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Means of Teaching Mathematics in Elementary Classes

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Abstract: Mathematics, like any other science, is in continuous development. This has a great influence on the development of technology, economics, and other sciences, including pedagogy and methods of teaching mathematics. The article discusses the basic means of teaching mathematics in primary school.

Key words: primary grades, mathematics, mathematics teaching aids, textbook, task groups, cards with math tasks, handouts, counting sticks.

Introduction

The system of teaching aids to mathematics for primary schoolchildren should consist of the following basic aids:

1. A textbook on mathematics for primary grades.
2. Teaching aids containing material in addition to the textbook: Task cards for organizing students' independent work; collections of problems for oral calculations; materials to test the knowledge of students, etc.
3. Various kinds of teaching aids for teachers.
4. Material-subject (illustrative) models, which may include devices, measuring instruments, tables, handouts and counting materials, etc. Textbook as the main means of teaching mathematics.

Main part

Primary school mathematics textbooks. The textbook systematically and fully disclose the content of the mathematics course, reflect the level of knowledge, abilities and skills that students must master in each class. Along with the task of communicating certain information, textbooks perform didactic functions: they help to consciously assimilate knowledge, teach methods of mental activity, contribute to the formation of certain skills and abilities, including skills of independent work, control and self-control, help the teacher to educate and develop students. The textbook containing illustrations provides great opportunities for carrying out correctional work of various forms and content.

The system of placing illustrations and exercises in textbooks contributes to the development of abstract thinking in children, since the gradual transition from subject visualization to conditional makes it possible to more successfully form students' skills in modeling mathematical concepts. No less important is the system of illustrations presented in the textbook for the development of the concrete thinking of children.

Thus, the drawings and plot materials contained in the textbook, drawings, diagrams, tables, samples of mathematical notation help students not only understand many mathematical relationships, but also provide material for mathematical generalizations, acquaint them with various aspects of the surrounding reality.

The success of the use of pictures also largely depends on how quickly and well the children learn to understand the pictures. For this, in the process of work, it is necessary to acquaint students with

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visual means. Gradually, it is necessary to bring to their consciousness that the main contours of the line convey the shape and structure of the object, and relief special shading of various types, delimiting and connecting auxiliary lines serve as a means of conveying the material texture of the object, separation and connection between its parts in the drawing.

The most effective form is when the student's perception is guided by the teacher. He directs his attention through a system of leading questions that help to understand the drawing and comprehend its essence. Guidance from the teacher should take various forms depending on the novelty and complexity of the drawing perceived by the student.

For example, going through the topic "More, less, the same", a conversation on one of the pictures in the textbook can be structured like this: "Find the top left picture. What's in this picture? (students find it difficult to answer). Drawn what you love to play with. Especially boys! (car) What is this car? What is it called? (Bread and food are imported into this one). Let's call it a grocery machine. And what is drawn to the right? (Also a grocery machine). Now find the bottom left picture. What is drawn here? (fuel tanker car). And next? (also a fuel truck) How many cars are drawn in total? (four). How many are grocery? (two). And fuel trucks (also two cars). How else can you say about these cars? (There are as many food trucks as there are fuel trucks, there are as many fuel trucks as there are food trucks).

It should be noted that although the illustrations are made taking into account the requirements for embossed graphics, some of them have drawbacks.

For example, consider the case when the figure shows two rows of birch leaves of the same shape and size, differing only in that some of them are smooth, and others: relief-point shading is applied. It is inconvenient to work on this drawing, because it is unclear by what criteria these leaves can be distinguished. It is incorrect to call them smooth and rough, since birch leaves are always smooth. In this case, a flat drawing depicting green and yellow birch leaves taken from a textbook for mass schools was adapted for perception with the help of touch. Working with the image of geometric shapes is also of great interest to children. Here it is only necessary to stipulate certain details. To illustrate the composition of numbers in the textbook, images of geometric shapes are often used. For example, circles, shaded and not shaded (sometimes only a relief outline is given), relief dotted shading.

A large place in the textbook is occupied by illustrations that serve as a visual basis for the study of the geometric material provided by the program. Completing tasks of geometric content contributes to the development of spatial representations in students, the ability to observe, compare, abstract and generalize. All tasks of geometric content in the relief-point version of the textbook, in our opinion, can be divided into three groups.

To the 1st group, we include tasks that can be performed based on the illustration of the textbook without changes and additions, i.e. as indicated in the book. Examples of such assignments include the following:

The second group consisted of tasks that students can complete with the help of a mathematical device. For example, jobs like

a) mark the points as shown in the drawing and connect them with segments so that you get a quadrangle.

To the 3rd group we attributed tasks, the fulfillment of which by younger schoolchildren is associated with great difficulties and unjustified loss of time, or even impossible.

Tutorials containing material in addition to the tutorial.

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One of the important places among learning is occupied by cards with math assignments. These manuals are designed to help the teacher organize students' independent work at different stages of the lesson. They can be used to conduct control and educational independent work, organize frontal, group and individual work in the classroom, fill gaps in the knowledge of children. The use of cards will allow you to solve a number of didactic problems. With their help, you can effectively organize frontal work with the class when studying new material, carry out independent work to consolidate and check the passed material. In addition, work on cards contributes to the education of independence, the development of thinking, the creative abilities of students; it helps to carry out a differentiated approach, taking into account the preparedness of each student.

Handouts are also one of the main didactic visual aids in teaching children. The types and forms of handouts are very diverse. Its types are determined by the studied materials, their specific content, as for the functions, they mainly consist in revealing the content of new concepts, consolidating the studied material, ensuring active independent educational activity of students, and controlling the assimilation of the material. Using handouts based on actions with specific familiar objects, students, under the guidance of a teacher, learn to count, compare different groups of objects, and establish various connections between numbers. The main types of handouts are: counting sticks, cubes, cards (cut numbers, manuals with applique images, etc.), coins.

Counting sticks are one of the simplest and most valuable learning tools. They can be widely used in the study of the first and second ten and the topic "Hundred". With their help, to clearly explain to students the education and the composition of numbers in the natural series, to study arithmetic operations. In addition, they are also used in the propaedeutics of geometry. Children build various geometric shapes from sticks: triangles, quadrangles, etc. An example of using sticks to control knowledge is the game "silent", the teacher calls the number (1, 2, 3, 4, 5), and the students pick up and name the corresponding number of sticks.

Cards are used at all stages of the lesson: when checking homework, explaining and consolidating new material, repeating what has been passed and exercising control over students' knowledge. Cut numbers and signs of arithmetic operations and relations are a set of cards with embossed images in the form of an applique pattern of numbers (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50 , 60, 70, 80, 90) and signs (+, -, =>, ^).

The dimensions of such cards are approximately 5-5.5 x 9.5 cm - for single-digit numbers and signs, 10-11 x 9.5 cm - for two-digit numbers. With the help of split numbers and signs of arithmetic operations, you can effectively organize frontal work.

Conclusion

The widespread use of teaching aids in the practice of educational work in mathematics lessons not only ensures the assimilation of the material, but also helps to overcome specific difficulties in the process of mastering mathematics by younger students.

References:

1. Bantova M.A., Beltyukova G.V. Methods of teaching mathematics in primary grades. - M., 1984.
2. Bespalko V.P. Pedagogy and progressive teaching technologies. - M .: Publishing house of the Institute of vocational education of the Ministry of Education of Russia, 1995.
3. Istomina NB and other Methods of teaching mathematics in primary classes. - M .: MGZPI, 1996.
4. Zhikalkina T.K. Didactic games in mathematics lessons. - M., 1994.

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