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FORMATION OF CONCEPTS ABOUT LENGTH IN PRIMARY SCHOOL STUDENTS, DEVELOPING LENGTH MEASURING SKILLS

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Abstract:

This article discusses the formation of innovative teaching activities of team and teachers - the conditions for developing the skills of using modern informational technologies. It is well known that in the system of continuing education, primary education is an integral part of general secondary education. Geometric material studied in grades 1-4 Since it is necessary to create a basis for the study of geometric materials studied in grades 5-6, as well as a systematic course of geometry, its content is related to the composition and development general education goals; in the upper grades to create a reserve of geometric representations that create the necessary conditions for conscious and thorough mastery of geometric material by students, to formulate and develop their spatial representations, and to achieve their goals.

Keywords: Pedagogical technology, information, technological approach, object, subject, integration.

1.INTRODUCTION.

According to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated August 16, 1999 "On approval of the State educational standards of general secondary education", the knowledge that students should acquire in mathematics at the end of primary education , a minimum level of skills and competencies is defined. In particular, elementary school students must have the following knowledge, skills, and competencies related to geometric shapes:

-recognize cross-sections, triangles, rectangles (including rectangles and squares), pentagons and circles in pictures;

-recognize and understand the surrounding geometric shapes;

- to measure the length of the section, to make a section of a given length, to be able to visually measure the length of the section;

- be able to make rectangles, squares, triangles and circles using a ruler and compass;

-calculate the perimeter of a polygon, the area of a rectangle and the area of a square;

-know the units of length (mm, cm, dm, m, km) and surface (sm.kv., dm.kv., m.kv.), the basic ratios between them, put them in place. llay get.

It is well known that in the system of continuing education, primary education is an integral part of general secondary education. Geometric material studied in grades 1-4 Since it is necessary to create a basis for the study of geometric materials studied in grades 5-6, as well as a systematic course of geometry, its content is related to the composition and development general education goals; aimed at creating a reserve of geometric concepts that create the necessary conditions for conscious and thorough mastery of geometric material by students in the upper grades, the formation and development of their spatial imagination to achieve their goals.

In order to achieve these goals, in the definition of the content of geometric material in primary school students have an idea of geometric figures (dots, straight lines, curves, broken lines, angles, polygons, circles, circles) and their elements in addition to composing content, to separate the required figures in complex drawings, to find familiar figures in the objects that surround students, to cut geometric figures and to create new figures from cut pieces, geometric quantities (the length of the cut, the straight rectangular face) requires great attention to the exercise.

2. THE MAIN PART.

It should be noted that in the elementary mathematics course, geometric figures are initially used as an educational tool and as a calculation material. However, when using geometric figures as computational material in mathematics lessons, students focus not only on the arithmetic side of the problem, but also on the elementary properties of these geometric figures (e.g., the ends and sides of a polygon, the center of a circle and a circle, etc.).

It is also advisable to pay attention to the combination, because these properties are often found experimentally, so students in some cases still can not connect them with each other.

Then, in the study of geometric material, about geometric figures (point, straight and curved line, straight line cross section, broken line, angle, polygon, circle and circle), some of them are simple. attention is paid to the formation of a system of perceptions about the properties in students.

In the study of geometric figures and their properties, it is recommended to make extensive use of the surrounding material objects, ready-made models and drawings of figures, various tools. These can be demonstrations of geometric figures made of colored cardboard or thick paper, models for the whole class, posters depicting the figures, slides, slides.

By experimenting with models of geometric figures, students identify the symbols that are important to the geometric figure being studied, realizing that the color, material, and size of the figure are not important to the figure.

The study of some geometric figures will require the development of hand-made visual aids with students. These can be, for example, rectangular models, polygon models (including rectangles and squares), and so on.

One of the main goals of learning geometric elements in primary school is to structure and develop students 'spatial imagination. To achieve this goal, in many cases, and especially in the early stages of spatial perception, great emphasis is placed on students 'practical work. The spatial imaginations of the students who made the models with their own hands, drew the drawings themselves, cut them out, and did practical work related to making new figures from the cut figures were passive, limited only to observation of the object. becomes conscious and solid in relation to the geometric imagination of the learner.

