Methods of Teaching Mathematics Based on the Conventional Approach to Elementary School Mathematics

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Abstract: *methodology for teaching mathematics in primary school. Arithmetic material is the main content of the course. The main core of the elementary course consists of the arithmetic of natural numbers and basic quantities. In addition, the basic concepts of geometry and algebra are integrated into this course.*

Key words: *traditional lesson, non-traditional, in experiments, arithmetic material, conventional, algebraic, geometric, concentrations.*

Lesson types: Non-traditional lesson. What is a traditional lesson?

Traditional lesson --- types of lessons conducted sequentially according to the stages of the lesson conducted under the guidance of the teacher. What is a non-traditional lesson?

A non-traditional lesson (in online form) performs didactic functions such as making students interested in learning, broadening the scope of knowledge, training in them the characteristics of present-responsibility, activating and developing their ability to think independently.

As it was noted in the experiments, if the training was conducted in the usual way, based only on listening, our students learned a maximum of 20% of the information, and when advanced pedagogical methods were used, it was more It is confirmed that the indicator has increased to 80/90%. The effectiveness of non-traditional education lies in the fact that its participants will have integrated systematic knowledge and, on the basis of the development of independent creative thinking skills, basic skills for future professional activities will be formed, and the educational process will be directly connected with practice. provides. That is why it is considered one of the highly effective methods of developmental education.

Methods of teaching mathematics in primary grades. Arithmetic material is the main content of the course. The core of the elementary course consists of the arithmetic of natural numbers and basic quantities. In addition, the basic concepts of geometry and algebra are integrated into this course. Elementary mathematics course is an organic part of school mathematics course. The organic part taught in grades VI-XI is taught the most basic and age-appropriate elementary concepts of mathematics. In higher grades, these concepts are taught in an expanded, deepened and enriched manner. So, the content of elementary school mathematics determines the content of high school mathematics.

The structure of elementary mathematics has its own characteristics.

For example: multiplication based on addition is subtracted. The elementary mathematics course is a whole course that includes three subjects in its structure; it is necessary to distinguish parts

consisting of arithmetical, algebraic and geometrical material. A concentric arrangement of arithmetic material is maintained in the elementary mathematics course.

But in the current program, the number of concentrates is reduced: tens, hundreds, thousands, multi-digit numbers. It should also be said that the material is grouped in such a large way that the interconnected concepts, actions, and issues are approached in terms of time.

At the same time as studying the properties of arithmetic operations and appropriate calculation methods, the connections between the results and components of arithmetic operations are revealed.

(For example: if one of the addends is subtracted from the sum, the second addend is formed) changes in the results of arithmetic operations are observed when one of the components changes. Explain the concepts of equality, inequality, equation, variable on a concrete basis from the 1st grade, numerical
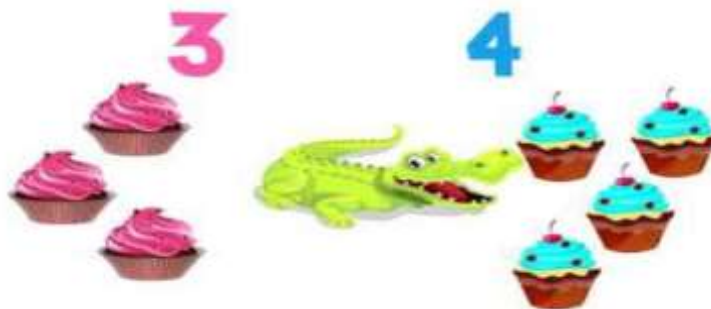
equalities and inequalities (4=4, 6=1+5, 2 big 3, 6+1 big 5, 8-3 big 8-2) Learning them is related to learning arithmetical material and helps to reveal it more deeply.

For example: A clear example of the uppercase sign is through this picture we shape the reader's mind.

Starting from the 2nd grade, equations in the form of $(X+6)-3=12$ and hakazo are considered. Solving the equations is performed first by the method of selection, and then based on the knowledge of the connections between the results and components of the operations.
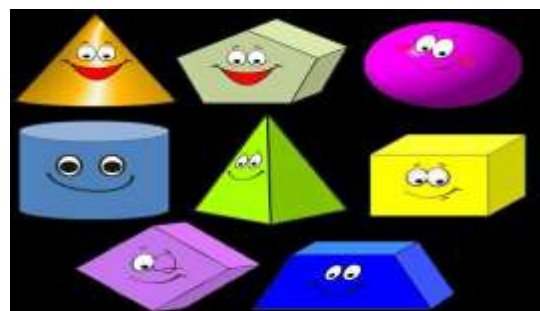
For example:

$(X+6)-3=12$

$X+6 =12+3$

$X=15-6$

$X = 9$

Practical testing with a variable allows students to acquire functional imagination. Geometric material serves the purpose of introducing children to the simplest geometric figures, developing their spatial imagination, as well as showing arithmetic laws and connections.

