



Methods And Significance Of Checking The Knowledge Of Students In The Educational Process In Mathematics Lessons

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Abstract. The article talks about the importance of checking students' knowledge in the educational process in elementary mathematics classes, as well as verbal and calculation methods.

Keywords. Student, teacher, memory, exercise problem, oral, written, addition, subtraction, multiplication, division, pure hearing, to see

Matematika Darslarida O'Quvchilar Bilimini O'Quv Jarayonida Tekshirish Usullari Va Ahamiyati

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Annotatsiya. Maqolada boshlang'ich sinf matematika darslarida o'quvchilar bilimini o'quv jarayonida tekshirishning ahamiyativa og'zaki va hisoblash usullari haqida so's yuritilgan.

Kalit so'zlar. O'quvchi, o'qituvchi, xotira, mashq masala, og zaki, yozma, qo'shishiluvchi, yig indi, ayriluvchi, ayirma, kamayuvchi, ko'paytuvchi, ko'paytma, bo'linuvchi, bo'linma, sof eshitish, ko'rish.



In teaching mathematics, it is important to check whether students have solved examples and problems correctly.

When checking knowledge in mathematics, it is necessary to take into account not only the presence of this or that knowledge in the minds of students according to the requirements of the program, but also the following that characterize its quality:

that students' judgments and concepts correspond to the object being taught; accuracy, i.e. correctness of details;

completeness, i.e. sufficient and complete reasoning and concepts related to objects and processes;

to reflect important signs in objects and processes, concepts and opinions; awareness, that is, the ability to understand the connection between concepts and to be able to justify judgments;

consistency, i.e. long retention in the memory of students.

Examination and assessment of students' knowledge is common to all subjects in didactics. The purpose of checking and evaluating knowledge is for the teacher to determine the quality of students' mastery of the educational material, the level of knowledge acquisition in the program, and the formation of skills and competencies.

In this way, the teacher compares the educational activities of students with the amount of knowledge that students must master in mathematics with the curriculum. He constantly monitors whether the knowledge necessary to master this volume and achieve independent problem solving has been formed or not.

There are various ways of putting knowledge into practice when solving new problems and checking the knowledge and skills of students in mathematics by the teacher. , is determined by measuring, performing laboratory work, etc.

For example, if a student knows that a product is formed by multiplication, he has difficulty solving the problem "find the product of 5, the product of 6, the product". Therefore, it is necessary to perform the above-mentioned steps in each student's answer.

Oral determination of students' knowledge.

Asking students individually, and this asking should be accompanied by a small amount of oral assessment. The teacher usually connects such a request with checking homework.

It is used to solve examples and problems with all students of the class in order to check oral calculation skills. The teacher tells an example, students solve it



orally and write down only their answers to the corresponding number in their notebooks. It is advisable to carry out such a task for 7-10 minutes in each lesson. Oral calculation can be divided into two types:

- account of the first type. In this case, the calculator does not write anything and does not use any weapon or tool - he memorizes the given numbers by hearing. This is a pure listening exercise.
- the second type is oral calculation with the help of tables. In this case, the given numbers are memorized by hearing and sight or only by sight. This type of oral account uses written posters, counting figures, tables and other visual aids. This is a visual and auditory exercise.

In the first half year of schooling, when operations are performed on small numbers and the tables of addition and subtraction are only being mastered, students use oral methods of calculation. From the second half of the second academic year, with the transition to learning to count within 1000, the main form of calculation is written ratio. At the same time, introducing students to various methods of oral calculation and creating quick oral calculation skills should continue until the end of the arithmetic course, where it is possible to bring counting within 100 and large numbers to counting within 100. more attention should be paid to creating skills.

For example: 1) $130 \times 4 = 13 \times 10 \times 4 = 52 \times 10 = 480$

2) $480 : 6 = 48 \times 10 : 6 = 8 \times 10 = 80$

3) $26000 + 35000 = 25 \times 1000 + 36 \times 1000 = 61000$

At the beginning of the first school year, the teacher conducts pure listening exercises from oral counting. Only after the students get acquainted with the written numbering and signs of actions, they gradually move to verbal and semi-written calculations with sight and hearing.

In the second half of the second grade of primary school, and in the third and fourth grades, oral calculation is mainly carried out on visual and auditory exercises. In these classes, 5-7 minutes should be given every day to verbal solving of problems and quick calculation exercises. It is not recommended to give more time than this, because children work (more intensively) with all their strength in oral counting and are likely to be more tired. The teacher often determines how long the oral account should be continued, because the time given for the oral account depends on many factors, the activity of the students, their readiness, the quality of the materials, etc.



We need to answer the question of when the above-mentioned 5-7 minute oral calculation should be conducted during the lesson.

In the experience of many schools, they put this work at the beginning of the lesson, right after checking the homework. It is not appropriate to send it as a template, it is possible to do the oral calculation even in the middle of the lesson, for example, to start independent work to strengthen the newly taught rule by solving examples and problems under the guidance of the teacher; in lessons where more problems are solved, if the teacher notices that the students are tired, then an oral assessment is given. The oral account makes the work diverse and enlivens.