When studying the elements of geometry in the primary grades, it is important to distinguish its specific directions, taking into account the characteristics of the studied material system, because it allows to determine the content and nature of the exercises to be studied. one is basic and which helps to determine which one has an introductory character. For example, an elementary school math course focuses on the concept of intersection. To get an idea of this concept, you need to use the concept of "straight line". However, it should not be concluded that such a teacher should acquaint students with the concept of a straight line, because in this case the main purpose is to acquaint students with the intersection, the concept of a straight line has only an introductory character will be. That's why students are short

- after being introduced to straight lines and curves, their knowledge of intersection is deeply and thoroughly structured.
- take a look Let's at the geometric materials studied in the elementary math course and their role in shaping students 'geometric representations.

An elementary math course curriculum requires students to have a clear idea of a point, a straight line, a curve, and a straight line intersection. In order to meet these requirements, great attention is paid to the organization of students' practical work, as discussed above, as well as to the methods of comparison and contrast.

To give students an initial idea of a straight line, three students are drawn to the board, two students hold the chalk-clad string firmly on the board at two points, and the third student pulls the string tight. releases, resulting in the image of a part of a straight line on the board. It is explained to the class that it can be continued in both directions.

Introducing students to a straight line as well as a curved line (by comparison) is a good idea. For example, if a stretched thread leaves a straight line mark on the board, it is cooled to create an image of a curved line, and the trace left creates an image of a curved line.

Once students have simple ideas about straight lines and curves, they are now introduced to how to draw a straight line with a ruler.

Not only is it important to draw horizontally drawn straight lines, but it is also important to draw straight lines vertically or obliquely to help students consciously and accurately construct a straight line. In many cases, students do not understand the vertical lines drawn vertically, and the straight lines drawn diagonally are called "oblique lines" or, in some cases, "curved lines". It is also a good idea to introduce students to some of the properties of straight lines and curves. For example, as a result of several exercises, students can draw as many straight and curved lines as they want through one point, and as many curves as they want through two points, but only one straight line can be drawn through two points. conclude that the line can be drawn.

It is important to use folding a sheet of paper to help students visualize a straight line. Students' attention should be drawn to the fact that no matter how the sheet of paper is folded, the result is the same, that is, a straight line is formed.

Once students have formed an idea of a straight line and a curved line, they can now move on to form an idea of a straight line intersection. Here, too, it is recommended to use practical work: cut the tensioned thread on the board with scissors to get an initial idea of the straight line section. Students place two dots on a straight line drawn in their notebooks and realize that a straight line whose boundary consists of these points is a cross-section, or a short cross-section. After the introduction of the use of letters in the definition of geometric figures, it is understood that two letters can now be used to denote a section, and that these letters are placed at the end of the section, and that D and Ye indicate the end of the section if "DE section" is written.

Much attention is paid to measuring and comparing the lengths of sections according to the curriculum of the elementary mathematics course. If the lengths of the sections are initially measured in grids and with a ruler, then the length of the sections and the ruler are measured.

Once students have developed the skills to measure and compare the lengths of sections, their knowledge and skills will be strengthened by solving problems related to making cuts to a given length and making rectangles. To reinforce the idea of cross-section, also introduce students to exercises to show a straight line cross-section from the environment around them (board edges, ceiling-to-wall joints, desk edge, etc.). important.

Polygons are used as didactic tools in the study of the first decimal numbers in the mathematics course in the primary grades. Then we begin to study the elements (sides, angles, and ends) of polygons. For example, when introducing the concept of a triangle, students learn that it is made of different materials (paper, plastic, wood), of different sizes, colors, shapes (acute angles, obtuse angles, equilateral, equilateral, showing the triangles to students, abstracting them from their non-essential properties (made of different materials, color, size, different appearance), the main important properties for a triangle are its three ends, three should be noted that there is a side and three corners.

