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# CRITICAL THINKING AND REASONING SKILLS

*“The more one listens to ordinary conversations, the more apparent it becomes that the reasoning faculties of the brain take little part in the direction of the vocal organs.”*

—EDGAR RICE BURROUGHS,  
American author and creator of the Tarzan series (1875–1950)

## LESSON SUMMARY

You’ve probably heard the terms “critical thinking” and “reasoning skills” many times, in many different contexts. But what exactly does it mean to “think critically”? And just what are “reasoning skills”? This lesson will answer these questions and show you why critical thinking and reasoning skills are so important.

**N**o matter who you are or what you do, you have to make decisions on a regular basis. You may not realize it, but even those decisions that seem like second nature—like deciding what to wear when you’re getting dressed in the morning—require some critical thinking and reasoning skills. When you decide what to wear, you take many factors into consideration—the weather forecast; the current temperature; your plans for the day (where are you going? who will you see?); your comfort level (will you be walking a lot? sitting all day?); and so on. Thus, you are already a critical thinker on some level. But your life is complicated, and you face decisions that are much more difficult than choosing what to wear. How do you handle a conflict? Solve a problem? Resolve a crisis? Make a moral or ethical decision?

“The person who thinks before he acts seldom has to apologize for his acts.”

—Napoleon Hill  
(*Think and Grow Rich*)

While there’s no guarantee you’ll always make the right decision or find the most effective solution to a problem, there *is* a way to significantly improve your odds—and that is by improving your critical thinking and reasoning skills.

## Definition: What Are Critical Thinking and Reasoning Skills?

To improve your critical thinking and reasoning skills, you need to know exactly what they are.

### Critical Thinking

Think for a minute about the words *critical thinking*. What does this phrase mean? Essentially, **critical thinking** is a decision-making process. Specifically, critical thinking means carefully considering a problem, claim, question, or situation in order to determine the best solution. That is, when you think critically, you take the time to consider all sides of an issue, evaluate evidence, and imagine different scenarios and possible outcomes. It sounds like a lot of work, but the same basic critical thinking skills can be applied to all types of situations.

### TIP

It is important to keep in mind that all problems have more than one solution. Like potato chips, you can’t stop at just one. Keep thinking (and munching!) and see how many possible answers you can find. You might be surprised.

Critical thinking is so important because it helps you determine:

- How to best solve a problem
- Whether to accept or reject a claim
- How to best answer a question
- How to best handle a situation

### Reasoning Skills

Reasoning skills, on the other hand, deal more with the *process* of getting from point A, the problem, to point B, the solution. You can get there haphazardly, or you can get there by reason.

A **reason** is a motive or cause for something—a justification for thoughts, actions, or opinions. In other words, it’s *why* you do, say, or think what you do. But your reasons for doing things aren’t always reasonable—as you know if you’ve ever done or said something in the heat of the moment. **Reasoning skills** ask you to use good sense and base your reasons on facts, evidence, or logical conclusions rather than just on your emotions. In short, when you decide on the best way to handle a situation or determine the best solution to a problem, you should have *logical* (rather than purely *emotional*) reasons for coming to that conclusion.

**Logical:** according to reason; according to conclusions drawn from evidence or common sense

**Emotional:** drawn from emotions, from intense mental feelings

## The Difference between Reason and Emotion

It would be false to say that anything emotional is not reasonable. In fact, it's perfectly valid to take your emotions into consideration when you make decisions. After all, how you feel is very important. But if there's *no* logic or reason behind your decisions, you're usually in for trouble.

Let's say, for example, that you need to buy a computer. This is a rather big decision, so it's important that you make it wisely. You'll want to be sure that you:

- Carefully consider your options
- Consider different possibilities and outcomes
- Have logical reasons to support your final decision

It may seem obvious that you need to choose a computer that best suits your needs and budget. For example, as much as you might like the top-of-the-line gaming computer with the best video card, almost unlimited memory, and built in surround sound, you shouldn't get it if you only need this computer for simple functions. But for a variety of emotional reasons, many people do make these kinds of unwise, unreasonable decisions. They may have thought critically and still made the wrong choice because they let their emotions override their sense of logic and reason.

### Practice

1. For practice, imagine this scenario—buying a new computer—and apply critical thinking and reasoning skills to it. First, critical thinking: What different things should you take into consideration when thinking about what kind of computer to buy? List at least five different considerations. One is already listed for you.

### Things to consider:

1. price
- 2.
- 3.
- 4.
- 5.

