesizes works of a creative, educational, research, and design nature using methods of historical analysis; comparative historical characteristics in order to determine general patterns and features of the historical development of Kazakhstan

and other regions of the world; conclusions and hypotheses for the formation of a historical understanding and a holistic view of the history of Kazakhstan;
6) assesses the degree of influence of various factors (geographical, demographic, migration, political, socio-economic, cultural, etc.) on the development of Kazakhstan in different historical periods; the activities of historical figures in the context of their influence on national history; the contribution of the culture of the peoples of Central Asia to the development of world civilization; the reliability of historical information; the degree of validity of various scientific theories on issues of the ethnic, political, cultural and socio-economic history of Kazakhstan.
"Physical culture":
1) knows the rules and safety precautions for physical education; rules and techniques for performing motor actions, sets of physical exercises of various types; biodynamic features and content of physical exercises, the basics of their use in solving problems of physical development and health promotion; physiological principles of the activity of the body's systems during muscle loads, the possibilities of their development and improvement by means of physical education;
2) understands the psychofunctional characteristics of one's own body; the possibilities of developing individual traits and personality traits through regular physical exercise; the need to lead a healthy lifestyle; the levels of complexity of the motor actions performed; the need to achieve the required intensity of various physical activities at different stages of physical fitness;
3) applies various types of physical exercises for the purpose of self-improvement, organization of leisure and a healthy lifestyle; basic technical and tactical actions in a game or in the process of performing a specially created set of exercises; individual methods of monitoring the development of the adaptive properties of the body, strengthening health and increasing physical fitness; methods of organizing independent physical exercise classes with different functional focuses, rules for the use of sports equipment and equipment, digital technologies; injury prevention during physical exercise and the provision of first aid;
4) analyzes the functional state of one’s own body when performing physical exercises in order to achieve a health effect and improve physical fitness;
5) synthesizes acquired skills into a system of actions in various situations both in physical education lessons and in everyday life; skills for maintaining a healthy and safe lifestyle; assimilation of rules of individual and collective safe behavior in emergency situations that threaten the life and health of people;
6) evaluates the importance of physical exercise of a general, professional-applied and health-improving nature; levels of one's own physical development and motor fitness;

the effectiveness of physical exercise, the functional state of the body and physical performance; the dosage of physical activity and the direction of the effects of physical exercise.

"Basic military training:

1) knows the fundamentals of military affairs, the structure and tasks of the Defense Forces of the Republic of Kazakhstan; the organization and actions of a low-level tactical unit, including squad tactics in defense, offense and in urban conditions; the purpose, structure and rules for the safe handling of standard weapons, their training dummies, ammunition and protective equipment; the fundamentals of the use of unmanned and robotic systems, as well as the operating principles of global navigation systems (GPS, GLONASS, BeiDou, Galileo); the fundamentals of cybersecurity, digital protection and the principles of applying artificial intelligence in the military sphere; the specifics of the impact of modern weapons and algorithms for action in emergency situations; principles of tactical medicine and the procedure for providing first aid in various risk zones.

2) understands the importance of discipline, teamwork, and responsibility; the role of modern technologies in ensuring defense capability and the significance of digital security; the relationship between personal resilience and unit combat effectiveness; the consequences of using modern weapons, as well as the possible social, environmental, and economic consequences of emergency situations.

3) applies skills in terrain orientation using traditional and digital means; soldier action algorithms in typical tactical situations, including practicing scenarios on 3D simulators; basic techniques of camouflage, cover, and engineering protection; skills in the safe handling of training weapons and protective equipment; skills in operating training unmanned systems as part of the educational program; methods of providing first aid for wounds, burns, bleeding, fractures, frostbite, and other injuries; practical skills acquired during mandatory field training; digital tools for searching, analyzing, and processing information.

4) analyzes tactical scenarios for the unit's actions, including through the analysis of modeling results in a digital environment; potential risks associated with the use of modern technologies; emergency situations in combat and emergency situations; and the consequences of decisions made.

5) evaluates the effectiveness of one's own actions and the actions of the team; the level of risk in various situations; the consequences of management and behavioral decisions; personal readiness for service in the Armed Forces of the Republic of Kazakhstan.

Footnote. Clause 44 as amended by orders of the Acting Minister of Education of the Republic of Kazakhstan dated 25.05.2026 No. 137-НҚ (shall enter into force upon expiry of ten calendar days after the date of its first official publication); dated 26.06.2026 No. 182-НҚ (shall enter into force on 12.07.2026 ).

45. Expected results upon completion of general secondary education in advanced level subjects in the natural sciences and mathematics field.

"Physics":

1) knows the physical quantities and concepts of mechanics (kinematics, dynamics, statics, hydroaerostatics, hydroaerodynamics), molecular physics and thermodynamics; electromagnetism (electrostatics, direct and alternating electric current, magnetic field, electromagnetic induction), optics (geometric and wave), quantum physics; the main stages of the evolution of the Universe; methods of transmitting and receiving information, the principles of constructing basic radio engineering devices and systems; the history of the emergence and basic principles of nanotechnology;

2) understands the basic laws, principles and postulates of mechanics (kinematics, dynamics, statics, hydroaerostatics, hydroaerodynamics), molecular physics and thermodynamics; the basic laws and principles of electromagnetism (electrostatics, direct and alternating electric current, magnetic field, electromagnetic induction), optics (geometric and wave), quantum physics; methods for studying nanosystems and nanomaterials; the place of physical science in the modern scientific picture of the world; the role of physics in shaping horizons and solving practical problems;

3) applies fundamental physical concepts, patterns, laws and theories; terminology and symbolism of physical science; basic methods of scientific knowledge used in physics: observation, description, measurement, experiment; capabilities of new digital technologies for searching and processing information on physics in computer databases and the Internet; methods of processing the results of measurements and experiments, determining the relationship between physical quantities;

4) analyzes dependencies presented in the form of power functions; relationships between two variables, the actions of various physical forces on phenomena, on bodies and objects in the Universe, graphs of the dependence of physical processes and relationships between variables; operating principles and characteristics of devices and instruments, areas of application of scientific discoveries; cause-and-effect relationships between human production activities and the state of the environment, areas of application of nanotechnology; parameters characterizing the state of the Universe and possible paths of its development;

5) synthesizes collected and processed data, information for presentation in the form of a table, graph, message, report, presentation; scientific models and evidence for putting forward hypotheses, arguments and explanations; a plan for conducting an experiment and research;
6) evaluates knowledge of laws and their application; the results of observations and experiments; the applicability of scientific methods in specific cases; the consequences of human household and industrial activities associated with physical processes, from the standpoint of environmental safety.
"Chemistry":
1) knows the basic chemical concepts; atomic theory; theory of the chemical structure of organic substances; classification of substances according to various characteristics; nomenclature, structure, physicochemical properties of the main classes of inorganic and organic compounds; special properties and some areas of application of polymeric materials, metals and alloys, non-metals and their compounds; some areas of application of nanotechnology;
2) understands the ability of various substances to enter into chemical reactions; energy changes in chemical reactions; the basic mechanisms of chemical transformations; the fundamentals of kinetic theory, homogeneous and heterogeneous catalysis, electrochemistry; special properties of transition metals; chemical properties of inorganic and organic compounds depending on structure; principles of studying compounds using instrumental methods of analysis; principles of chemical production of the most important inorganic and organic substances;
3) applies knowledge and skills to explain chemical phenomena occurring in nature, everyday life and in production; to determine the possibility of chemical transformations under various conditions and assess their consequences; methods of qualitative and quantitative analysis of substances; rules of environmentally friendly behavior in the environment; methods of assessing the impact of chemical pollution of the environment on living organisms; critical thinking and knowledge of scientific methods for the development, conduct, observation, recording and analysis of the results of chemical experiments; rules for the safe handling of flammable and toxic substances, laboratory equipment;
4) analyzes the dependence of the properties of substances on their composition and structure; the simplest spectra of substances to determine their structure and properties; the dependence of the rate of chemical reactions and chemical equilibrium on various factors; trends in the change in the properties of elements in the periodic table; various theories of acids and bases, ionic equilibria in solutions;

5) synthesizes genetic relationships between the most important classes of inorganic and organic compounds; evidence-based reasoning about the possibility and results of chemical transformations using the theory of chemical bonding and the structure of substances;
6) evaluates the properties of various materials; the influence of various factors on the rate of chemical reactions; the impact of various environmental conditions on chemical equilibrium; the consequences of the influence of chemical production on the environment and human health; the consequences of radioactive decay; the reliability of information from various sources.
"Biology":
1) knows the structure, composition and functions of proteins, fats, carbohydrates, nucleic acids; the basic mechanisms of antigen-antibody reactions; the fundamental principles of the chromosome theory of heredity, human chromosomal diseases; types/types of variability, nutrition and metabolism of living organisms; methods of speciation; the basics of genetics and the possibilities of genetic engineering; the scheme and stages of the formation of life on Earth, anthropogenesis; global and regional environmental problems and principles of natural resource conservation;
2) understands the processes occurring during the dark and light phases of photosynthesis; the mechanism of substance transport, translocation, the occurrence of chromosomal and gene mutations; the essence of genetic engineering manipulations; the stages of energy metabolism; the relationship between hereditary variability and evolution; patterns of inheritance; the mechanism of evolutionary processes; the rules of the ecological pyramid; the consequences of anthropogenic impact on the environment;
3) applies schemes and methods for solving problems of molecular biology and genetics; statistical methods for the analysis of ecosystems, inheritance of traits and modification variability; methods of qualitative and quantitative analysis of substances; critical thinking and knowledge of scientific methods for the development, conduct, observation, recording and analysis of the results of experiments; rules for the safe handling of drugs, toxic substances, laboratory equipment;
4) analyzes the features of photosynthesis and chemosynthesis processes; factors influencing the evolutionary process; the structure of RNA and DNA molecules; the processes of mutation and repair, recombination and replication of DNA, the relationship between DNA structure and its function; the differences between spermatogenesis and oogenesis; species diversity and sustainability of ecosystems; the environmental situation in the world and Kazakhstan;

