



## DEVELOPMENT OF LOGICAL THINKING SKILLS IN ACTIVITIES OUTSIDE THE CLASSROOM AT SCHOOL

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**Annotation:** this article describes methods for improving the development of logical thinking of elementary students during extracurricular activities, and gives several tasks that need to find a solution, relying on logical thinking. Solutions to given assignments are outlined.

**Keywords:** thought, thinking, perception, logical thinking, critical thinking, logical thinking, idea, solution

From time immemorial, people have emphasized the importance of communication for socialization. The ability to have a place among people, to establish a warm and sincere communication with them, to gather others around him is formed in a child from a young age. Later, it becomes a human character. Children's finding their place in life starts from this situation, communication. Communication is not as simple as it seems. It is necessary for a person to understand the words he is speaking, to be able to digest them, to be able to think deeply and analyze them. This guarantees that a person will have deep knowledge and know the science of logic in his place. The deeper the knowledge, the more logical thinking will increase and the thinking will expand. For this reason, teaching children to think logically is extremely important in preparing them for a bright future. To do this, first of all, it is necessary to raise children with a thirst for knowledge from a young age. It is necessary to teach them to work more on their own, to help them to work together with the team. Regardless of what kind of profession they will have in the future, it is a great achievement for the society to have a specialist in their profession and to have extensive and deep knowledge in this field. Even if a person has knowledge, if he does not have the ability to think freely, his actions will not produce results. A person is valued for his free thinking and independent decision making. The child's pre-existing worldview develops over time due to acquired knowledge, will, personal thinking and interest in the world. Because thinking is the highest stage of human knowledge, i.e., it is a component of human spirituality, it is a mental stage of cognition that determines the general, important features of things and events in the world, and reflects legal connections. is considered an important task. It is also necessary to help them to know the real world around them, to understand its main concepts and ideas. It is desirable to develop this process especially in primary education. As it has been said, strong and solid thinking consists in acquiring deep knowledge. Effective delivery of knowledge to students depends on the teacher. For this, first of all, the teacher must be a skilled pedagogue and a strong psychologist. Even if the teacher has knowledge, but if he cannot deliver it to the students, then he has misused the valuable time and irrevocable knowledge acquired at a young age of different people who are growing up for the society. Therefore, it is necessary not only for the student, but also for the teacher to have a wide and strong range of thinking. When the teacher teaches children about subjects, he should integrate them. After all, a child has two or three concepts in one subject. This, in turn, leads to the expansion of the child's thinking. In this process, the child learns the set of views, concepts and hypotheses formed during the study of the secrets of man and the universe, through which a person learns how correct or incorrect the conclusions and opinions are. In this place, he ponders and studies the relations between these processes and events, their specific

characteristics, their interrelationships or differences. Since the inner world of elementary school students is different from that of adults, the limits of their thoughts are also sharply different from those of adults. Thoughts are not only related to brain activity, but are inextricably linked with the soul and psyche. Therefore, the level of thinking and behavior of children will correspond to it. Taking this into account, it is necessary to teach logical thinking in children not only through education, but also through the use of various methods in the form of games. Since children have strong energy, it is appropriate to let them play team games in solidarity.

Interesting problems and examples are invaluable in extracurricular activities. Therefore, it is necessary for a qualified teacher to start by giving students logical examples and problems that they can solve. After that, the level of difficulty of the problems gradually increases. Each presented example, the solution of the problem should be explained to the students. Consider the following thought-provoking problem:

**Problem 1.** Babur has 15 apples and Sarwar has 3 more apples than Babur. If it is known that the number of apples in Babur is 5 less than that of Dilshad, which student has the most number of apples?

So, it is known that Babur has 15 apples. Sarwar has 3 more apples than Babur. We add 3 more apples to Babur's number of apples to find his apples in Sarwar. That is,  $15+3=18$ . Now Sarwar's number of apples is clear. The number of apples was 18. Next, we will pay attention to the number of apples of Dilshad. The number of apples in Babur is 5 less than Dilshad. That is, now you need to add 5 more apples to Babur's. Then the number of apples in Dilshad will be clear. This makes  $15+5=20$ . So:

In Babur - 15

In Sarwar - 18

In Dilshad - 20

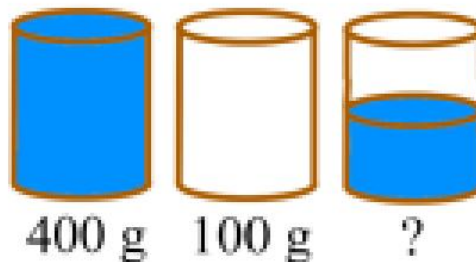
The question asks to find the number of apples in the student with the most apples. It can be seen that the student with the most apples is Dilshad. That is, there are 20 apples in it.

Answer: 20

**Problem 2.** A glass filled with water weighs 400 grams. The weight of an empty glass is 100 grams. Find the weight of a glass half filled with water? (Figure 1)

If the weight of the glass filled with water is 400 grams, then we subtract the weight of the empty glass from it. Through this, we determine the weight of a glass of water. That is,  $400-100=300$ . So, the weight of water is 300 grams. Now we determine the weight of half a glass of water.  $300:2 = 150$  grams. Then add a cup and a half cup of water. That is, it remains  $100+150=250$ .

So the answer is: 250 grams



**Problem 3.** Stephen wants to make the largest number by placing the numbers 2, 0, 1, 9 in the boxes below. What numbers can he write instead of the question mark



In this example, it is necessary to first find the largest number. First of all, if we take the number 9, the largest of the numbers given to the first of the cells, it will also be appropriate if we put the number 2 in the next place. The next big number is 1. Now the number to be added is zero. Then the total is 921. However, another exception occurs. In this case, we can place a zero after the numbers 9 and 2. Then, adding 1 makes the total again 921. So, in the example, the numbers in the question mark are 1's and 0's.

Answer: 0 or 1

In conclusion, it is worth saying that by developing logical thinking in elementary school students, it is possible to expand their worldview, and for this, they should continuously review examples and problems, riddles, mathematical rebuses, puzzles that encourage them to think critically. needed. Because it is equally beneficial for all of us to educate them as a high-level staff.

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