

METHODOLOGY OF TEACHING MASS AS A MEASURABLE QUANTITY

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Abstract: This article discusses the methodological features of teaching mass as a measurable quantity in primary school. It highlights the goals, objectives, and methods of forming students' understanding of mass and developing measurement skills.

Key words: mass, quantity, measurement, primary school, teaching methodology.

Introduction

The study of quantities plays an important role in the primary school mathematics curriculum. One of the fundamental quantities is mass, which helps students understand the properties of objects in the world around them.

Developing an understanding of mass promotes logical thinking, observation, and practical skills. It is important that students not only understand units of measurement but also be able to apply them in everyday life.

Main Section

Teaching the concept of mass in elementary grades is an important step in developing students' understanding of quantities and their measurement. Initially, students perceive mass through sensory experience, comparing objects by weight. They determine which object is heavier or lighter based on their own sensations. This approach lays the foundation for their subsequent understanding of mass as a measurable quantity.

Gradually, instruction moves from intuitive perception to conscious understanding. The teacher introduces students to measuring instruments such as scales, explains how they work, and demonstrates how to determine the mass of an object. At this stage, it is important to ensure students' active participation in the learning process: they must independently weigh objects, compare the results, and draw conclusions. Practical activities promote deeper learning and develop cognitive activity.

Introducing units of mass measurement, such as grams and kilograms, is the next important step. Students learn to relate mass to specific objects, which helps them better understand the meaning of numerical values. For example, the teacher might use real-life examples: the mass of an apple, a book, or a school backpack. This helps students connect theoretical knowledge with real-life situations.

Particular attention is paid to developing measurement skills and solving practical problems. Students learn to record measurement results, compare the masses of different objects, and perform simple calculations with quantities. It is important that assignments be varied and

include elements of problem-based learning, which stimulates interest in the subject and develops logical thinking.

The mass teaching method also includes the use of visual aids, such as models, drawings, and tables. These help students better understand abstract concepts and make the learning process more accessible. Game-based learning, such as comparison tasks or measurement accuracy competitions, increases student motivation and creates a positive emotional atmosphere in the classroom.

Furthermore, a step-by-step approach to learning is crucial: from specific actions with objects to the development of generalized knowledge. Teachers must consider the age, developmental, and individual abilities of young students. Gradually increasing the complexity of tasks ensures successful learning by all students.

Conclusion

Teaching the concept of mass as a unit of measurement plays an important role in the mathematical development of young students. This topic helps develop understanding of mass, its units of measurement, and practical applications of this knowledge.

The effectiveness of learning depends on the use of visual aids, practical tasks, and active learning methods. Engaging students in independent learning fosters logical thinking, observation skills, and cognitive interest.

Adherence to the principle of gradual learning and consideration of students' age-appropriate characteristics ensures the material is accessible and facilitates successful learning. The acquired knowledge and skills are essential for further study of mathematics and its application in everyday life.

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