5) synthesizes a diagram of gametogenesis in humans; diagrams of food chains in ecosystems; collected and processed data, information for presentation in the form of a table, graph, message, report, presentation; scientific models and evidence for putting forward hypotheses, arguments and explanations; a plan for conducting an experiment and research; research, educational and creative projects; possible solutions to environmental problems in Kazakhstan;
6) evaluates the influence of various factors on enzyme activity, protein structure, and photosynthesis productivity; cytological foundations of monohybrid and dihybrid crossing, patterns of modification variability; causes of mutagenesis; ecosystems of one's region; ethical issues of using genetically modified and transgenic organisms, and research in biotechnology.
"Geography":
1) knows the main categories of geography, geoinformatics, geoecology, nature management, geopolitics, geoeconomics; features of geoecological, economic-geographical, socio-geographical, political-geographical and geopolitical maps; geographical features and modern problems of nature management; causes, factors and sources of anthropogenic impact on the geosphere; the system and main directions of environmental protection measures; modern taxonomy of types and types of nature management and general principles of rational nature management; differences in the standard and quality of life of the population, geographical features of the sectoral and territorial structure of the economy of individual regions and countries; geographical specifics of individual countries and regions, their differences in the level of socio-economic development, specialization in the system of international geographical division of labor; the content of the modern political map of the world; indicators of world economic development; the structure of state territory and types of states; state borders, their types and dynamics; features of the modern geopolitical and geoeconomic position of the Republic of Kazakhstan; participation of Kazakhstan in regional, international political processes, in the international geographical division of labor; geographical aspects of global problems of humanity;
2) understands the modern economic-geographical and political-geographical picture of the world; the need to integrate geography with other sciences; the features and dynamics of geoecological, social, geoeconomic and geopolitical processes; the unity and stability of the geographical system "nature - population (society) - economy (economy)"; ways to stabilise anthropogenic pressure on the natural environment; the role of scientific and technological progress in environmental protection; natural, economic and social factors that shape and change the geographical (environmental) environment of human habitation at the levels from global to local; the degree of

dependence of the quality of life on the quality of the natural environment; the geographical specificity of large regions and countries of the world in the context of globalisation; the significance and essence of modern integration and geopolitical processes; the role and spheres of influence, the nature of the interaction of subjects of geopolitics, the features of the geopolitical zoning of the world, the causes of modern global problems of mankind and ways to resolve them;

3) applies modern methods of geographical research and their combinations; various sources of geographical information; elements of additional characteristics of thematic maps; skills of searching, processing, systematization, interpretation, transformation, storage, transmission and presentation of geographical information in the required context; cartometric techniques; various formulas for performing calculations in the required context;

4) analyzes the cause-and-effect relationships between processes and phenomena occurring in the geographic shell and geographic environment; the relationship between nature and society and their spatial features; features of the placement, connections and other spatial relationships of geographic objects, processes and phenomena; natural, socio-economic foundations of the modern world economy; quantitative and qualitative geospatial data; modern factors of the placement of economic sectors; ratings and indices of countries of the world;

5) synthesizes models, research and creative projects, information materials; develops solutions to problems of the functioning and development of geographical objects; knowledge and skills for classifying, systematizing, generalizing and differentiating the objects, processes and phenomena under study; knowledge and skills for explaining processes and phenomena, making forecasts, determining the nature of changes and prospects for the development of geographical objects, processes and phenomena;

6) evaluates the degree of reliability of sources of geographic information; parameters and ecological state of the geosphere; the degree of natural, anthropogenic and man-made changes in individual territories and their consequences; the effectiveness of environmental protection measures; the level of scientific and technological progress in environmental protection and nature management; environmental quality; quality of life; indicators and place of various states in ratings and indices; the geographical and geopolitical position of territories of any rank; countries of the world according to the main socio-economic indicators; morphological features of state territory.

Footnote. Clause 45 as amended by Order No. 182-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 (effective from July 12, 2026 ).

46. Expected results upon completion of general secondary education in subjects of the standard level of education in the natural sciences and mathematics field.
"World History":
1) knows the historical types of civilizations and their locations; historical forms of government and the stages of formation and development of state and legal institutions; military and political events that influenced the course of world history; world discoveries and achievements that influenced world cultural and historical progress; the history and current state of world culture; the main scientific theories concerning the origin and development of man, society, peoples of the world and civilizations; historical figures who made a significant contribution to the development of world social thought; the main generalizing scientific works on world history;
2) understands the cultural and historical process in its unity and diversity; characteristic features of civilizations, historical forms and types of state; the importance of state and legal institutions; the influence of natural and geographical factors on the formation and development of world civilizations; the influence of military and political events on the course of history; the importance of great discoveries and achievements of mankind for world cultural and historical progress; the influence of external and internal factors on political, socio-economic, cultural changes in the world in different historical periods; historical aspects of the development of world public thought; the influence of the individual on the development of history; the importance of universal values for maintaining peace and stability in the global world;
3) applies the skills of historical thinking in identifying state formations and cultural and civilizational centers of the world in time and space; determining the characteristic features of civilizations, historical forms and types of states; determining the features of the political, socio-economic and cultural development of the peoples of the world in different historical periods; determining the role of a historical figure in world history; determining one’s own position in relation to the events and phenomena of the past and present;
4) analyzes the historical development of the peoples of the world, identifying common features and characteristics; the influence of various factors (geographical, demographic, migration, political, socio-economic, cultural) on the formation and development of society in different historical periods; historical events, phenomena, processes of world history in order to determine cause-and-effect relationships; motives and results of the activities of historical figures; historical sources; trends and prospects for the development of modern society in the context of globalization;

5) synthesizes works of a creative, educational, research, and design nature using methods of historical analysis; comparative historical characteristics with the aim of determining general patterns and features of the historical development of the peoples of the world;
6) evaluates the degree of influence of various factors (geographical, demographic, migration, political, socio-economic, cultural) on the development of society in different historical periods; the activities of historical figures in the context of their influence on world history; the contribution of the culture of various peoples of the world to the formation and development of world civilization; the reliability of historical information; the degree of validity of various scientific theories on issues of ethnic, political, cultural and socio-economic history of the world.
"Graphics and Design":
1) knows the basic tools, methods, and techniques for recording visual information; the basic types of graphic images; the basic design methods and graphic tools; the laws of formation of geometric bodies; the general rules for drawing up a drawing; general concepts of mechanical engineering and construction drawings, elements of a topographic drawing; the stages of designing and manufacturing a product; methods and tools for displaying visual information using manual and computer graphics;
2) understands the importance of graphic images in visualizing and conveying information about the world of objects, phenomena and processes; the principles of the graphic modeling method; the differences between types of graphic images in displaying the shape of objects, their spatial and metric characteristics; the possibilities and features of manual and computer graphics in practical activities; features of modeling and modeling;
3) applies tools and materials for graphic works; projection methods; techniques for constructing geometric (structural) forms of an object; methods for constructing drawings of surface developments of geometric bodies; techniques for transforming the appearance and composition of images; reference documentation for making design and construction decisions; means of manual and computer graphics in solving various problems in graphic modeling, prototyping, design;
4) analyzes the properties of images and different ways of conveying visual information; the geometric shape and design of objects when creating their images; the possibility of using different types of images to identify the shape of an object; complex drawing to determine the shapes of objects and the graphic composition of images;
5) synthesizes contour images to reconstruct the shape of an object; graphic information in the original images to systematize them by type and composition;

various types of images for a complete and sufficient display of graphic information; various graphic means for conveying and implementing creative ideas;
6) evaluates methods of recording visual information; graphic images of various objects; different methods of transforming images; design methods and graphic tools used in the process of design activities; design and geometric characteristics of objects; the process and result of creative activity.
"Fundamentals of Law":
1) knows the systems, norms, sources of constitutional law; constitutional political rights; systems, norms, subjects of administrative law; labor law, its significance, tasks of organizing administrative labor discipline, responsibility for violation of labor discipline, sources, relations of civil law, forms of property rights, the scope of application of consumer law; family relations, the rights and responsibilities of parents and children; the concept, features of criminal law, criminal liability, its types, the concept of protecting the rights of citizens, as well as the need and possibility of its implementation;
2) understands the role and significance of law as the most important social regulator and element of the culture of society, the basic legal principles of Kazakhstani society, the system and structure of law, legal relations, the essence of an offense and legal liability, legal regulation of the socio-economic sphere, legal activity as a type of exercise of law;
3) applies evidentiary argumentation of one's own position in specific legal situations using regulatory acts, legal knowledge to evaluate specific legal norms from the point of view of their compliance with the legislation of the Republic of Kazakhstan; the skill of independently searching for legal information; legal rules when participating in discussions on current social and legal issues, in everyday life;
4) analyzes legal norms, legal information obtained from various sources;
5) synthesizes the information received to correlate one's own behavior and the actions of others with accepted moral and legal norms; knowledge, skills and abilities to collect and analyze information in a given context, to assess the situation, express one's attitude, and make decisions that do not contradict universal and ethnocultural values;
6) independently evaluates the specific features of the application of the legislation of the Republic of Kazakhstan when solving specific problems.
47. Expected results upon completion of general secondary education in advanced subjects in the social and humanitarian fields.
"Foreign language".