(For example, an instructional image of a rectangle divided into equal squares is used to reveal the relation of the permutation properties of multiplication). For example:
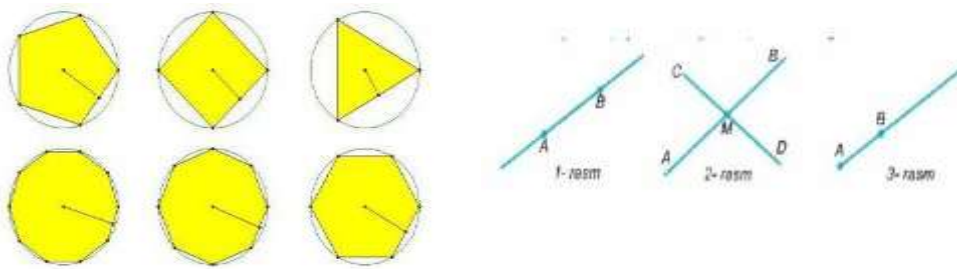
tarting from grade 1, straight and curved lines, cross sections, polygons and their elements,

right angles and angles are introduced.

For example: Interactive methods of forming basic mathematical concepts in primary grades.

About basic mathematical concepts. One of the main tasks of teaching elementary mathematics is to form basic mathematical concepts in students. A concept is an idea about the important, common features of a set of objects. A concept is formed based on the generalization of imaginations of students, which are emotional images of objects and real world events.

For example: Perception of various rectangular objects such as a board, a sheet of paper, a table top, a brick or a matchbox, and the like, through the body, muscles, and senses. with, students will have a clear idea of a rectangle. Ignoring the material these objects are made of, their weight,

color, and other properties, the reader compares these images and summarizes his overall important contributions. This shows that plane figures have 4 sides and 4 right angles. It can be seen from this example that one of the methods of formation of geometric concepts is to exclude various symbols that do not correspond to the set of objects under consideration, and to preserve general, important symbols.

n this, the students will start with some private performances under the guidance of the teacher

they can look at a set of flat geometric figures. Square-Rectangle, parallelogram, convex quadrilateral is an arbitrary quadrilateral or its inverse. From the set of all rectangles, it is possible to separate convex quadrilaterals, which are part sets, and from them, parallelograms, which are part of it, then a rectangle, and finally a square. Find the difference moment:

Students' learning and the teacher's guidance can be shown as follows.

Activity of the teacher;

1) Determining students' knowledge on the basis of asking students' knowledge, interviewing, giving practical tasks to solve calculation problems

2) Demonstration of visual weapons and tools and organization of observation.

3) Conversation, presentation of knowledge in connection with explanations, organizing work with a book.

4) Organization of exercises: organization of educational practical and life-practical work of students.

5) Checking students' knowledge by asking questions and assigning tasks to perform practical work.

Activities of students;

1) Answering the teacher's questions, measuring, calculating, solving problems.

2) Observation, analysis, synthesis, comparison, generalization, deductive, drawing conclusions on the described objects.

3) Listening to the teacher's statement, reading a book, summarizing and remembering facts.

4) Applying acquired knowledge to practical work, applying previously acquired knowledge in changed conditions.

5) Answering the teacher's questions, doing practical work.

In other words, the idea that the teacher teaches the students, and the students read, can be expressed as follows; students acquire educational skills and knowledge, and teachers guide the process of acquiring knowledge.
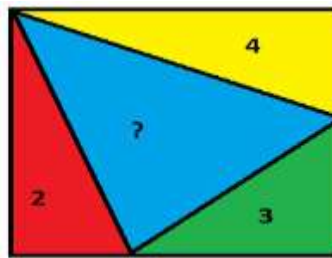
This leadership consists in organizing the educational activities of the teacher
is considered For this, the teacher selects the necessary material, arranges it in a certain sequence, recommends sources of knowledge for students.
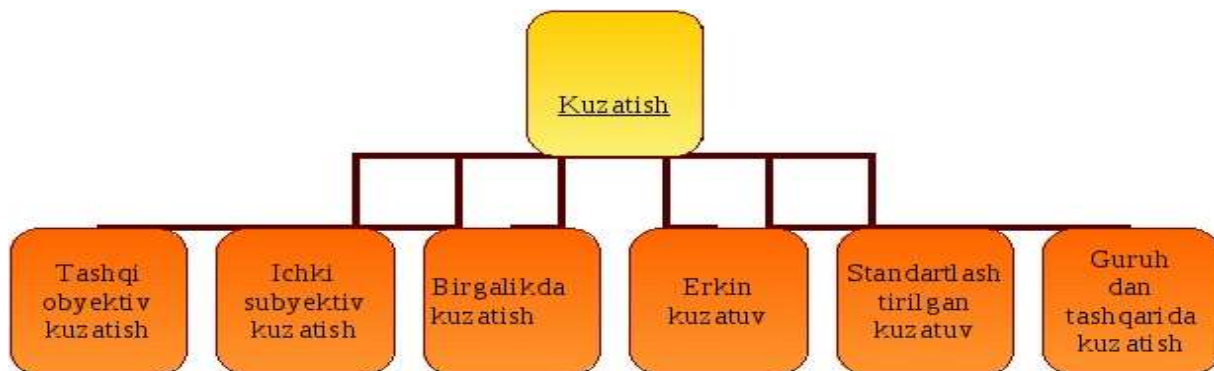
It organizes students' learning activities. It controls how the process of learning takes place. The process of students' acquisition of mathematical knowledge is a difficult process. This can only be properly understood when one truly understands the emergence of mathematical concepts. Even before the child comes to school, he works with the game, searches for some of its elements from the set, combines the elements into a set, collects his sets. Separates its part from its set.