The guidelines recommend doing this as follows; showing the students triangles of different colors, sizes, and shapes made from different materials brought into the classroom, the teacher said, "These are triangles. Although they differ in color, size, and appearance, they are all called "triangles." Who says why these figures (representing all the triangles they bring in) are called triangles? " (Because these have a three-cornered angle). The teacher points and says, "This is the side of the triangle, this is the end of the triangle. How many sides are there in a triangle, how many ends are there? " As students answer these questions, they will understand the three sides of a triangle. Students then identify the elements of the triangle in their triangle models. It is important that students clearly understand that the end of a triangle is a point and the side of a triangle is an intersection.

When introduced to another element of a triangle, the angle, students first get an idea of the angle, which is interpreted as the "truncated angle" of the triangle.

Therefore, in addition to showing the angle of the triangle (the teacher puts one end of the pointer on the end of the triangle and rotates it from one side of the corner to the other), the teacher has to cut off a part of the triangle - its angle - for great demonstration.

It is important that students make their own models of triangles using paper, plasticine, and sticks, draw and color triangles in their notebooks, and do exercises to distinguish triangles from other geometric shapes.

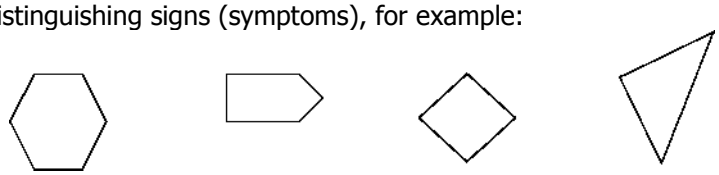
As a result of this exercise, students will be able to show the elements of a triangle: the end of a triangle (points), the side of a triangle (show the intersections, showing the intersection from one end to the other), and the angles of the triangle.

Introducing students to rectangles, pentagons, and hexagons is based on the same plan, focusing on the relationship between the name of the polygon being studied and the number of its elements: triangle-triangle, three-triangle, three-sided, rectangle-four-cornered, four-three, four-sided, and so on. In addition, students will understand that the number of these elements, that is, the number of angles, ends, and sides, is equal.

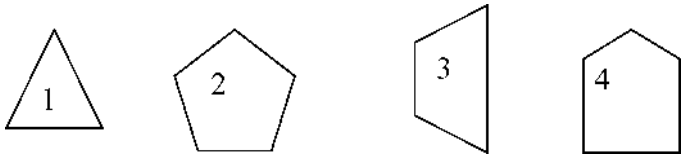
The use of paper models of polygons in the study of polygons, and the drawing and coloring of polygons in notebooks are important because in elementary school, polygons are considered part of a plane. As you know, there are two definitions of the concept of a polygon in a mathematics course, one of which describes a polygon as a closed broken line, and the other as a part of a polygon.

As mentioned above, in elementary school, polygons are studied as part of a plane. But the experience of teaching math in elementary school shows that many students cannot distinguish between polygons and closed broken lines. Therefore, it is advisable to include in the system of geometric exercises exercises that reveal the essence of the concept of "closed broken line". Solving these exercises and using the methods of comparison and contrast in solving them provides a basis for students to consciously master these concepts and is a mistake that can be made later by some students; that is, to avoid errors such as finding its perimeter instead of finding the face of a rectangle, and vice versa, instead of finding its perimeter instead of finding the perimeter of a rectangle.

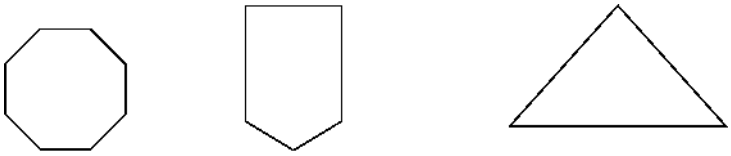
Using the models of polygons, you can perform a variety of exercises for the classification of figures. If at first this exercise was aimed at distinguishing signs (symptoms), for example:



How are these exercises different from each other? [Exercises 13, 359]



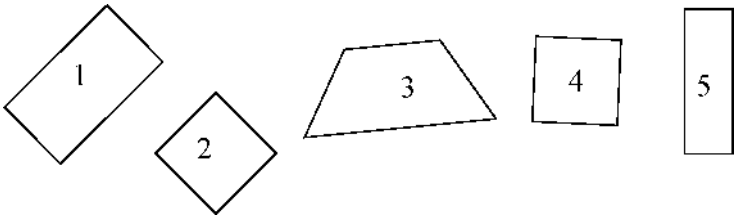
B) Draw any polygon that is not here in your notebook. [13, Exercise 629]



Say the shapes in one word, how many rectangles are there? Which shapes have two right angles? [Exercise 13,593]

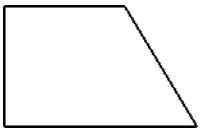
Look at the drawing and name what the shapes in it are called.

