

LOGICAL TASKS FOR PRIMARY SCHOOL STUDENTS

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ANNOTATION

In every education system in the world, logical thinking has become one of the main teaching tasks. Therefore, teaching logical and critical thinking to school children today will help them to become not only mature professionals for a field in the future, but also as people who can express themselves freely.

Key words: *Logical thinking, logic math tasks, math examples, critical thinking, child psychology, education system, school programs and others.*

Logical thinking is the act of analyzing a situation and coming up with a sensible solution. Similar to critical thinking, logical thinking requires the use of reasoning skills to study a problem objectively, which will allow you to make a rational conclusion about how to proceed. When you use the facts available to you to address a problem you may be facing at work, for example, you are using logical reasoning skills. In this article, we will explore reasons why logical thinking can help you be a stronger professional with tips on how you can improve your logical thinking skills. Logical thinking skills are important because they can help you reason through important decisions, solve problems, generate creative ideas and set goals—all of which are necessary for developing your career. Whether you have just entered the workforce or want to advance your career, you will come across challenges on a daily basis that require logical reasoning skills. The stronger your logical thinking skills are, the more easily you will be able to come up with solutions and plans that benefit you and your workplace.

There are many ways to strengthen logical thinking in your daily work. Here are a few methods you might consider to develop your logical thinking skills:

1. Spend time on creative hobbies.
2. Practice questioning.
3. Socialize with others.
4. Learn a new skill.
5. Try to anticipate the outcome of your decisions

Logic is the science of how to evaluate arguments and reasoning. Critical thinking is a process of evaluation which uses logic to separate truth from falsehood, reasonable from unreasonable beliefs. If you want to better evaluate the various claims, ideas, and arguments you encounter, you need a better understanding of basic logic and the process of critical thinking. Is learning about logic and how to properly construct arguments really important? Most people may not need such skills in their day-to-day lives, but the truth is that almost everyone will benefit from learning how to think more critically. This does not only apply to our own beliefs, but also to all the ideas and claims that we regularly encounter. Without the right mental tools, we have little hope of reliably separating truth from falsehood. Everyone makes mistakes. Quite often, what is most important is the ability to first recognize our mistakes and then what we do about it. Unfortunately, there are fields where the worse a person is, the less likely they are to even recognize that they have made mistakes, much less will be able to fix them. Indeed, they are actually likely to accuse those who know more of being the ones who are wrong.

Critical thinking and logic are one of these fields. Many people imagine that they are already quite good at it and thus don't believe that they need to learn more. This prevents them from ever improving. People use words like "logic" and "logical" a lot, often without really understanding what they mean.

Strictly speaking, logic is the science or study of how to evaluate arguments and reasoning. It's not a matter of opinion, it's a science of how arguments must be formed in order to be reasonable or correct. Obviously, a better understanding is critical for helping us reason and think better. Without it, it's too easy for us to fall into error. The term "critical thinking" is used often but it isn't always properly understood. Put simply, critical thinking means developing reliable, rational evaluations of an argument or idea. Critical thinking is a means for separating truth from falsehood and reasonable from unreasonable beliefs. It frequently involves finding flaws in the arguments of others, but that's not all that it's about. It's not simply about criticizing ideas, it is about developing the ability to think about ideas with greater critical distance. Arguments are about disagreement - people aren't likely to argue over things they agree on. As obvious as that may be, it isn't always as obvious what, exactly, people disagree on. This is especially true for those who are caught up in the midst of a disagreement. This is a problem because disagreements can't be resolved if those involved don't recognize what their disagreement is really about - or worse yet, actually disagree on what they disagree about. If those involved don't work that out, the only thing they'll accomplish by arguing is to create more animosity. It's easiest to see government propaganda in the context of wartime. The label is also applicable to the efforts of corporations to buy their products, to apologists trying to get people to adopt their religion and many other situations. Understanding the nature of propaganda and how it works is critical to being able to think more critically about it.

There are many types of Logical puzzles & Maths Puzzles asked in various types of Aptitude Exams. These types of questions are explained one by one. **Alphabet Series:** These types of questions are most frequently asked in Logical puzzles section of most of the management exams.

Now for instance, we wish to find the 12th letter from the left side. We know that O is the 10th letter. Therefore L will be the 12th letter of the alphabet. **Finding Positions:** You get the questions like these much more commonly in these tests, which provides you alphabetical positions from the right side.

Let us say that there are seven boys standing in a row, ABCDEFG. If we see that C is standing on 3rd position from the left while standing 5th from the right. The sum of both the positions is $5 + 3 = 8$ while total number of students is 7. So if position is given from Left side, subtract it from total number of students and then add one. This will give you the position from the right side.

Number Series: These types of questions are also very often asked in Logical Puzzles section of Aptitude exams. There are a few examples given of Number series: **Example 1:** Find the next number in the series:

101, 102, 104, 107, 111, 116

In the example above we can see that differences between two consecutive terms given are 1, 2, 3, 4 & 5 respectively. Therefore the next difference has to be 6. The next term therefore should be $116 + 6 = 122$.

Example 2: Find the next term in the series: 1, 3, 8, 19, 42 In this example we can see that second term is given by multiplying first term by 2 and then adding 1, third term is given by multiplying second term by 2 and then adding 2, next multiplying by 2 and then adding 3, then multiplying by 4 and then adding 4, so next term has to be $42 * 5 = 210 + 1 = 211$

Critical thinking is the key to success in the 21st century the work we do, study, and do that enables us to produce is a positive skill that helps us understand more deeply. Critical teaching thinking is higher than

described in the National Training Program who can find their place in professional culture, creative and socially active life is also suitable for solving the task of forming qualified personnel.