All such practical actions with a collection of things, constant contact with adults, lead to the formation of the concept of natural number.

Let's find the puzzle

How many numbers are the pictures drawn by?

The use of interactive methods of mathematics in elementary grades is a process that makes the student interested in the learning process, encourages him to learn new topics. With

interactive methods, it will be possible to interest any student in the class.

Games with rules
and is the subject of development of role-playing games. The basis of such games is a mental and willful attempt to learn one or another content, actions determined by the progress of the game.

Find the difference moment:

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It organizes students' learning activities. It controls how the process of learning takes place.

The process of students' acquisition of mathematical knowledge is a difficult process. This can only be properly understood when one truly understands the emergence of mathematical concepts.

Even before the child comes to school, he works with the game, looks for some of its elements from the set, combines the elements into a set, collects his sets. Separates its part from the set,

All such practical actions with a collection of things, constant communication with adults - lead to the formation of the concept of natural number.

We find the puzzle:

How many numbers are the pictures drawn by?

The use of interactive methods of mathematics in elementary grades brings the student into the learning process
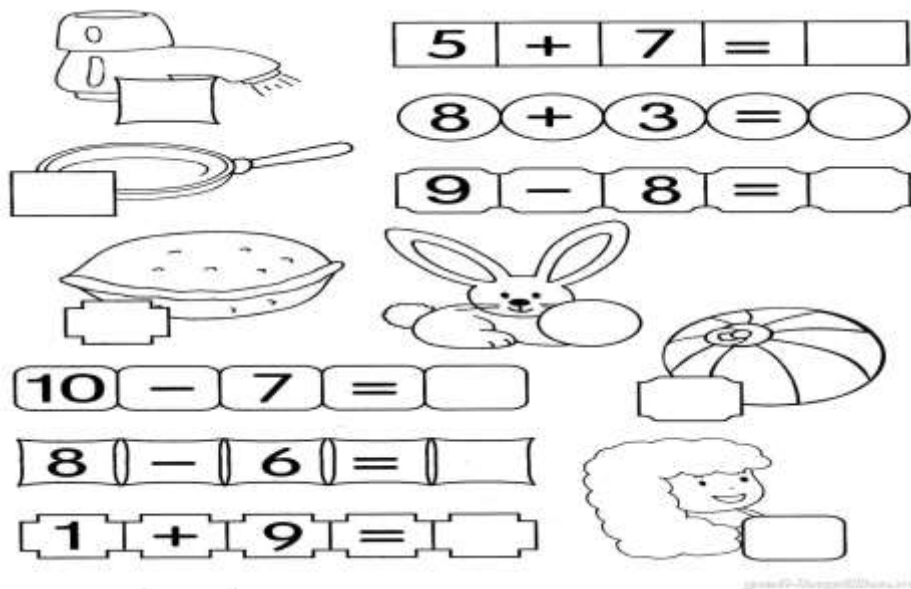
It is interesting, it is a process that encourages him to learn new topics. With interactive methods, it will be possible to interest any student in the class.

Different methods according to the level of activity of students.

1) Explanatory-illustrative method.

In this case, the teacher provides ready-made information using various means, and students receive, understand and remember this information. The teacher provides information orally, in writing, with instructions.

2) Reproductive method.

The main feature is to restore the method of activity, and the teacher repeats the tasks. Competencies and skills are formed using this method.

3) Problematic presentation of knowledge.

In this case, the teacher poses a problem by discussing a rule aloud, and manages the process of solving it, teaches students to think, and strengthens research.

4) Research methods of teaching.

In this case, after students understand the given problem, they make their own work plan, hypothesize, determine the verification method, conduct observations, experiments, compare facts,

summarize and draw conclusions.

5) Problem teaching method.

It means creating problem situations, forming a problem, helping students to solve it, leading them.

We selected some topics from the first grade mathematics textbook and developed games based on them. Click the desired button on this picture and you will be able to play interesting games hidden under the numbers.

It mainly describes the sequence of numbers and is given in different colors so that students

do not confuse the numbers. Depending on the English language, we start the beginning of the numbers from the "Start" button and reach the "Finish" i.e. the end, and explain the sequence of numbers to the students in an understandable way. In addition, the planets are depicted, which makes the reader interested in understanding a new topic.

In conclusion, we can say that in order to increase the efficiency of our educational process, we are using modern educational technologies and methods. The use of foreign experiences and methods in the wide reforms of the educational process currently being carried out in our country gives effective results.

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