

A.Ryabko,
Senior Lecturer
(Glukhiv national pedagogical university Dovzhenko)

SCENE TASKS OF PHYSICAL MEANING AS A WAY OF PROPAEDOUTICS OF PHYSICS IN 5-6 FORMS OF GENERAL SCHOOL

Physics teachers of 7th forms faced with the problem of underdeveloped ability of pupils to abstract and logical thinking, unpreparedness of children to perception of modeling approach – basis of physics; with immature general educational skills; solving problems in physics requires the using of a large number of academic skills, which causes difficulties in many pupils. During physics study, as we know, the most of all natural sciences is used mathematical apparatus, specific sign language, formulas, and so on. Many pupils have difficulties which can be partially prevented if realize systematic interdisciplinary interaction of natural courses and mathematics in 5-6th forms by means of scenes tasks of physical meaning.

Methods of teaching pupils to solve scenes math tasks are considered in works of L. Friedman, F. Smith, A. Slim, T. Safonov. Methodology of work with scenes tasks in physics are devoted works of methodists: J. Perelman, A. Semko, M. Tulchinsky, I. Lanin, G. Shchukin, A. Usoltseva and many others. The great attention is paid to works touches upon the problem of the content of propaedeutic natural course of primary and general schools. It is mentioned in the works of D. Kovalev, N. Rykov, D. Traytaka, M. Skatkina, V. Fedorova, E. Shukhov, T. Vasyutin.

The purpose of the article is to analyze the possible interaction between the mathematics and nature-study in the aspect of propaedeutics of physical knowledge during solving text tasks. The aim of the article is to work out the algorithm of making the scenes task of physical content for 5-6 th forms. The achievement by pupils such qualities of mastering the content of mathematics education as awareness, strength, depth, systematic, generalization is possible only during realization of active approach in study. The most important type of educational activity, in the process of which is mastered the system of mathematical knowledge and skills is solving tasks. That task is the means which sends and largely promotes teaching and learning activities of pupils.

The solving tasks of natural contents don't only promote the development of mathematical skills, but also get acquainted with scientific facts about living and inanimate of nature. Tasks of nature-study content can be used in the lessons in mathematics, nature-study, in extracurricular activities, as well as during non-standard, including integrated lessons. Scene tasks extend imagination of pupils about using the laws of physics in around world, interest and create the motivation to executing tasks, form the cognitive interest; help to organize knowledge tests.

Future prospects we see in the development of tasks of experimental content (experimental tasks in natural study), which would be the mathematical addition to independent research work of pupils in nature-study – observation, experimentation, experiments.