

The content of tasks.

The Olympiad includes two rounds (theoretical and experimental) in each age league.

The theoretical round includes a set of problems. These may include information from natural sciences related to physics: astronomy, chemistry, biology, geography, technology. The solutions can be obtained based on the knowledge of physical principles and laws. Some of the questions can be presented in the test form.

The content of the tasks for the Senior League is in line with the program of the International Physics Olympiad (IPhO).

The content of the tasks for the Junior League includes, in addition to physical laws, information from related fields of science included in the "Natural Studies" course and is in line with the 5-8 grade curricula currently in place in the Republic of Belarus. Solving these problems does not require knowledge of complex mathematical methods.

When conducting the Olympiad in person, the tasks of the experimental round involve conducting real physical experiments with real equipment, and include the traditional stages of a physical experiment: building a theoretical model of the studied phenomenon, developing the scheme of the experimental setup to be used, assembling the setup from the components provided, making measurements, analyzing and processing the measurement results, formulating rationalized conclusions.

When conducting the Olympiad remotely, the tasks of the experimental round include the results of real physical experiments presented in the form of measurement tables, graphs, diagrams, photographs, and video footage. The participants of the Olympiad are to:

- explain the given data based on formulas, diagrams, graphs, numbers;
- propose schemes of experimental setup used to obtain the said measurement results;
- build theoretical models of the phenomena described;
- if necessary, independently retrieve data from the submitted photographs;
- perform mathematical processing of measurement results;
- formulate and rationalize conclusions based on the work done.

Conducting the experimental round remotely does not require the organizers to prepare special equipment, however, the participants of the Olympiad must be provided with drawing and measurement instruments (millimeter-scale measurement ruler, protractor, compasses).

Some tasks of both theoretical and experimental rounds may include elements of mathematical modeling of physical phenomena and subsequent numerical calculations. To complete these tasks, it is enough to use an engineering calculator. Knowledge of complex numerical methods (solving nonlinear equations, numerical differentiation and integration, solving differential equations, Monte Carlo methods, etc.) is not required. The necessary information from this file is given in the task description. Using programmable calculators and computers is not allowed.