1) Listening: understands the main points of clearly spoken statements, within the literary norm, on familiar topics, simple informational messages on ordinary everyday matters and topics related to school and future professional activity; can follow the main points of a longer discussion in general terms; understands a lecture or conversation on educational or professional topics, provided that the subject is familiar and the presentation itself is simple and has a clear structure; understands detailed instructions of a technical nature; most television programmes on topics of interest, e.g. interviews, short lectures, reports, when they are delivered slowly and clearly;
2) Speaking: Can describe something or tell a story in the form of a series of consecutive statements; retell the plot of a book or film and describe his/her reaction to it; make short, rehearsed announcements on a topic as part of an educational activity; give a presentation on a familiar topic that is clear enough that the thought can be followed throughout and the main points of which are clearly explained; answer a series of questions about his/her presentation with the right to ask a question again; describe his/her experiences, formulating his/her feelings and reactions to them in complex coherent text;
3) Reading: understands simple texts containing factual information on a topic of interest in detail, descriptions of events, feelings and desires in personal letters; can read longer texts of fiction and non-fiction within the framework of individual unfamiliar general and academic topics; identify the main points of different types of newspaper articles, use unfamiliar paper and digital resources to check meaning and expand understanding;
4) Writing: Can write simple, coherent texts on a wide range of familiar and personal topics, linking together a number of short, separate elements; Can summarize and express opinions fairly fluently on collected factual information on familiar everyday and social issues within the field of activity; Can write personal letters, reporting news and thoughts on abstract topics or topics related to culture: music, films; Can make notes in the form of a list of key points during a simple lecture, provided that the topic is familiar, the language is simple and pronounced clearly, in a standard dialect; Can retell a story in writing.
"World History":
1) knows the historical types of civilizations and their locations; historical forms of government and the stages of formation and development of state and legal institutions; military and political events that influenced the course of world history; world discoveries and achievements that influenced world cultural and historical progress; the history and current state of world culture; the main scientific theories concerning the origin and development of man, society, peoples of the world and

civilizations; historical figures who made a significant contribution to the development of world social thought; the main generalizing scientific works on world history;
2) understands the cultural and historical process in its unity and diversity; characteristic features of civilizations, historical forms and types of state; the importance of state and legal institutions; the influence of natural and geographical factors on the formation and development of world civilizations; the influence of military and political events on the course of history; the importance of great discoveries and achievements of mankind for world cultural and historical progress; the influence of external and internal factors on political, socio-economic, cultural changes in the world in different historical periods; historical aspects of the development of world public thought; the influence of the individual on the development of history; the importance of universal values for maintaining peace and stability in the global world;
3) applies the skills of historical thinking in identifying state formations and cultural and civilizational centers of the world in time and space; determining the characteristic features of civilizations, historical forms and types of states; determining the features of the political, socio-economic and cultural development of the peoples of the world in different historical periods; determining the role of a historical figure in world history; determining one's own position in relation to the events and phenomena of the past and present;
4) analyzes the historical development of the peoples of the world, identifying common features and characteristics; the influence of various factors (geographical, demographic, migration, political, socio-economic, cultural) on the formation and development of society in different historical periods; historical events, phenomena, processes of world history in order to determine cause-and-effect relationships; motives and results of the activities of historical figures; historical sources; basic scientific theories concerning the process of ethnogenesis, political genesis and cultural genesis; trends and prospects for the development of modern society in the context of globalization;
5) synthesizes works of a creative, educational, research, and design nature using methods of historical analysis; comparative historical characteristics with the aim of determining general patterns and features of the historical development of the peoples of the world; conclusions and hypotheses for the formation of a historical understanding and a holistic view of the global cultural and historical process;
6) evaluates the degree of influence of various factors (geographical, demographic, migration, political, socio-economic, cultural) on the development of society in different historical periods; the activities of historical figures in the context of their

influence on world history; the contribution of the culture of various peoples of the world to the formation and development of world civilization; the reliability of historical information; the degree of validity of various scientific theories on issues of ethnic, political, cultural and socio-economic history of the world.

"Geography":

1) knows the place and role of geoecology, geoinformatics, geopolitics, geoeconomics, regional studies in the system of geographical sciences; basic scientific concepts in the field of nature management, economic, social, political geography and geopolitics; factors, sources and consequences of anthropogenic impact on the geosphere; environmental risks; signs of environmental crisis; ecological classification of territories; the system and main directions of environmental protection measures; the specifics of regional nature management systems; the main administrative, economic and legal mechanisms for nature management; directions of modern environmental policy; environmental quality indicators; quality of life indicators; models of economic systems; key indicators of development of the world economy and countries of the world; the totality of international relations between the countries of the world; the process of globalization; participation of Kazakhstan in regional and international organizations; modern global problems of mankind and their manifestations at the local, regional levels; directions of geopolitical activity of the Republic of Kazakhstan in light of national interests; historical and cultural regions of the world;

2) understands the spatial diversity of the modern world, its general and regional features; patterns of development of nature, population and economy; problems of interaction between society and nature; features of natural, social, economic and political processes; personal responsibility for the state of the environment; dynamics of global and local natural and socio-economic, ecological processes; ways of optimizing the interaction between society and nature, stabilizing anthropogenic pressure on the natural environment; the role of scientific and technological progress in environmental protection; the degree of dependence of the socio-economic and political development of the territory on geographical factors; dependence of the quality of life on the quality of the natural environment, the sources of modern socio-economic and ecological problems and ways of their resolution; the role and spheres of influence, the nature of interaction of the subjects of geopolitics;

3) applies methods of geoecological, economic-geographical, socio-geographical, political-geographical and geopolitical research and their combinations; sources of geospatial data; skills in searching, processing, systematizing, interpreting,

transforming, storing, transmitting and presenting geospatial data in the required context; cartometric techniques;
4) analyzes quantitative and qualitative geospatial data; classification features of geographical objects, processes and phenomena; cause-and-effect relationships between processes and phenomena occurring in the geographic shell and geographic environment; features of the placement, connections and other spatial relationships of geographical objects, processes and phenomena; the influence of environmental factors on the life and activities of people; natural, socio-economic foundations of social production; the impact of planned economic activity on the state of the environment and public health; signs of an environmental crisis; organizational and legal foundations for environmental protection and rational use of natural resources; modern factors of the placement of economic sectors; geoecological, geopolitical and economic processes; international political, economic, socio-cultural, environmental ties and relations; territorial and political systems; the structure of the state territory; state borders, their types and dynamics; the system of national interests of the country; geopolitical activity of the subjects of geopolitics; world geopolitical space; geographical and geopolitical position, features and factors of political, economic and social development, the role and place of Kazakhstan in the world;
5) synthesizes models, research and creative projects, information materials; develops solutions to problems of the functioning and development of geographical objects; knowledge and skills for classifying, systematizing, generalizing and differentiating the objects, processes and phenomena under study; knowledge and skills for explaining processes and phenomena, making forecasts, determining the nature of changes and prospects for the development of geographical objects, processes and phenomena;
6) evaluates the parameters and ecological state of the geosphere; anthropogenic load on the geosphere and its consequences; geographical and geopolitical position, natural resource potential of territories of any rank; quality of the natural environment; environmental risks; degree of environmental crisis; effectiveness of environmental measures; level of scientific and technological progress in environmental protection and nature management; quality of the environment; quality of life; indicators and place of various states in international comparisons; advantages and disadvantages of various models of global economic development; positive and negative impact of globalization on countries of the world; morphological features of state territory; effectiveness of geopolitical activity of geopolitical entities; results of activities of international organizations.
"Fundamentals of Law":

1) knows the systems, norms, sources of constitutional law; constitutional political rights; systems, norms, subjects of administrative law; labor law, its significance, tasks of organizing administrative labor discipline, responsibility for violation of labor discipline, sources, relations of civil law, forms of property rights, the scope of application of consumer law; family relations, the rights and responsibilities of parents and children; the concept, features of criminal law, criminal liability, its types, the concept of protecting the rights of citizens, as well as the need and possibility of its implementation;
2) understands the role and significance of law as the most important social regulator and element of the culture of society, the basic legal principles of Kazakhstani society, the system and structure of law, legal relations, the essence of an offense and legal liability, legal regulation of the socio-economic sphere, legal activity as a type of exercise of law;
3) applies evidentiary argumentation of one's own position in specific legal situations using regulatory acts, legal knowledge to evaluate specific legal norms from the point of view of their compliance with the legislation of the Republic of Kazakhstan; the skill of independently searching for legal information; legal rules when participating in discussions on current social and legal issues, in everyday life;
4) analyzes information presented in the context of controversial issues arising in the process of legal relations in a particular area of legislation, legal norms, legal information obtained from various sources;
5) synthesizes the information received to correlate one's own behavior and the actions of others with accepted moral and legal norms; knowledge, skills and abilities to collect and analyze information in a given context, to assess the situation, express one's attitude, and make decisions that do not contradict universal and ethnocultural values;
6) independently evaluates the specific features of the application of the legislation of the Republic of Kazakhstan when solving specific problems.
48. Expected results upon completion of general secondary education in subjects of the standard level of education in the social and humanitarian field.
"Physics".
1) knows the physical quantities and concepts of mechanics (kinematics, dynamics, statics, hydroaerostatics, hydroaerodynamics), molecular physics and thermodynamics; electromagnetism (electrostatics, direct and alternating electric current, magnetic field, electromagnetic induction), optics (geometric and wave), quantum physics; the main stages of the evolution of the Universe; methods of