G) Find the right rectangle between the rectangles. Divide the squares between the rectangles. [Exercise 13,491]



This exercise helps students to understand that "an arbitrary rectangle is a rectangle and an arbitrary square is a rectangle."

From the models of polygons it is possible to divide the figures into parts and solve the problem of creating new figures from these parts. It should be noted that for the first time, students are introduced to the division of figures into parts. They know, for example, that if a point is marked on an intersection, that point divides the given section into two sections. Therefore, it is not difficult for students to divide polygons into parts.



3.CONCLUSION.

Exercises on dividing figures into parts and creating a new figure in the created parts help students to introduce the concept of unit share on the one hand, and on the other hand, play an important role in introducing the concept of 'face of figure'.

Therefore, in the initial stage of such exercises, using paper models of figures, the scissors are cut into pieces, and then the required figure is formed from these parts, and then the solution of such problems is done by students in drawings and minds.

REFERENCES:

1. Yuldasheva M. M. Development of tolerance in the history of eastern culture //SJIF Impact Factor. – Т. 7.
2. Xoliqulovich J. R. Toponymics-a Linguistic Phenomenon in The Work of Sadriddin Aini //Middle European Scientific Bulletin. – 2021. – Т. 8.
3. Baymuradovna B. S. et al. PEDAGOGICAL TECHNOLOGIES FOR THE DEVELOPMENT OF COGNITIVE CREATIVE ABILITIES OF STUDENTS IN THE LESSONS OF THE RUSSIAN LANGUAGE //Journal of Critical Reviews. – 2020. – Т. 7. – №. 6. – С. 492-496.
4. Юлдашева М. М. и др. ЭФФЕКТИВНОСТЬ ПРИМЕНЕНИЯ СОВМЕСТНЫХ ИНТЕРАКТИВНЫХ ОБУЧАЮЩИХ МЕТОДОВ «КРУГЛЫЙ СТОЛ» И «СЛАБОЕ ЗВЕНО» //Биология и интегративная медицина. – 2020. – №. 4 (44).
5. ogli, Yarashov Mardon Jobir; ,THE IMPORTANCE OF USING DIGITAL TECHNOLOGY IN PRIMARY SCHOOL MATHEMATICS EDUCATION,ACADEMICIA,1,11,5,2021,ACADEMICIA: An International Multidisciplinary Research Journal
6. Курбанова Ш. Н. и др. ПРЕПОДАВАНИЕ МАТЕМАТИКИ В НАЧАЛЬНЫХ КЛАССАХ //European reseach: innovation in science, education and technology. – 2020. – С. 97-100.
7. Косимов Ф. М., Ярашов М. Ж. ТВОРЧЕСКИЕ САМОСТОЯТЕЛЬНЫЕ РАБОТЫ НА УРОКАХ МАТЕМАТИКИ В НАЧАЛЬНЫХ КЛАССАХ //ИННОВАЦИОННЫЙ ПОТЕНЦИАЛ РАЗВИТИЯ НАУКИ В СОВРЕМЕННОМ МИРЕ: ДОСТИЖЕНИЯ И ИННОВАЦИИ. – 2020. – С. 178-181.
8. Ismoilovich D. D. THEORETICAL FOUNDATIONS OF WORK ON TEXT ANALYSIS IN PRIMARY SCHOOL.
9. Olloqova M. O. Intensive education and linguistic competence in mother tongue //ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL. – 2021. – Т. 11. – №. 1. – С. 580-587.

