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**FORMATION OF SUBJECT EXPERTISE IN STUDY OF PHYSICS RATIO OF GRAVITATIONAL AND INERT MASSES**

In accordance with the requirements of the State Standard of full secondary education in order to improve the quality of education, we look for one approach to forming the subject (branch) competencies (defined as pupils gained in learning experience for a specific subject related activities with the assimilation, understanding and application of new knowledge) in physics. For implementation of this approach we propose to consider the example of one of the physical education concepts.

In school physics course taught in such important semantic and methodological aspects of the concept as mass, inertial and gravitational mass. In our opinion, they are universal, cross-cutting concepts, so it is advisable to disclose their essence in all branches of physics, which in turn promote the formation of the subject (Industrial) competence in physics.

The problem of formation of various competencies during study physics is considered in works of many scientists and methodologists. Appreciating their contribution to the development of thought and methodical analysis of the formation conducting the concepts of "jurisdiction" and "competence", we believe that due attention to the formation of competencies, including objective (sector), the study of specific concepts, laws was not given.

The purpose of the article is to highlight the main methodological features when forming the subject (Industrial) competence in physics at the approach of the gravitational and inertial masses.

We propose the theoretical and experimental aspects to address the problem of identity between gravitational and inertial masses and provide further substance to offer unified concept of mass, which would concentrate all properties of this concept. In this way, students deeply understand the physical meaning of these important concepts of physics, which in turn promote the formation of the subject (Industrial) competence in physics.