transmitting and receiving information, the history of the emergence and basic principles of nanotechnology;
2) understands the basic laws of molecular physics and thermodynamics; the basic laws and principles of electromagnetism (electrostatics, direct and alternating electric current, magnetic field, electromagnetic induction), optics (geometric and wave); methods for studying nanosystems and nanomaterials; the place of physical science in the modern scientific picture of the world; the role of physics in shaping horizons and solving practical problems;
3) applies fundamental physical concepts, patterns, laws and theories; terminology and symbolism of physical science; basic methods of scientific knowledge used in physics: observation, description, measurement, experiment; determination of the relationship between physical quantities;
4) analyzes dependencies presented in the form of power functions; relationships between two variables, the effects of various physical forces on phenomena, on bodies and objects in the Universe, graphs of the dependence of physical processes and relationships between variables; cause-and-effect relationships between human production activities and the state of the environment, areas of application of nanotechnology; parameters characterizing the state of the Universe and possible paths of its development;
5) synthesizes collected and processed data, information for presentation in the form of a table, graph, message, report, presentation; scientific models and evidence for putting forward hypotheses, arguments and explanations; a plan for conducting an experiment and research;
6) evaluates knowledge of laws and their application; results of observations and experiments; consequences of human household and industrial activities associated with physical processes, from the standpoint of environmental safety.
"Chemistry":
1) knows the basic chemical concepts; atomic theory; the theory of the chemical structure of organic substances; the classification of substances according to various characteristics; the nomenclature, structure, and physical and chemical properties of the main classes of inorganic and organic compounds; special properties and some areas of application of polymeric materials, metals and alloys, non-metals and their compounds;
2) understands the ability of various substances to enter into chemical reactions; the fundamentals of kinetic theory, homogeneous and heterogeneous catalysis; the chemical properties of inorganic and organic compounds depending on their structure;

the principles of chemical production of the most important inorganic and organic substances;
3) applies knowledge and skills to explain chemical phenomena occurring in nature, everyday life and in production; methods of qualitative analysis of substances; rules of environmentally friendly behavior in the environment; methods for assessing the impact of chemical pollution of the environment on living organisms; critical thinking and knowledge of scientific methods for the development, conduct, observation, recording and analysis of the results of chemical experiments; rules for the safe handling of flammable and toxic substances, laboratory equipment;
4) analyzes the dependence of the properties of substances on their composition and structure; the dependence of the rate of chemical reactions and chemical equilibrium on various factors; trends in the change in the properties of elements in the periodic table;
5) synthesizes genetic relationships between the most important classes of inorganic and organic compounds; evidence-based reasoning about the possibility and results of chemical transformations using the theory of chemical bonding and the structure of substances;
6) evaluates the properties of various materials; the influence of various factors on the rate of chemical reactions; the impact of various environmental conditions on chemical equilibrium; the consequences of the influence of chemical production on the environment and human health; the reliability of information from various sources.
"Biology":
1) knows the structure, composition and functions of proteins, fats, carbohydrates, nucleic acids; the basic mechanisms of antigen-antibody reactions; the fundamental principles of the chromosome theory of heredity, human chromosomal diseases; types (types) of variability, nutrition and metabolism of living organisms; the basics of genetics and the possibilities of genetic engineering; the scheme and stages of the formation of life on Earth, anthropogenesis; global and regional environmental problems and principles of natural resource conservation;
2) understands the processes occurring during the dark and light phases of photosynthesis; the mechanism of substance transport, the occurrence of chromosomal and gene mutations; stages of energy metabolism; the relationship between hereditary variability and evolution; patterns of inheritance; the mechanism of evolutionary processes; the consequences of anthropogenic impact on the environment;
3) applies schemes and methods for solving problems of molecular biology and genetics; statistical methods for the analysis of ecosystems, inheritance of traits and modification variability; critical thinking and knowledge of scientific methods for the

development, conduct, observation, recording and analysis of the results of experiments; rules for the safe handling of drugs, toxic substances, laboratory equipment;
4) analyzes the features of photosynthesis and chemosynthesis processes; factors influencing the evolutionary process; the structure of RNA and DNA molecules; mutation processes, the relationship between DNA structure and its function; differences between spermatogenesis and oogenesis; species diversity and ecosystem sustainability; the environmental situation in the world and Kazakhstan;
5) synthesizes a diagram of gametogenesis in humans; diagrams of food chains in ecosystems; collected and processed data, information for presentation in the form of a table, graph, message, report, presentation; scientific models and evidence for putting forward hypotheses, arguments and explanations; a plan for conducting an experiment and research; research, educational and creative projects; possible solutions to environmental problems in Kazakhstan;
6) evaluates the influence of various factors on enzyme activity, protein structure, and photosynthesis productivity; cytological foundations of monohybrid and dihybrid crossing, patterns of modification variability; causes of mutagenesis; ecosystems of one's region; ethical issues of using genetically modified and transgenic organisms, and research in biotechnology.
49. Expected results upon completion of general secondary education in subjects of the standard level of study in the natural sciences, mathematics, and social sciences.
"Fundamentals of Entrepreneurship and Business":
1) understands entrepreneurship as an economic phenomenon and describes its role; describes the differences between entrepreneurship and business; understands entrepreneurship as a form of self-realization and personal motivation; analyzes the competencies of an entrepreneur; evaluates the possibility of achieving their own goals through the prism of entrepreneurship; evaluates their level of development in relation to the potential of an entrepreneur; recognize modern trends in entrepreneurship, including in Kazakhstan;
2) Knows what markets are in the context of both economics and marketing; understands the importance of ideas in entrepreneurship; distinguishes between business-to-business and business-to-consumer segments; applies idea generation tools; proposes an idea design plan; translates the needs of idea implementation into requirements for team composition; applies team building tools; applies business model tools; identifies the interrelationships between the components of a business model; describes the expected consequences of changing existing data; applies

business model building tools; applies the concepts and principles of Lean Start up (Lean Manufacturing) in an entrepreneurial environment;
3) explains the concept and functions of marketing; defines the concept of competition; analyzes the forms of influence of various forces on competition; describes the profile of its consumer; understands the essence of distribution channels and distinguishes their classification; proposes a plan for communicating the value of its product/service to the end consumer; describes the relationship with each consumer segment;
4) understands the importance of money in the economy; understands the meaning of income and expenses; understands the difference between assets and liabilities; understands the essence of the concepts of surplus and deficit, evaluates their impact on the pricing process; distinguishes between the concepts of "price", "value", "pricing structure"; understands the significance of fixed and variable costs in the pricing process; evaluates the possibilities of creative and innovative approaches in the formation of new profit channels; applies the AB testing tool (a method for evaluating the effectiveness of product variants);
5) understands the essence and importance of resources in business; proposes a plan for the most efficient use of business resources; estimates the cost of business resources; knows the principles of limited business resources; gives examples of the efficient use of resources under conditions of limited resources; understands the essence of intellectual resources in business; develops a strategy for replenishing enterprise resources;
6) understands the meaning of partnership and its types; evaluates the benefits of outsourcing for business; describes key activities; distinguishes between the management of human, material and intellectual resources; explains the rules of sales management; describes the project and its characteristics; applies time management rules in the project; proposes a project plan; uses information tools in the project;
7) understands the key obligations of business to the state; identifies the relationship between the tax regime and the legal form of business; draws up a general income plan for his business idea; explains the scheme for forming a profit and loss statement; explains the scheme for forming a cash flow statement; identifies the relationship between the profitability of a project and fixed and variable costs;
8) describes the market development forecast; distinguishes between extensive and intensive business development methods; evaluates the effectiveness of various types of business scaling; understands quality management tools; understands the essence of strategic planning; develops a mission and vision for the future company;

distinguishes between strategic and financial business goals; understands the structure of the legal liability of an entrepreneur.

50. The content of the "Life Safety Fundamentals" course is implemented within the "Basic Military Training" course, with an annual teaching load of 12 hours by instructors who organize basic military training. Life Safety Fundamentals classes are mandatory and are held during school hours.

Footnote. Clause 50 as amended by Order No. 137-НҚ of the Acting Minister of Education of the Republic of Kazakhstan dated May 25, 2026 (shall enter into force ten calendar days after its first official publication).

51. The assessment of students' academic achievements is carried out using criteria for assessing students' knowledge. Assessment criteria are used to measure the level of students' academic achievement.

52. Assessment criteria are developed in accordance with the learning objectives of each curriculum.

53. Assessment of students' academic achievements is carried out in the form of formative and summative assessment.

54. Criteria for assessing students' knowledge are developed and approved by the authorized body in the field of education.

55. For students with special educational needs, conditions are created for them to receive an education, correct developmental disabilities, and social adaptation.

**Chapter 5. Requirements for the duration of study**

56. The period for mastering the general secondary education curriculum is two years.

57. The duration of the academic year in grades 10-11 (12) is 34 academic weeks.

Footnote. Clause 57 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

58. The duration of vacation time in a calendar year is at least 115 days, of which at least 25 days are during the academic year.

Vacations are provided three times per academic year: in the fall, winter, and spring. The specific dates of these vacations are determined by the authorized body of the Republic of Kazakhstan in the field of education.

Appendix 5
to the order
of the Minister of Education
of the Republic of Kazakhstan
dated August 3, 2022 No. 348

**State Compulsory Standard of Technical and Vocational Education**

Footnote. Appendix 5 - as amended by Order of the Minister of Education of the Republic of Kazakhstan dated June 6, 2023, No. 161 (shall enter into force ten calendar days after the date of its first official publication).

**Chapter 1. General Provisions**

1. This state compulsory standard of technical and vocational education (hereinafter referred to as the SCES) has been developed in accordance with Article 56 of the Law of the Republic of Kazakhstan "On Education" (hereinafter referred to as the Law), subparagraph 4) of paragraph 15 of the Regulation on the Ministry of Education of the Republic of Kazakhstan, approved by the Resolution of the Government of the Republic of Kazakhstan dated August 19, 2022 No. 581 "Some issues of the Ministry of Education of the Republic of Kazakhstan", and defines the requirements for the content of education with a focus on learning outcomes, the maximum volume of academic workload, the level of preparation of students, the duration of study in educational programs of technical and vocational education (hereinafter referred to as educational programs of TVE).

This State Educational Standard is applied by educational organizations implementing educational programs of the Technical and Professional Education (hereinafter referred to as Technical and Professional Education organizations), including military and special educational institutions (hereinafter referred to as VSUZ), regardless of the form of ownership and departmental subordination, and by developers of educational programs of the Technical and Professional Education.

