

Educational Area of Natural Sciences

«I explore the world»

Grades 3-4

(implemented within the integrated subject in the amount of 7 hours per week, 245 hours per year. Approximate distribution of hours between educational areas within this integrated subject: language and literature – 2 hours per week; mathematics, natural sciences, technology, social and health-preserving, civics and history – 1 hour per week)

Proposed content	
1.	<p>«I get to know nature» content line</p> <p>Natural phenomena. Cause-and-effect relations in nature. Devices for measuring linear dimensions of bodies, mass, time, and temperature. Units of length, area, volume, mass, time, temperature. Observations and experiments – methods of nature research. Air and its properties. Air movement. Some plants and animals. The impact of environment on plant and animal organisms. Scale. Orientation on terrain Compass. Constellation. The moon: Earth's satellite. Planets of the Solar system. Galaxy. Milky way. Change of day and night. The reasons for the change of seasons. The shape and size of the Earth. Horizon. Human body. Healthy lifestyle. Healthcare. The components of a healthy diet: animal and vegetable products, salt, sugar.</p>
2.	<p>«Me in nature» content line</p> <p>Bodies and substances. Variety of substances in the environment. The spread of water in nature, its importance for living organisms. Natural water cycle. The importance of air for plants, animals and humans. Sources of air pollution. Methods of air purity protection. Mineral resources (coal, oil, gas, peat) and their use. Renewable energy sources (sun, wind and water) and their use. Soil organisms. The role of living organisms in soil formation. The importance of soil for plants and animals. The unity of the world of animate and inanimate nature; human being as a part of nature. Human in nature. The significance of nature in human life. Protection of flora and fauna. Protected areas of one's homeland. Economical use of water, electricity, and gas in everyday life.</p>

3. «Me in the human-made world» content line

Human being and nature. The significance of nature in human life.
Protection of environment from pollution. Protection of the Earth's interior.
The use of inventions and discoveries.
Expediency of the re-use of materials.
Mechanisms and tools.

Compulsory learning outcomes of applicants for education (recording with the State standard of primary education).

Student:

- selects in the outside world or from the suggested questions such problems that can be solved by means of research;
- defines the purpose of observations / research; predicts the possible results of observations / research;
- determines the sequence of steps during the observation / experiment; selects the necessary conditions for the study;
- conducts monitoring of selected or proposed natural phenomena and objects, conducts research, creates training models;
- establishes links between objects and natural phenomena; draws conclusions from observations and research with a teacher or independently;
- determines success factors, analyzes errors that occur during the study, changes conditions or sequence of actions during the study;
- finds, systematizes (according to the plan) information about the world; uses technical devices and devices to search for information;
- presents information in the form of a picture, diagram, graph, text, presentation, etc.;
- acts in the outside world, taking into account the relationships between objects of wildlife and inanimate nature;
- establishes links between human activity and the state of the world; makes rules of conduct in the world and adheres to them;
- explains the importance of inventions in everyday life, of the importance to preserve nature;
- determines the approximate cost of natural resources used in the family, ways to reduce them;
- explains the importance of what studies for their own life, distinguishes between the main and the secondary;
- identifies known and unknown in a problem, provides proofs of correctness of judgments;
- classifies objects of the outside world according to several features and properties;
- offers their own way to solve the selected or proposed problem.