10. Adizova N. B. THE ROLE OF ETHNOTOPONYM IN THE TOPONYM OF BUKHARA DISTRICT //Theoretical & Applied Science. – 2020. – №. 1. – С. 414-416.
11. Adizova N. B. THE ROLE OF ETHNOTOPONYMS IN THE BUKHARA DISTRICT MICROTOPONY //Scientific reports of Bukhara State University. – 2020. – Т. 4. – №. 2. – С. 131-134.
12. Rasulovna, Hamroyeva Maftuna. "Use Of Anthroponyms In Tahir Malik's Stories." Journal of Contemporary Issues in Business and Government 27.1 (2021): 203-211.
13. Safarova N. MUSEUMS AS A FACTOR OF LIFELONG EDUCATION IN THE FORMATION OF HISTORICAL CONSCIOUSNESS //Theoretical & Applied Science. – 2018. – №. 9. – С. 170-172.
14. Sidikova S. D. Theoretical and didactic principles of distance learning //ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL. – 2021. – Т. 11. – №. 1. – С. 541-548.
15. Саидова Г. Э. Ситуация свободного выбора на уроках математики в начальных классах //Вестник науки и образования. – 2019. – №. 7-3 (61).
16. Сайфуллаева Н. Б., Саидова Г. Э. Повышение эффективности занятий, используя интерактивные методы в начальном образовании //Научный журнал. – 2019. – №. 6 (40).
17. Саидова Г. Э., Санокулова С. Ф. ЭФФЕКТИВНОСТЬ ИСПОЛЬЗОВАНИЯ ТЕХНОЛОГИИ ДИДАКТИЧЕСКОГО ИГРОВОГО ОБРАЗОВАНИЯ В НАЧАЛЬНЫХ КЛАССАХ //EUROPEAN RESEARCH. – 2020. – С. 118-120.
18. Саидова Г. Э. РАЗВИТИЕ ЛОГИЧЕСКОГО МЫШЛЕНИЯ УЧАЩИХСЯ НА УРОКАХ МАТЕМАТИКИ В НАЧАЛЬНОЙ ШКОЛЕ //INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS OF PHILISOPHY, PSYCHOLOGY AND PEDAGOGY. – 2019. – С. 97-101.
19. Саидова Г. Э. ИСПОЛЬЗОВАНИЕ СОВРЕМЕННЫХ ПЕДАГОГИЧЕСКИХ ТЕХНОЛОГИЙ НА УРОКЕ МАТЕМАТИКИ.
20. Homitovna H. M. A model of continuity in the formation of mathematical concepts in kindergarten and primary school pupils //ACADEMICIA: An International Multidisciplinary Research Journal. – 2020. – Т. 10. – №. 11. – С. 1756-1764.
21. Хакимова М. Х. ПРОБЛЕМЫ ОБЕСПЕЧЕНИЯ ПРЕЕМСТВЕННОСТИ ДОШКОЛЬНОГО И НАЧАЛЬНОГО ОБРАЗОВАНИЯ ПРИ ФОРМИРОВАНИИ МАТЕМАТИЧЕСКИХ ПОНЯТИЙ У УЧАЩИХСЯ //European reseach: innovation in science, education and technology. – 2020. – С. 69-71.
22. Рустамова Г. ФОРМИРОВАНИЕ КОМПЕТЕНТНОСТЕЙ УЧЕНИКА ЧЕРЕЗ СПЕЦИФИЧЕСКУЮ ИНТЕРПРЕТАЦИЮ ОБРАЗА ТОПОЛЯ В УЗБЕКСКИХ НАРОДНЫХ ПЕСНЯХ," //Інновації в освітньому процесі: методологія, тенденції, технології. – 2020. – Т. 1. – С. 1,131-133.
23. Saidahmedovna U. D., Qizi R. G. B. Beliefs About the" Tree of Life" in Uzbek Folklore //Middle European Scientific Bulletin. – 2021. – Т. 8.
24. Jonpulatovna S. M., Qizi I. M. F. An integrated approach to the use of pedagogical technologies in primary school mathematics //Middle European Scientific Bulletin. – 2021. – Т. 8.
25. Ergashevna S. G., Furqatovna S. S. Modern Forms of Mathematics in Primary Schools //Middle European Scientific Bulletin. – 2021. – Т. 8.