### Answers

You probably listed several important issues, such as:

- Condition: new or used
- Speed
- Amount of memory
- Internet access
- CD/DVD player
- CD burner/Video card
- Size—desktop or laptop?
- Brand name/manufacturer
- Size of monitor
- Type of keyboard
- Hardware or software—what programs do you need?
- Available tech support
- Reviews of product

## Justifying Your Decision

One way to help ensure that you're using your critical thinking and reasoning skills is to always justify your decisions and actions. Why did you do what you did? Why did you make that decision? Why did that seem like the best solution? Try this with even your everyday decisions and actions. You'll get to know your current decision-making process, and you'll be able to determine where in that process you can become more effective.

**Practice**

2. Imagine that you do really have to buy a computer. Using your critical thinking and reasoning skills, write down what kind of computer (brand, price, etc.) you'd buy and why. You can make up the specifics: what's important is that you include several different reasons that show you've thought about your decisions carefully and critically.

**Kind of computer:**

**Approximate price:**

**Reasons for this choice:**

**Answers**

Answers will vary. Here's a sample answer:

**Kind of computer:** new Dell laptop

**Approximate price:** \$519

**Reasons for this choice:**

- Dell is a solid brand name with full tech service and a one-year warranty
- A laptop fits my needs because I do a lot of my work on the bus and in coffee shops
- The price is about average and I found a deal that saves me \$180 instantly, so I'm actually getting a \$700 laptop
- It has two times more storage than the other laptop looked at
- It has an extended battery life
- It's lightweight so I won't have a problem carrying it in my backpack
- It has a CD/DVD burner included and an excellent graphics card

## Why Critical Thinking and Reasoning Skills Are Important

You will face (if you don't already) situations on the job, at home, and at school that require critical thinking and reasoning skills. By improving these skills, you can improve your success in everything you do. Specifically, strong critical thinking and reasoning skills will help you:

- Compose and support strong, logical arguments
- Assess the validity of other people's arguments
- Make more effective and logical decisions
- Solve problems more efficiently

Essentially, these four skills make up **problem-solving skills**. For example, if someone wants to change your mind and convince you of something, you have a "problem"—you have to decide whether or not to change your beliefs, whether to accept that person's argument. Similarly, when you have a choice to make, or a position you'd like to support, you have a different type of "problem" to solve—what choice to make, how to support your position. Thus, this book will use the term *problem solving* to refer to any one of these situations. Problem solving will be the focus of the next lesson.

**TIP**

Don't be fooled by the use of the term *argument*. In this book, the word doesn't mean raised voices, harsh tones, and veiled insults. Instead, in this arena, according to Princeton, the word *argument* means "a course of reasoning aimed at demonstrating a truth or falsehood; the methodical process of logical reasoning."

**Practice**

Use your critical thinking and reasoning skills to solve the following problem.

Hans has been out of work for two months. Then, in the same week, he is offered jobs by two different engineering companies, the Johnson Corporation and Samson Brothers. They are paying the same hourly rate but the Johnson Corporation is offering a better benefits program, while the Samson Brothers is located far closer to Hans' home. What should Hans do?

3. List the different issues Hans should consider in making this difficult decision.
4. Make a decision for Hans and explain why that's a good decision for him. Feel free to make up the various circumstances in his life—for example, whether Hans is married with children or single. The more reasons you can give for his decision, the better.

**Answers**

3. Some of the issues Hans needs to consider include:
  - Job security
  - Insurance benefits
  - Hours
  - Job environment
  - Specific job responsibilities
  - Location/commute
  - Room for promotion
  - Stability of company
  - Compatibility with coworkers

4. Answers will vary. Here's a sample answer:

Hans should take the job with the Johnson Corporation. They are offering excellent insurance coverage and a pension plan. Since Hans has four children and a wife with some health problems, both of these are important factors. Although he would save gas money and time by taking the closer job, it would not be enough to outweigh the advantages of the Johnson's benefits. In addition, the Johnson Corporation has a stellar reputation in town and Hans is sure that with time and hard work, he will be able to move into a higher position within the company.

**In Short**

Critical thinking is the act of carefully considering a problem, claim, question, or situation in order to determine the best solution. Reasoning skills, which go hand-in-hand with critical thinking, ask you to base your decisions on facts, evidence, and/or logical conclusions. Critical thinking and reasoning skills are implemented simultaneously to help you make smart decisions and solve problems effectively. They also help you make stronger arguments and better evaluate the arguments of others.

### Skill Building until Next Time

Notice how many decisions you make throughout the day and how many different problems you face. What kind of decisions and problems do you encounter most often at home? At work? At school?

- Write down the process you went through to make a decision or solve a problem today. What did you do to get from point A, the problem, to point B, the solution?
- Evaluate a decision or problem you solved recently. Do you think it was a wise decision or effective solution? Why or why not? Did you consider the range of issues, or did you neglect to take certain issues into consideration? Did you make your decision based mostly on reason or mostly on your emotions?