Footnote. Clause 1 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

2. The following terms and definitions are used in the State Educational Standard:

1) academic credit – a standardized unit of measurement of the volume of scientific and (or) educational work (workload) of a student and (or) teacher (educator), necessary to achieve the learning outcomes of an educational program;

2) component of a higher education institution – a list of academic disciplines and corresponding minimum volumes of credits determined by the higher education institution independently for mastering the educational program;

3) military internship – a type of educational activity in military and special educational institutions aimed at consolidating theoretical knowledge, skills, acquiring and developing practical skills and competencies in the process of performing functional duties related to future professional activities;

4) basic module – a functionally complete structural element of the educational program, aimed at developing the basic competence of the student;

5) basic competence – a set of knowledge, skills and abilities necessary for mastering professional competencies in accordance with the chosen specialty, forming the basis for the professional development of a future specialist and reflecting the specifics of introduction to the specialty.
6) component of the educational organization - a list of disciplines or modules determined by the technical and vocational education organization independently in accordance with the regional development plan, employer requirements, taking into account professional standards and WorldSkills professional standards within the framework of mastering the educational program;
7) demonstration exam – a form of midterm and/or final assessment that allows the student to practically demonstrate the acquired professional competencies;
8) diploma thesis (project) – the final independent work of a student, which is a summary of the results of the student's mastery of the educational program of the technical and vocational education;
9) general competence – a set of knowledge, abilities and skills necessary for the personal, social and professional activities of a student in solving problems common to all professional fields that are necessary for human life;
10) compulsory module – a functionally complete structural element of the educational program, aimed at developing the general competencies of the student;
11) individual curriculum – a curriculum developed for each academic year by a student independently with the help of an educational organization based on the educational program and catalog of elective disciplines and (or) modules;
12) project work – practical and/or creative work of a student, carried out under the guidance of a teacher or mentor;
13) working curriculum – a document developed by a technical and vocational education organization for a specific academic discipline and (or) module of the working curriculum;
14) working curriculum – a document developed by a technical and vocational education organization, regulating the list, volume of academic disciplines and/or modules, the sequence of their study, as well as the forms of monitoring their mastery;
15) professional module – a functionally complete structural element of the educational program aimed at developing professional competence;
16) professional competence – the ability to solve a set of professional tasks based on knowledge, skills and abilities, as well as personal qualities that allow one to effectively carry out professional activities;

17) consultation – a form of educational activities that provides assistance to students in mastering the educational program, carried out within the framework of midterm and final certification, support for diploma, course projects (works) and project work;
18) credit-modular system of education – a model of organizing the educational process based on the unity of credit and modular education technologies;
19) compulsory component – a list of academic disciplines and (or) modules that students must master;
20) micro-qualification – a set of knowledge, skills and competencies obtained upon completion of a short period of training, allowing one to perform individual work functions;
21) elective component - a list of disciplines or modules offered by the technical and vocational education organization, independently chosen by students, aimed at expanding practical experience in acquiring qualifications, including through project work;
22) optional classes – additional training with the aim of deepening knowledge, developing interests and abilities of students within the framework of the chosen specialty, not included in compulsory training.

Footnote. Clause 2 – as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (shall enter into force ten calendar days after the date of its first official publication).

**Chapter 2. Requirements for the content of technical and vocational education with a focus on learning outcomes**

3. The content of technical and vocational education is determined by educational programs and is focused on learning outcomes.

The content of the educational programs of the technical and vocational education and training includes:

in the training of qualified workers:

1) study of general education, general humanities, general professional, special disciplines or study of a module of general education disciplines, compulsory, basic and professional modules;
2) implementation of laboratory and practical classes;
3) completion of industrial training and professional practice;
4) passing the midterm and final assessments.

in the training of mid-level specialists:

1) study of general education, general humanities, socio-economic, general professional, special disciplines or study of a module of general education disciplines, compulsory, basic and professional modules;

2) implementation of laboratory and practical classes;
3) completion of industrial training and professional practice;
4) completion of coursework (project) and diploma (written or practical) work (project), unless otherwise provided for by the working curricula and plan;
5) passing the midterm and final assessments.
In higher education institutions, the content of the educational programs of technical and vocational education includes the study of general educational, general humanitarian, general professional, and specialized disciplines, as well as military internship.
Within the framework of the main educational program (Major), at the discretion of the technical and vocational education organization, students are provided with the opportunity to obtain additional microqualifications.
To develop additional competencies and skills of students, at the discretion of the technical and vocational education organization, an additional educational program (Minor) is implemented, carried out at the expense of hours allocated for optional classes.
Footnote. Clause 3 – as amended by Order No. 240 of the Minister of Education of the Republic of Kazakhstan dated October 13, 2025 (shall enter into force ten calendar days after the date of its first official publication).

4. The list and scope of general education disciplines is determined taking into account the profile of the specialty in the following areas: technical and technological, pedagogical, artistic and technological, socio-economic, agrarian and technological, social and humanitarian.
The following are compulsory general education subjects, regardless of the specialty profile: "Kazakh language" and "Kazakh literature", "Russian language and literature" (for groups with Kazakh as the language of instruction), "Russian language" and "Russian literature", "Kazakh language and literature" (for groups with Russian as the language of instruction), "Foreign language", "Mathematics", "Computer science", "History of Kazakhstan", "Physical education", "Basic military training", "Physics", "Chemistry", "Biology", "Geography", "Graphics and design", "World history" and the course "Global competencies".
The list and scope of general education disciplines in educational programs for individuals with special educational needs is determined independently by the technical and vocational education organization depending on the specialty profile.
The module of general education disciplines (general education disciplines) is studied in the 1st and 2nd years and can be integrated into compulsory, basic and/or professional modules.

Physical Education classes are mandatory and are scheduled for at least 3 hours per week during the theoretical training period, of which 1 hour per week may be scheduled through optional classes or sports sections.
For higher education institutions, "Physical Fitness" classes are mandatory and scheduled independently by the institution, with a minimum of three hours per week. Exams are held at the end of each semester.
For specialties that require increased physical activity (choreography, sports, circus, acting), classes in "Physical Education" are implemented within the framework of special disciplines or basic and professional modules.
Basic military training classes for girls at educational institutions are conducted together with boys, and the "Fundamentals of Medical Knowledge" section is taught separately. Girls are not included in practical classes on the "Fundamentals of Military Affairs" section. Upon completion of the basic military training course, students attend field training (camp) training (except for those in the "Arts and Culture" program) jointly with local military command authorities. During these field training sessions, girls undergo medical training at technical and vocational institutions under the supervision of a medical professional. The "Fundamentals of Life Safety" curriculum is implemented within the "Basic Military Training" course (except at higher educational institutions).
Footnote. Clause 4 – as amended by the Order of the Acting Minister of Education of the Republic of Kazakhstan dated May 25, 2026, No. 137-НҚ (shall enter into force ten calendar days after the date of its first official publication).

5. Educational programs are developed by technical and vocational education organizations independently with the participation of employers based on the current requirements of the State Educational Standard, professional standards (if any), and WorldSkills professional standards (if any).
Educational programs of the technical and vocational education system are included in the register of educational programs (with the exception of military, medical and pharmaceutical specialties) and include:
1. Passport of the educational program;
2. List of competencies;
3. Contents of the educational program:
3.1. Content of modules (disciplines);
3.2. A summary table reflecting the volume of credits/hours acquired by modules (disciplines) of the educational program;
3.3. Matrix of disciplines by competencies (for modular programs).

Higher education institutions determine the structure and content of educational programs independently in agreement with the authorized body in the field of defense.
The educational programs of the technical and vocational education and training (TVE) reflect the learning outcomes, on the basis of which curricula (working curricula, individual student curricula) and working curricula for modules/disciplines are developed.
Educational programs, at the discretion of the educational organization, are updated at the beginning of each academic year in accordance with changing requirements of employers, professional standards (if any) and WorldSkills professional standards (if any).
Footnote. Clause 5 – as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (comes into effect ten calendar days after its first official publication).

6. To develop general competencies, the organization of technical and vocational education provides for the study of general humanities, socio-economic disciplines or compulsory modules (with the exception of military specialties).
General competencies are aimed at developing a healthy lifestyle and improving physical fitness, socialization and adaptation in society and the workplace, developing a sense of patriotism and citizenship, national identity, integrity, and an anti-corruption culture, acquiring entrepreneurial skills and financial literacy, and applying digital technologies in professional activities.
The educational programs of the technical and vocational education system include the study of the following compulsory modules:
1) development and improvement of physical qualities;
2) application of digital technologies;
3) application of basic knowledge of economics and the fundamentals of entrepreneurship;
4) application of the fundamentals of social sciences for socialization and adaptation in society and the work collective.
The inclusion of the module "Application of the Fundamentals of Social Sciences for Socialization and Adaptation in Society and the Workplace" should be provided for in educational programs for the training of mid-level specialists.
At the discretion of the technical and vocational education organization, mandatory modules are fully or partially integrated into basic and/or professional modules depending on the specialty profile, with the exception of military specialties.
Footnote. Clause 6 - as amended by the order of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 No. 182-НҚ (comes into effect on

July 12, 2026 ).

7. The content of basic and professional modules (general professional and special disciplines) takes into account modern requirements for environmental and/or industrial safety.
Basic modules are aimed at forming the basis for acquiring professional competencies, which are further developed during the development of professional modules, and reflect the specifics of a particular professional activity.
Basic and professional modules (general professional and special disciplines) are determined by the technical and vocational education organization independently.
At the discretion of the technical and vocational education organization, basic modules are fully or partially integrated into professional modules, with the exception of military specialties.
In order to expand practical experience in acquiring qualifications, at the discretion of the technical and vocational education organization, project work is implemented for students within the framework of basic, professional modules and/or independent work of students.
Footnote. Clause 7 – as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (comes into effect ten calendar days after its first official publication).