There are various definitions of this concept in the literature. Critical thinking should be distinguished from other forms of mental activity will be Sometimes knowing the opposite is what you are learning serves. So mental in the process before critical thinking consider some of the performance skills; but think them critically can't say Remembering is the most important part of thinking, learning without it the process is not feasible, but it is fundamentally different from critical thinking does. Computer memory is much better than any of us, however remembering does not imply critical thinking. Most teachers are different value memory development more than thinking, control work c in exams, they mainly check the level of memory of the student. But while proponents of critical thinking refer to more complex types of mental activity holds.

"Critical thinking" without which the learning process cannot be carried out Another type is related to the understanding of complex ideas. Biology and in math, history, and literature classes, students sometimes say what the teacher says or rather to understand what is written in the textbook they harden. Understanding is difficult, especially if the material is difficult is a mental process. For example, the student is the head to understand the theorem freezing. Of course, there are complex mental processes in his brain, but do it nor is it critical thinking at the moment. We are trying to understand the opinion of others As we work, in the first stage, our personal thinking becomes sluggish: in this we only perceive that it was created by someone before us. Critical thinking, on the other hand, involves examining new, well-understood ideas occurs when evaluated, developed, and applied. Remembering facts and understanding ideas is essential for critical thinking are prerequisites, but they are also critical of each other does not mean.

Logical reasoning requires independence. As parents and teachers, if we try to trust the children and their decisions, we can aid the development of their logical reasoning. In trying to find their own answers, children begin to foster the capability to reason logically. Conversely, if we don't trust them and relentlessly shower them with our suggestions, beliefs, experiences and strategies, they will become dependent on others to do the thinking. They will not form their own conclusions and their logical side will remain underdeveloped. When children are given the freedom to learn, they explore the what's, why's and how's.

At the age of 3 or 4 years, children can reason out that they need to act, however, their actions do not adequately correlate to the task. They begin to respond immediately; acting indiscriminately to address the problem without actually analysing the circumstances behind it. Pre-schoolers are unable to comprehend the conditions of a problem, which means that they cannot critically assess the situation. This eventually leads to trial and error, a valuable form of experience. Logical reasoning starts to take shape after these practical attempts at solving problems. By the age of 5 or 6, children begin to start understanding the problems and searching for ways to solve them; they begin to use logical reasoning. This is especially apparent as children of this age group begin to use speech as a basis for logical reasoning. Arguments form the foundation of their reasoning and their resolve to solve intellectual problems. These children learn to communicate what they feel and think; they discover a range of communication methods, along with their correlation with rationale and reaction. They begin to reason and draw conclusions. Their thinking has now evolved from when they were in preschool, having gradually shifted from acting to understanding and communicating to logical reasoning.

If the goal is to help children, then we need to go about it in a certain way. As we've come to realize, we cannot make children's school life easier by solving all of their problems and doing everything for them. To

nurture their ingenuity and help them develop their logical reasoning skills, parents and teachers should teach the children to use their memory reserves. Memory and reasoning go hand-in-hand when it comes to solving problems. Additionally, logical reasoning aids one's ability to memorize; it helps develop the following types of memory:

- Motor Memory - the ability to memorize routinely performed movement and recall muscle coordination.
- Verbal-logical memory - the ability to store and use verbal information or information that is heard.
- Visual-shape memory - the ability to recognize and distinguish forms, faces, colours and visual elements.
- Emotional memory - the ability to capture feelings and connect them to related events.

Utilizing these four types of memories at the same time is essential for the development of logical reasoning in children. It also enhances a child's ability to learn new material. Logical reasoning is essential to problem-solving, which is a stepping stone to success. Instigating the development of logical reasoning in children at an early age helps improve mental operations; resulting in higher levels of cognitive activity and an increased capability to solve intellectual problems.

It is important to understand that while children can use our guidance, they do not need us to do everything for them. While giving children the freedom to think and reason, we can also help them understand what is right and wrong. Trial and error is beneficial for learning; however, it should not come at a great cost. A nudge in the right direction, even if through setting up the potential for the development of logical reasoning, can greatly benefit children in their later years.

In summary, we can say that logical thinking is one of the top priorities in education for school-age children. European scientists say that in order to teach logical thinking, children must first be taught to solve mathematical examples. And today, all the problems in this area that can be encountered in our education system by school children are primarily due to the fact that children have little interest in mathematics, as well as most of them are afraid to express their opinions.

REFERENCES

1. Зак А. З. Развитие теоретического мышления у младших школьников. - М., 1984. Калмыкова З. И. Продуктивное мышление как основа обучаемости. - М., 1981.
2. Нишонова З. Мустакил ижодий фикрлаш ва шахс хислатлари // Халк таълими. - Тошкент, 2001. - № 4. -Б. 38-42.
3. Ходжиева Ф. О. О'quvchilarda mantiqiy fikrlashni shakllantirish. Тошкент: Фан, 2008. - 140 б.
4. <https://www.hitbullseye.com/Logical-Reasoning.php>
5. <https://mathgeekmama.com/how-to-teach-logical-reasoning/>
6. <https://www.learnreligions.com/what-is-logic-what-is-critical-thinking-249764>
7. <https://www.hindustantimes.com/education/how-to-develop-logical-reasoning-in-a-child/story-uEGyE5qS4Wmz7mJ3mVodWL.html>