



## WAYS OF DEVELOPING STUDENTS' MENTAL ABILITIES BY USING TEACHING METHODOLOGIES WITH GEOMETRIC MATERIALS

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### ANNOTATION

The article describes the types and characteristics of geometric materials that are taught from the first grade of elementary school in the classroom. The role of geometric materials in shaping students' mental abilities is highlighted.

**Keywords:** *Point, straight line and curved line, straight line intersection, broken line, geometric material*

### INTRODUCTION

From the first grade onwards, students develop ideas about points, straight lines and curves, straight line intersections, and broken lines. As you know, the concept of a point, a straight line, is one of the indescribable basics of a school geometry course. There are no questions about what a point is, a straight line, but they are imagined. For example, a pencil mark on a piece of paper and a chalk mark on a board give the impression of a dot. Grade I students' perceptions of the straight line occur as they complete a variety of practical tasks. For example, if the chalk thread is released by pulling the wing tightly, an image of a straight line is formed on the board. It can be continued in both directions. There are other ways to draw a straight line with a ruler. For example, you can create a straight line by folding a sheet of paper, and the fold line will be a straight line. When the sheet of paper is folded in different directions, the result is the same, resulting in a straight line image. It is also important to change the position of the straight line on the board, that is, to draw it horizontally, vertically, or vertically. Children are introduced to the curve at the same time as the straight line. If the tensioned thread leaves a straight line on the board, and the thread is loosened and left to cool, the trace it leaves gives the impression of a curved line. Students practice looking for curves and straight lines in the environment. For example, the edges of a blackboard, door, window, or desk can be seen as a straight line, while the edges of a pot, petals, leaves, windows, and curtain flowers in a classroom can be seen as a curved line. During the exercises, students will learn some of the properties of straight and curved lines. For example: practice drawing lines from a point, you can draw as many straight and curved lines as you want from one point, you can draw as many straight lines and curves as you want from two points. concludes that Students will also be introduced to the cut. If two points are placed on a straight line, the part of the straight line bounded by these points is called the intersection or intersection of the straight line.

### MAIN PART

The boundaries of the section can be marked with dashes. Exercises to show a straight line cross-section from the environment reinforce the idea of a cross-section. To introduce students to the broken line, a piece of wire is taken, which is broken in front of the children and broken into several pieces. I broke the wire, the line, the cut into several pieces, and a new figure was formed, which is called a broken or broken line. A broken line is made up of intersections, called joints of a broken line. Broken lines can be open or closed.

Closed broken lines are the boundaries of triangles and rectangles. For example, children are taught that a closed broken line consisting of three joints is the boundary of a triangle. Students are then taught to find the length of each broken line and to put the numbers found in order to find the length of the broken line. Exercises to find the length of a broken line will help students understand the concept of polygonal perimeter.

2. Children also learn about polygons at an early age. In children, perceptions of these figures are gradually formed in the process of primary education and later on, in the upper grades. Initially, geometric figures were used as didactic material in the study of the top ten. Children learn to count, solve problems, compare, and more. Images about some figures are exchanged, their names, circles, squares, triangles are remembered. The next task of the teacher is to expand the knowledge of students about geometric figures, to teach them to distinguish the elements of figures, to teach them to draw figures, to acquaint them with some properties of figures. The teacher introduces the children to the triangles by using triangles of different shapes, colors, and sizes cut from paper. The presentation can be conducted as follows. Illustrating triangles and telling children that these are triangles. They have three ends, sides and corners. The end of a triangle consists of a point and the side of the intersection. To show the angle of a triangle, you need to cut off one of its corners. After that, the children will be introduced to rectangles, pentagons, hexagons based on this plan. Figure models can be used to perform a series of exercises to identify figures based on given symbols to compare two or more figures.

For example:

Show a figure with four sides and four corners, a figure with five sides and five corners.

The teacher points to the side, end, and angle of the triangle and asks, "What am I showing?" he asks.

Count how many ends, how many corners, how many sides the yellow and red figures have. What can big figures be called? What can small figures be called?

Separating triangles from a set of shapes, what is more, all triangles or red triangles?

Right and wrong angles

To create a right-angle model, each student folds a sheet of paper of an arbitrary shape along a straight line, then the parts of the previously formed fold line overlap. should fold again. The folded paper is opened and flattened, which is divided into four lines. each of the resulting pieces will be a model of a right angle. By placing these models on top of each other, students make sure that all right angles overlap and that they are equal to each other. take one corner from each student and show that they are the same regardless of the shape of the sheets of paper. Using the right angle model, students find right and wrong angles from surrounding objects in books, notebooks, desks, and other objects, and from paper models of polygons. The right angles of the angles are achieved by placing them on the comparison of right and wrong with the surrounding objects using the Model. Make a straight line model so that the ends and sides overlap at a given angle. If both sides overlap, the angle is correct. To develop the ability to compare angles, they need to do a sufficient number of independent exercises and find the right angle from books, a table, a blackboard, and so on. The model of a right angle is a means of developing ideas about polygons and their properties.

Rectangular models with different sizes and ratios of different colored sides, notebook sheets, colored paper can be formed from other papers of rectangular shape, for this purpose the rectangular paper should be folded in a line parallel to one of its edges. Such a sheet of paper itself serves as a model of a rectangle. We cut the sheets along the fold lines to create different models of a rectangle. By attaching some of these rectangles to the board at random, we teach children to distinguish the insignificant property of a rectangle, its position in the plane. The rectangular model and the method of folding the plane of a rectangle can be used to help children understand the basic properties of a rectangle. Using the rectangle model, the children determine that all the angles of the rectangle are correct, and their equality is determined by folding the opposite sides of the rectangle and overlapping them. A square model can be created by folding a rectangular plane along lines 1 and 2. When the teacher draws the children's attention to the fact that the rectangle is folded along the line number 1, its adjacent sides are overlapped, folded along the line number 2 and then dashed along this line. coming from a right rectangle, the equality of the adjacent sides is achieved. As a result, we get a rectangle with equal sides. The teacher says that such a rectangle is called a square. Exercises are used to differentiate between rectangles and squares.

## CONCLUSIONS

The generalization of the properties of geometric figures, the formation of ideas about mathematical language, the need to solve practical problems of geometric content requires the use of Latin letters in the definition of geometric figures. each geometric figure can be named. We name each of the points to differentiate them. For example: A is A point. Point V refers to reading V. So if we denote the points by the capital letter of the Latin alphabet, we denote the intersection by two letters, because it has two ends, and they consist of dots. AV and it is read as AB and BA. Polygons also need to be marked with letters, and in order to mark them, the ends of the letters must be rotated in a certain order. The rotation can be started from any third.

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