8. Educational programs of technical and vocational education, along with theoretical training, provide for industrial training and professional practice.
Professional practice is divided into educational, industrial and pre-graduation.
The timing and content of industrial training and professional practice are determined by the schedule of the educational process and working curricula.
Industrial training and professional practice constitute at least 40% of the total volume of general professional and special disciplines or of the total volume of credits allocated to basic and professional modules (with the exception of military educational institutions).
Educational programs for technical and vocational education using dual training provide for theoretical training in educational organizations and industrial training in the form of professional practice at an enterprise (organization), no less than sixty percent of the volume of study time for general professional, special disciplines and (or) basic, professional modules.
The number of hours of the curriculum allocated for industrial training also includes the number of hours for industrial training conducted at the educational organization.

At higher education institutions, professional internships include practical and methodological classes in disciplines that define combat training. Classes are held in classrooms, laboratories, during exercises, and during field training. These classes are aimed at acquiring practical skills and professional competencies in accordance with the qualifications awarded.
The timing and content of practical classes are determined by the working curricula, the schedule of the educational process and the working curricula.
In higher education institutions, the amount of study time for professional practice, military internship, and the study of general humanities, general professional, and specialized disciplines is determined by the relevant authorized body.
Footnote. Clause 8 – as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (comes into effect ten calendar days after its first official publication).

9. Assessment of the achievement of learning outcomes is carried out by various types of control: current monitoring of academic performance, midterm and final certification.
Tests, credits and course projects (work) are carried out at the expense of the academic time allocated for studying the discipline and/or module, exams - within the time allotted for midterm and/or final certification.
For higher education institutions, interim assessment is provided for in all disciplines, the main form of which is a test and/or examination determined by the higher education institution.
The midterm assessment in general education subjects includes examinations in the Kazakh language, Russian language and literature for groups with Kazakh as the language of instruction; Russian language, Kazakh language and literature for groups with Russian as the language of instruction; the history of Kazakhstan, mathematics, and a subject chosen by the educational organization according to the specialty profile.
Examinations in general education disciplines are conducted using credits/hours allocated to the "General Education Disciplines" module (general education disciplines).
A qualification exam is conducted after mastering each work qualification in the form of practical work or a demonstration exam in training and production workshops, laboratories and training centers of technical and vocational education organizations and/or at the production sites of enterprises.
Final and/or intermediate certification for specialties in the field of art and culture involves completing creative tasks.

The regulations on the creative assignment are developed by the technical and vocational education organizations independently.
For higher education institutions, final certification includes passing a comprehensive exam in specialized disciplines and passing an exam in the discipline of physical fitness.
Final assessment for individuals with special educational needs (with impaired intelligence) is carried out in the form of practical work; for other categories, it is determined by the technical and vocational education organization independently.
10. Working curricula are developed on the basis of models of the curriculum of technical and vocational education in accordance with appendices 1 and 2 of the State Educational Standard.
In the specialty "Choreographic Art", the working curricula differ from the specified models of the curriculum of the technical and vocational education.
11. Working curricula are developed for all disciplines and/or modules of the curriculum with a focus on learning outcomes and are approved by the technical and vocational education organization.
12. Working curricula and plans integrated with primary, basic secondary, general secondary, technical and vocational education in the specialty "Choreographic Art" are developed taking into account admission from grade 4 (5) and from grade 9 (after grade 9).
13. When developing educational programs for technical and vocational education organizations:
1) independently determine the volume and content of disciplines/modules while maintaining the total number of credits/hours allocated for compulsory education;
2) determine the sequence, list and number of modules/qualifications within one specialty;
3) choose various teaching technologies, forms, methods of organizing and monitoring the educational process.
14. When teaching individuals (children) with special educational needs in special groups, technical and vocational education institutions develop specialized educational programs. For students (children) with disabilities, individual plans and programs are adapted to their individual developmental characteristics and potential.
15. The content of the educational program, based on learning outcomes, allows for the development of learning trajectories with the acquisition of:
work qualifications;
working qualifications and mid-level specialists;
mid-level specialist.

**Chapter 3. Requirements for the maximum volume of students' academic workload**

16. The maximum amount of academic workload for students is no more than 54 hours per week.

The study load is measured by the time required for a student to achieve the established learning outcomes in an educational program.

When determining the student's academic workload, it is necessary to take into account that the academic year consists of academic periods (semesters), periods of midterm assessment, practical training and (or) industrial training, holidays, and a period of final assessment (in the final year).

17. The duration of academic periods and holidays is determined by the technical and vocational education organization independently.

18. For higher education institutions, during exercises, field trips, training grounds, all types of practical training, and military internships, educational work is planned at a rate of up to 54 hours of classes per week.

19. The total academic workload during the academic year is at least 75 credits or at least 1,800 academic hours, with the exception of the academic year of graduation, which is at least 45 credits. The volume of classroom work and student independent work under the guidance of a teacher (SIWT) is 60 credits/1,440 hours per year, with SIWT comprising no more than 30% of the total workload for each course and/or module. The volume of student independent work (SIWT) is 15 credits/360 hours per year.

In dual education, independent work experience is not included in the curriculum.

Taking into account the specifics of educational programs in the specialty "Pedagogy and Methodology of Primary Education", students are required to acquire at least 300 academic credits based on basic secondary education, and at least 225 credits based on general secondary education.

To provide assistance and develop individual abilities, students are provided with consultations and optional classes.

20. The volume of a student's academic workload is measured in credits/hours based on the learning outcomes he/she has mastered in each discipline and/or module or other types of academic work.

1 credit equals 24 academic hours, 1 academic hour equals 45 minutes.

21. The volume of study time for compulsory classes is 70% for evening education and 30% for correspondence education of the corresponding volume of study time provided for full-time education.

22. The technical and vocational education organization carries out educational activities in accordance with the license received and, throughout the entire period of its validity, complies with the qualification requirements imposed on educational

activities and the list of documents confirming compliance with them, approved by order of the Minister of Education of the Republic of Kazakhstan dated November 24, 2022 No. 473 (registered in the Register of Regulatory Legal Acts under No. 30721).

**Chapter 4. Requirements for the level of training of students**

23. Requirements for the level of training of students are determined by the descriptors of the national qualifications framework, industry qualifications frameworks, professional standards, WorldSkills professional standards and reflect the acquired competencies expressed in the achieved learning outcomes.

The descriptors reflect the learning outcomes that characterize the students' abilities upon reaching the following levels of training:

- in the training of qualified workers: to carry out activities with a certain degree of independence based on the assigned task, apply basic, general educational and practice-oriented professional knowledge, solve standard and simple similar practical problems, select methods of action from known ones based on knowledge and practical experience, adjust activities taking into account the results obtained;
- in the training of mid-level specialists: manage the standard work of others taking into account significant social and ethical aspects, be responsible for their own training and the training of others, apply professional (practical and theoretical) knowledge to carry out activities and practical experience, solve typical practical problems of a wide range that require independent analysis of the work situation and its predictable changes, choose technological ways of carrying out activities, conduct current and final control, perform assessment and correction of activities.

**Chapter 5. Requirements for the duration of training**

24. The training of personnel with technical and vocational education is carried out on the basis of basic secondary, general secondary, technical and vocational, post-secondary education, as well as higher education.

When applying for admission based on educational programs in technical and vocational education, post-secondary education, and higher education, the learning outcomes of the previous level of formal education are automatically recognized, the number of academic credits earned and the duration of study are reduced.

The technical and vocational education organization independently recognizes the learning outcomes of non-formal education, including microqualifications.

The timeframes for mastering educational programs are established by the technical and vocational education organization jointly with employers depending on the complexity and/or number of qualifications, the level of previous education, and are determined by the volume of credits/hours provided in accordance with Appendices 1 and 2 of the State Educational Standard.

Appendix 1

to the state compulsory
standard of technical
and vocational education

Footnote. Appendix 1 - as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (shall enter into force ten calendar days after the date of its first official publication).

**Model curriculum for technical and vocational education using modular teaching technology for skilled workers and mid-level specialists**

| No. | Name of blocks of modules and types of educational activities | Number of credits/hours | | | |
|---|---|---|---|---|---|
| | | for persons with special educational needs (with unpreserved intellect) | based on basic secondary education | on the basis of general secondary education | based vocat highe |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Module "General Education Disciplines"* | + | 75 (60+15 SRS)/1800(1440+360 SRS) | - | - |
| 2 | Compulsory modules | + | + | + | +** |
| 3 | Basic modules | + | + | + | + |
| 4 | Professional modules | | | | |
| 4.1 | Professional modules for work qualifications*** | + | + | + | |
| 4.2 | Professional modules for the qualification of a mid-level specialist*** | + | + | + | + |
| 5 | Interim assessment | + | + | + | + |
| 6 | Final certification | + | + | + | + |
| | Total for compulsory education | | | | |
| | Skilled workers | 120/2880 | 150 (120+30) /3600 (2880+720 SRS) – 225 (180+45)/5400 (4320+1080 SRS) **** | 75 (60+15) /1800 (1440+360 SRS) – 150 (120+30) /3600 (2880+720 SRS) **** | 75 ( (1440 |
| | Mid-level specialist | - | 225 (180+45)/5400 (4320+1080 SRS) – 300(240+60) /7200 (5760+1440 SRS) ***** | 150 (120+30) /3600 (2880+720 SRS) – 225 (180+45) /5400 (4320+1080 SRS) ***** | 75 (1440 (120+ (2880 |
| 7 | Elective classes | no more than 4 hours a week | | | |
| 8 | Consultations | no more than 100 hours per academic year | | | |
| | Total academic workload per student in credits/hours | 138/3312 | 252 (207+45) /6048 (4968+1080 SRS) – 336 (276+60) /8064 (6624+1440 SRS) | 84 (69+15) /2016 (1656+360CPC) – 168 (138+30) /4032 (3312+720 SRS) 168 (138+30)/4032 | 84 (1656 (138+ (3312 |

| | | | | | |
|---|---|---|---|---|---|
| | | | | (3312+720 SRS) - 252 (207+45) /6048 (4968+1080 SRS) | |

Note:

* for the specialty "Choreographic Art" is 53 (38+15)/1272 (912+360) credits/hours.