There are many types of oral counting. We cannot dwell on all of them, it is impossible, because our advanced teachers do not stand in one place. Creative teachers create new types of oral accounts. Of course, some forms of oral calculus need to be tested before they can be recommended for public schools. We will focus on the types of oral account used.

It should be noted that, of course, these types cannot be considered fully developed, and there are many types of exercises based on auditory and visual senses conducted in IV classes. We will touch on some of them.

1. Write examples on the board. The teacher writes a series of numbers on the board, then shows them with a pointer, students count orally and answer when the teacher calls. This method is used in exercises on large numbers, in special ways of oral calculation and in solving regulated (complex) problems.

2. Posters, counting figures and tables.

- a. "account dial"
- b. "City - Trosky Table"
- c. "euler series"
- d. "account levels"
- e. "account figures"
- f. "interesting squares"



The teacher hangs one of these weapons on the board;

shows numbers with a pointer and suggests counting. Teachers count and raise their hands. Types of listening exercises;

1. single action examples
2. 2,3,4,5, practical examples
3. Riddle problems
4. A matter of organized appearance.

Visual and auditory exercises, as well as auditory exercises, can be given in such forms:

- a. issues without concrete content
- b. concrete meaningful issues

We see issues that have no concrete content.

Questions to add.

- 1) How much is 98 added to 18?
- 2) How much is 76 added to 12?
- 3) Multiply 58 by 2
- 4) Find a number more than 3 from 49?
- 5) Which is greater: the sum of 28 and 31 or the sum of 42 and 17?
- 6) I thought of a number, I took 75 from it, 28 remained, what is the number I thought of?
- 7) What number is 57 when reduced by 13?
- 8) What number is 57 when reduced by 13?
- 9) 18 must be subtracted from which number to make 92?
- 10) What number is 53 when reduced by 47?
- 11) Find the denominator based on the divisor 42 and the divisor 378
- 12) If one of the addendums is increased (decremented) by 174 and the other by 288, how will the sum change? If the denominator is decreased (increased) by 147 and the denominator is increased (decreased) by 163, what does the difference do?



Subtraction Questions:

1. What is 12 less 47?
2. What about 52 minus 18?
3. Name the number less than 118 from 310.
4. What must be done to 372 to make 158?
5. How can 100 be formed from two (three) additions?
6. Name the numbers that add 137 to 200 and 1000?
7. Reduce 72 by 7 units.
8. What number should be added to 26 to make 40?
9. How much must be taken from 73 to make 65.
10. I thought of a number, added 60 to it, and got 100. How many times have I thought?
11. I thought of a number, increased (decremented) it by 69, 90 was obtained. How many times have I thought?
12. How much is 75 more than 37?
13. How many must be subtracted from 901 to make 794?
14. How to change 547 to make 188?
15. The sum of two addends is -596. one of the participants 377. The second.
16. Find the denominator of 153 and the difference of 47.
17. If 402 is added to the numerator and 283 is added to the denominator, what is the difference.
18. If 156 is taken from the denominator and the denominator, how does the difference change?

Multiplication and division problems.

1. I thought of a number, increased (decremented) it 8 times, 72 was obtained. How many times have I thought?
2. What number should be multiplied (divided) by 6 to get 84.
3. Name a number that is 4 times larger (smaller) than 60.
4. A number was divided into 8 equal parts and 11 were formed in each part. What number was divided?
5. How can you make 72 from two (three) multipliers?
6. Which of the numbers less than 20 divides the number 60 without a remainder?
7. How to multiply two equal numbers to get 144?
8. How many times should 17 be taken to make 68?



9. If the multiplier is increased 27 times, and the multiplier is increased 9 times, how does the product change?
10. If the multiplier is increased by 18 times and the multiplier is decreased by 180 times, what does the product do?
11. If the divisor is increased by 54 times and the divisor is decreased by 9 times, how does the denominator change?
12. If the divisor is increased by 5 times and the divisor is increased by 105 times, what does the division do?
13. 125 is one-sixth of what number?
14. If the product is 175, and one of the multipliers is 25, find the second multiplier.

All about actions.

1. If 15 is added to 21, the resulting number will be 9 times greater than the expected number. What number did I think?
2. If 40 is divided by 8, the resulting number is 10 times smaller than the expected number. How many times have I thought?
3. I thought of a number, multiplied it by 7 times, added 8 to the resulting number, and the result is 50. What number did I think?
4. How many times are there 8 in 42 and what is the remainder?
5. What number, when divided by 7, leaves 6 in the division and 3 remains?
6. If the divisor is 280, the numerator is 25, and the remainder is 5, what is the divisor?
7. Which one is bigger and how much bigger: 72 plus 18 mm or 12 minus 100 mm?
8. Name the smallest two-digit number, the largest three-digit number, the number 2 times larger than the smallest three-digit number, and the two larger (smaller) numbers than the largest two-digit number.
9. Name all numbers greater than 30 and less than 60 that are divisible by 4.