** on the basis of technical and vocational education with the qualification of working personnel, it is envisaged to study the module of subparagraph 4, paragraph 6, chapter 2.

*** Industrial training and/or professional practice constitutes at least 40% of the total volume of credits allocated to basic and professional modules.

**** is determined depending on the complexity and (or) number of qualifications.

***** is determined depending on the amount of training time allocated for the level of skilled workers.

Appendix 2
to the state compulsory
standard of technical
and vocational education

**Model curriculum for technical and vocational education for skilled workers and mid-level specialists**

| No. | Name of cycles and types of educational activities | Number of credits/hours | | | |
|---|---|---|---|---|---|
| | | for persons with special educational needs (with unpreserved intellect) | based on basic secondary education | on the basis of general secondary education | based vocat highe |
| 1 | 2 | 3 | 4 | 5 | 6 |
| | Skilled workers | | | | |
| 1 | General education disciplines | + | 75 (60+15 SRS)/1800(1440+360 SRS) | - | - |
| 2 | General humanities disciplines | + | + | + | + |
| 3 | General professional disciplines | + | + | + | + |
| 4 | Special disciplines | + | + | + | + |
| 5 | Industrial training and professional practice* | + | at least 40% of the total volume of general profes disciplines | | |
| 6 | Interim assessment | + | + | + | + |
| 7 | Final certification | + | + | + | + |
| | Total for compulsory education | 120/2880 | 150 (120+30)/3600 (2880+720 SRS) – 225 (180+45)/5400 (4320+1080 SRS)** | 75 (60+15)/1800 (1440+360 SRS) – 150 (120+30)/3600 (2880+720 SRS) ** | 75 (1440 |
| 8 | Elective classes | no more than 4 hours a week | | | |
| 9 | Consultations | no more than 100 hours per academic year | | | |
| | Total academic | 138/3312 | 168 (138+30)/4032 | 84 (69+15)/2016 | 84 |

| | | | | | |
|---|---|---|---|---|---|
| | workload per student in credits/hours | | (3312+720) –252 (207+45)/6048 (4968+1080 SRS)** | (1656+360)-168 (138+30)/4032 (3312+720)** | (1656 |
| | Mid-level specialist | | | | |
| 1 | General education disciplines | | 75 (60+15 SRS)/1800 (1440+360 SRS) | - | - |
| 2 | General humanities disciplines | | + | + | + |
| 3 | Social and economic disciplines | | + | + | + |
| 4 | General professional disciplines | | + | + | + |
| 5 | Special disciplines | | + | + | + |
| 6 | Industrial training and professional practice* | | at least 40% of the total volume of general profes disciplines | | |
| 7 | Interim assessment | | + | + | + |
| 8 | Final certification | | + | + | + |
| | Total for compulsory education | - | 225 (180+45)/5400 (4320+1080 SRS) – 300 (240+60)/7200 (5760+1440 SRS) | 150 (120+30)/3600 – 225 (180+45)/5400 (4320+1080 SRS) | 75 (1440 (120+ (2880 |
| 9 | Elective classes | | no more than 4 hours a week | | |
| 10 | Consultations | | no more than 100 hours per academic year | | |
| | Total academic workload per student in credits/hours | | 252 (207+45)6048 (4968+1080 SRS) – 336 (276+60)/8064 (6624+1440 SRS)** | 168 (138+30)/4032 (3312+720 SRS) – 252 (207+45)/6048 (4968+1080 SRS)** | 84 (1656 (138+ (3312 |

Note:

*including laboratory and practical classes in general professional and specialized disciplines, coursework and diploma projects.

**determined depending on the complexity of the qualifications.

Appendix 6
to the Order of
the Minister of Education
of the Republic of Kazakhstan
dated August 3, 2022 No. 348

**State Compulsory Standard of Post-Secondary Education**

Footnote. Appendix 6 - as amended by Order of the Minister of Education of the Republic of Kazakhstan dated June 6, 2023, No. 161 (shall enter into force ten calendar days after the date of its first official publication).

**Chapter 1. General Provisions**

1. This state compulsory standard of post-secondary education (hereinafter referred to as the SCSE) has been developed in accordance with Article 56 of the Law of the Republic of Kazakhstan "On Education" (hereinafter referred to as the Law), subparagraph 4) of paragraph 15 of the Regulation on the Ministry of Education of the Republic of Kazakhstan, approved by the Resolution of the Government of the Republic of Kazakhstan dated August 19, 2022 No. 581 "Some issues of the Ministry of Education of the Republic of Kazakhstan", and defines the requirements for the content of education with a focus on learning outcomes, the maximum volume of the academic workload, the level of preparation of students, the duration of study in post-secondary educational programs (hereinafter referred to as PE educational programs).
This State Educational Standard is applied by educational organizations implementing educational programs of professional education (hereinafter referred to as educational organizations), regardless of the form of ownership and departmental subordination, and by developers of educational programs of professional education.
Footnote. Clause 1 – as amended by Order No. 303 of the Minister of Education of the Republic of Kazakhstan dated October 4, 2023 (comes into effect after the day of its first official publication).

2. The following terms and definitions are used in the State Educational Standard:
1) academic credit – a standardized unit of measurement of the volume of scientific and (or) educational work (workload) of a student and (or) teacher (educator), necessary to achieve the learning outcomes of an educational program;
2) basic competence - a set of knowledge, skills and abilities necessary for mastering professional competencies in accordance with the chosen specialty, forming the basis for the professional development of a future specialist and reflecting the specifics of introduction to the specialty;
3) basic module - a functionally complete structural element of the educational program, aimed at developing the basic competence of the student;
4) component of the educational organization - a list of disciplines of basic or professional modules determined by the educational organization independently in accordance with the regional development plan, the requirements of employers, taking into account professional standards and the professional standards of WorldSkills (WorldSkills) within the framework of mastering the educational program;

5) demonstration exam – a form of midterm and/or final certification that allows the student to practically demonstrate the acquired professional competencies;
6) diploma thesis (project) – the final independent work of a student, which is a summary of the results of the student's mastery of the educational program of the PO;
7) general competence – a set of knowledge, skills and abilities necessary for the personal, social and professional activities of a student in solving problems common to all professional fields that are necessary for human life;
8) a compulsory module is a functionally complete structural element of the educational program, aimed at developing the general competencies of the student;
9) individual curriculum – a curriculum developed for each academic year by a student independently with the help of an educational organization based on the educational program and catalog of elective disciplines and (or) modules;
10) project work – practical and/or creative work of a student, carried out under the guidance of a teacher or mentor;
11) working curriculum – a document developed by a software development organization for a specific academic discipline and (or) module of the working curriculum;
12) working curriculum – a document developed by a vocational education organization, regulating the list, volume of academic disciplines and/or modules, the sequence of their study, as well as the forms of monitoring their mastery;
13) professional competence – the ability to solve a set of professional tasks based on knowledge, skills and abilities, as well as personal qualities that allow one to effectively carry out professional activities;
14) professional module – a functionally complete structural element of the educational program aimed at developing professional competence;
15) consultation – a form of educational activities that provides assistance to students in mastering the educational program, carried out within the framework of midterm and final assessment, support for diploma, course projects (works) and project work;
16) credit-modular system of education – a model of organizing the educational process based on the unity of credit and modular education technologies;
17) compulsory component – a list of educational modules that students must master;
18) micro-qualification – a set of knowledge, skills and competencies obtained upon completion of a short period of training, allowing one to perform individual work functions;
19) elective component - a list of disciplines or modules offered by the educational organization, independently chosen by students, aimed at expanding practical experience in mastering the qualification, including through project work;

20) optional classes – additional training with the aim of deepening knowledge, developing interests and abilities of students within the framework of the chosen specialty, not included in compulsory training.

Footnote. Clause 2 – as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (shall enter into force ten calendar days after the date of its first official publication).

**Chapter 2. Requirements for the content of post-secondary education with a focus on learning outcomes**

3. The content of the software is determined by educational programs and is focused on learning outcomes.

The content of the educational programs of the PO provides for the development of compulsory, basic and professional modules, including theoretical classes, laboratory and practical work, industrial training and professional practice.

Within the framework of the main educational program (Major), at the discretion of the educational organization, it is envisaged that students will receive additional microqualifications.

To develop additional competencies and skills in students, at the discretion of the educational institution, an additional educational program (Minor) is implemented, carried out at the expense of hours allocated for optional classes.

Footnote. Clause 3 – as amended by Order No. 240 of the Minister of Education of the Republic of Kazakhstan dated October 13, 2025 (shall enter into force ten calendar days after the date of its first official publication).

4. Educational programs are developed by educational institutions independently with the participation of employers based on the current requirements of the State Educational Standards (GOSO), professional standards (if any), and WorldSkills professional standards (if any).

Educational programs of the PO are synchronized with educational programs of higher education and are coordinated with higher and/or postgraduate education organizations in the relevant profile.

Educational programs of the PO are contained in the register of educational programs and include:

1. Passport of the educational program;
2. List of competencies;
3. Contents of the educational program:
3.1. Content of modules (disciplines);
3.2. A summary table reflecting the volume of credits/hours acquired by modules (disciplines) of the educational program;

3.3. Matrix of disciplines by competencies (for modular programs).
The educational programs of the PO reflect the learning outcomes, on the basis of which curricula (working curricula, individual student curricula) and working curricula for disciplines/modules are developed.
Educational programs, at the discretion of the educational organization, are updated at the beginning of each academic year in accordance with changing requirements of employers, professional standards and WorldSkills professional standards (if any).
Footnote. Clause 4 – as amended by Order No. 240 of the Minister of Education of the Republic of Kazakhstan dated October 13, 2025 (shall enter into force ten calendar days after the date of its first official publication).

5. The content of educational programs of the vocational education system provides for the study of integrated modules of educational programs of technical and vocational education with the inclusion of individual modules or disciplines of bachelor's degree educational programs.
Educational programs of professional development are developed by professional development organizations based on the combination of relevant substantive aspects of educational programs necessary for the performance of specific activities and the development of professional competence.
6. To develop general competencies, the software organization provides for the study of mandatory modules.
General competencies are aimed at developing a healthy lifestyle and improving physical fitness, socialization and adaptation in society and the workplace, developing a sense of patriotism and citizenship, national identity, integrity, and an anti-corruption culture, acquiring entrepreneurial skills and financial literacy, and applying digital technologies in professional activities.
The educational programs of the PO include the study of the following compulsory modules:
1) development and improvement of physical qualities;
2) application of digital technologies;
3) application of the fundamentals of social sciences for socialization and adaptation in society and the work collective;
4) application of the basic laws and mechanisms of functioning of the modern economic system in professional activities.
At the discretion of the organization, the mandatory modules are fully or partially integrated into the basic and/or professional modules depending on the specialty profile.

Footnote. Clause 6 - as amended by the order of the Acting Minister of Education of the Republic of Kazakhstan dated June 26, 2026 No. 182-НҚ (comes into effect on July 12, 2026 ).

7. The content of basic and professional modules (general professional and special disciplines) takes into account modern requirements for environmental and/or industrial safety.
Basic modules are aimed at forming the basis for acquiring professional competencies, which are subsequently developed during the development of professional modules, and reflect the specifics of a particular professional activity.
Basic and professional modules (general professional and specialized disciplines) are determined by the software organization independently.
At the discretion of the software organization, basic modules are fully or partially integrated into professional modules, with the exception of military specialties.
In order to expand the practical experience of mastering the qualification, at the discretion of the educational organization, project work of students is implemented within the framework of basic, professional modules and (or) independent work of students.
Footnote. Clause 7 – as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (comes into effect ten calendar days after its first official publication).

8. Educational programs of the PO, along with theoretical training, provide for industrial training and professional practice.
Professional practice is divided into educational, industrial and pre-graduation.
The timing and content of industrial training and professional practice are determined by the schedule of the educational process and working curricula.
Educational programs of professional development using dual training provide for theoretical training in educational organizations, and no less than sixty percent of the volume of study time for general professional, special disciplines and (or) basic, professional modules in the form of industrial training, professional practice at the enterprise (organization).
The number of hours of the curriculum allocated for industrial training also includes the number of hours for industrial training conducted at the educational organization.
Footnote. Clause 8 – as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (comes into effect ten calendar days after its first official publication).

9. Assessment of the achievement of learning outcomes is carried out by various types of control: current monitoring of academic performance, midterm and final certification.
Tests, credits and course projects (work) are carried out during the study time allocated for studying the module, and exams are carried out during the time allocated for midterm or final assessment.
Final and/or intermediate certification for specialties in the field of art and culture involves completing creative tasks.
The software organization develops the creative assignment regulations independently.
The qualification exam is conducted in the form of practical work or a demonstration exam in training and production workshops, laboratories and training centers of software organizations and/or at the production sites of enterprises.
Final assessment for individuals with special educational needs is conducted through practical work. The format of final assessment for students is determined by the educational institution.
10. Working curricula are developed on the basis of the model of the vocational education curriculum, in accordance with the appendix of the State Educational Standard.
11. Working curricula are developed for all disciplines and/or modules of the curriculum with a focus on learning outcomes and are approved by the educational institution.
12. When developing educational programs, software development organizations:
1) independently determine the volume and content of modules while maintaining the total number of credits/hours allocated for compulsory education;
2) determine the sequence, list and number of modules/qualifications within one specialty;
3) choose various teaching technologies, forms, methods of organizing and monitoring the educational process.
13. The content of the educational program of the PO provides for the continuity of educational levels, as well as the transfer of learning outcomes, credits/hours to the next level of education in related specialties (qualifications).

**Chapter 3. Requirements for the maximum volume of students' academic workload**

14. The maximum academic workload for students is no more than 54 hours per week.
The study load is measured by the time required for a student to achieve the established learning outcomes in an educational program.
The academic workload includes all of the student’s academic activities – lectures, seminars, coursework (projects), practical and laboratory work, industrial training and

professional practice, thesis (project), independent work, including under the guidance of a teacher.

When determining the student's academic workload, it is necessary to take into account that the academic year consists of academic periods (semesters), periods of midterm assessment, practical training and (or) industrial training, holidays, and a period of final assessment (in the final year).

The duration of academic periods and holidays is determined by the educational institution itself.

15. The total course load per academic year is at least 75 credits or at least 1,800 academic hours. The volume of classroom work and student independent work under supervision (SIWS) is 60 credits/1,440 hours per year, with SIWS comprising no more than 30% of the total workload for each course and/or module. The volume of student independent work (SIWS) is 15 credits/360 hours per year.

In dual education, independent work experience is not included in the curriculum.

To provide assistance and develop individual abilities, students are provided with consultations and optional classes.

16. The volume of a student's academic workload is measured in credits/hours based on the learning outcomes he/she has mastered in each module or other types of academic work.

1 credit equals 24 academic hours, 1 academic hour equals 45 minutes.

17. The volume of study time for compulsory classes is 70% for evening education and 30% for correspondence education of the corresponding volume of study time provided for full-time education.

18. The educational organization carries out educational activities in accordance with the received license and, throughout the entire period of its validity, complies with the qualification requirements imposed on educational activities and the list of documents confirming compliance with them, approved by order of the Minister of Education of the Republic of Kazakhstan dated November 24, 2022 No. 473 (registered in the Register of Regulatory Legal Acts under No. 30721).

**Chapter 4. Requirements for the level of training of students**

19. Requirements for the level of training of students are determined by the descriptors of the national qualifications framework, industry qualifications frameworks, professional standards, WorldSkills professional standards and reflect the acquired competencies expressed in the achieved learning outcomes.

The descriptors reflect the learning outcomes that characterize the students' abilities: to independently manage and control the processes of work and educational activities within the framework of the strategy, policy and goals of the organization, to discuss problems, to argue conclusions and competently handle information, to apply a wide

range of theoretical and practical knowledge in the professional field, to independently search for information necessary for solving professional problems, to solve practical problems that involve a variety of solution methods and their selection, to apply a creative approach (or the skills and abilities to independently develop and put forward various, including alternative, solutions to professional problems), to conduct current and final monitoring, to evaluate and correct activities.

**Chapter 5. Requirements for the duration of training**

20. The training of personnel with post-secondary education is carried out on the basis of general secondary education, technical and vocational education, post-secondary education, and higher education.

When applying for admission based on educational programs in technical and vocational education, post-secondary education, and higher education, the learning outcomes of the previous level of formal education are automatically recognized, the number of academic credits earned and the duration of study are reduced.

The PO independently recognizes the learning outcomes of non-formal education, including micro-qualifications.

The deadlines for mastering educational programs are established by the educational organization in accordance with the appendix of the State Educational Standard.

Appendix
to the state compulsory
standard of post-secondary education

Footnote. Appendix - as amended by Order No. 132 of the Acting Minister of Education of the Republic of Kazakhstan dated May 31, 2024 (comes into effect ten calendar days after its first official publication).

**Model Curriculum for Postsecondary Education**

| No. | Name of blocks of modules and types of educational activities | Number of credits/hours | | | |
|---|---|---|---|---|---|
| | | Based on general secondary education | Based on technical and vocational education with the qualification of skilled workers | Based on technical and vocational education with the qualification of a mid-level specialist | Based educa |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Compulsory modules | + | + | - | - |
| 2 | Basic modules* | + | + | + | + |
| 3 | Professional modules* | + | + | + | + |
| 4 | Interim assessment | + | + | + | + |
| 5 | Final certification | + | + | + | + |
| | Total for mandatory | 225 (180+45 SRS)/5400 (4320+1080 SRS)** | 150 (120+30 SRS)/3600(2880+ 720 SRS)*** | 75 (60+15 SRS)/1800 (1440+360 SRS) | 75 ( (1440 |
| 6 | Elective classes | no more than 4 hours a week | | | |
| 7 | Consultations | no more than 100 hours per academic year | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Total | 252 (207+45 SRS)/6048 (4968+1080 SRS) | 168 (138+30 SRS)/4032 (3312+720 SRS) | 84 (69+15 SRS)/2016 (1656+360 SRS) | 84 ( (1656 |

Note:

*Industrial training and/or vocational practice constitutes at least 40% of the basic and vocational modules.

**Provision is made for the development of professional modules of related qualifications at the levels of skilled workers and mid-level specialists (if available).

***Provision is made for the development of professional modules of related qualifications at the level of a mid-level specialist (if available).

Appendix 7
to the Order of the Minister of Education
of the Republic of Kazakhstan
dated August 3, 2022 No. 348

**List of some orders of the Ministry of Education and Science of the Republic of Kazakhstan that have become invalid**

1. Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 604 "On approval of state compulsory educational standards at all levels of education" (registered in the Register of state registration of regulatory legal acts under No. 17669).

2. Order of the Minister of Education and Science of the Republic of Kazakhstan dated May 5, 2020 No. 182 "On Amendments and Supplements to the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 604 "On Approval of State Compulsory Education Standards at All Levels of Education" (registered in the Register of State Registration of Regulatory Legal Acts under No. 20580).

3. Order of the Minister of Education and Science of the Republic of Kazakhstan dated August 28, 2020 No. 372 "On Amendments to the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 604 "On Approval of State Compulsory Education Standards of All Levels of Education" (registered in the Register of State Registration of Regulatory Legal Acts under No. 21146).

4. Order of the Acting Minister of Education and Science of the Republic of Kazakhstan dated July 23, 2021 No. 362 "On Amendments to the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 604 "On Approval of State Compulsory Education Standards of All Levels of Education" (registered in the Register of State Registration of Regulatory Legal Acts under No. 23692).

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