The teacher himself has a lot of variety of questions, because they enliven the lesson, train attention, increase intelligence and are a good preparation for solving problems.

In the elementary school mathematics program, it is said: "When conducting oral arithmetic exercises, it is not necessary to limit yourself to only simplified methods of oral calculations, but also to give students as much practice as possible on general methods of oral calculations. should be done."



In addition to the oral calculation, which is carried out during the 5-7 minutes allocated in the lesson, all the calculations that are easy to perform mentally, even in the written calculation, should be worked out orally.

For example, when dividing by a two-digit number, subtracting the products resulting from multiplying the divisor by each room of the division is performed orally.

Determining students' knowledge through written work

In order to fully check the knowledge, written works are taken on the previous section of the program.

For example, the following questions can be included in a written task to test students' knowledge about the numbering of multi-digit numbers.

Questions and examples. What is checked.

1. How many times greater is one hundred thousand than ten thousand?
Relationship between different room units.
2. How many hundreds are there in eight thousand?
3. How many ten thousand are there in 542000?
4. Find the highest room in 267805. Find out the number of classes by rooms.
5. Find the unit of the second class.
6. Write two numbers that represent different room units, the value of which is 3. Knowing the value of the number position
7. How many three-digit numbers are written using the numbers 7, 8 and 9. Know the difference between a number and a number.
8. Write all the numbers.
9. Replace the number 37245 with the sum of its additive charges. The skill of replacing the number with the sum of additive charges.
10. Solve examples $999+2$, $100000-1$, $9998+3$, $10000-2$. Knowing how to apply the knowledge of numbering to performing arithmetic operations.
11. What numbers are there between 997 and 1002. Knowing the sequence of natural numbers.

Tasks 1-3 are explained orally by the teacher. Students write the answers to the examples next to these numbers in their notebooks. Tasks 9-11 are written on the blackboard. Students copy it in their notebooks. Therefore, tasks 9-11 should be structured in 2 different ways. It should differ from each other only by numbers.



The teacher checks the students' work, notes their mistakes, and then a rating table is drawn up to summarize the written work.

It is good for the teacher to make a note as follows in his special notebook when collecting and evaluating the points obtained in the final inspection.

Assessment and assessment criteria

Taking into account the main shortcomings of the students' knowledge and skills will greatly help the teacher to know the shortcomings he has made and to identify the achievements and shortcomings of the students. Examination of students' knowledge, skills, and abilities is always carried out with evaluation.

In short, the teacher's assessment is most effective when the students' self-assessment is the same. Systematic assessment of students' knowledge, characterization of their achievements and shortcomings leads the teacher to determine the current mastery situation in the classroom.

Assessment is also necessary to characterize student learning. Because the more a student is evaluated, the more he tries to prepare, do his homework, and is always alert for the lesson.

REFERENCES:

1. Abdullaeva B.S. and others. Methodical guide for introduction of advanced mathematics and information and communication technologies into the educational process for 2nd graders. "Uzbekistan national encyclopedia" State publishing house. 11 b.t. Tashkent-2015. 176 pages.
2. B.S. Abdullayeva and others. Methodical guide for introduction of advanced and information and communication technologies to the educational process for 4th grade mathematics. "National Encyclopedia of Uzbekistan" State Publishing House. 11 b.t. Tashkent 2017. 224 pages.
3. Burkhanov Sattar. Mathematics: textbook for 3rd grade / S. Burkhanov, Q1. Khudayorov, Q. Norkulova; responsible editor A. Bakhramov. - Tashkent: Sharq, 2016 - 208p. 1. Jumaev M.E. Mathematics teaching methodology. (Textbook for O.O.Y.) Tashkent. "Turon-Iqbal", 2016. 426 p.
4. Jumaev M.E., N. T. Ahmedova, B. S. Abdullayeva, N. U. Aslonova "Mathematics didactic materials for primary grades", Methodical manual for teachers, Tashkent, 2016.
5. Burkhanov S. and head. Third grade mathematics textbook. Tashkent. "Sharq" 2019 10. Jumaev M.E. Theory and methodology of development of



elementary mathematical concepts in children. (for KHK) Tashkent. "Ilm Ziya" 2013.

6. Jumaev E.E. Elementary mathematics theory and methodology. (for KHK) Tashkent. "Turon Ikbol" 2012.

7. Holiqova, D. S. (2023). Тенденции развития образования и педагогики. Conference, 1(5), 147-150.

8. Xalilova, D. (2021). Direct modification of the language in translation. Multicultural Education, 7(7), 71.

9. Jalilovna, K. D. (2020). The stability of the ideological concept in the work of Dostoevsky. ACADEMICIA: An International Multidisciplinary Research Journal, 10(53), 301-309.