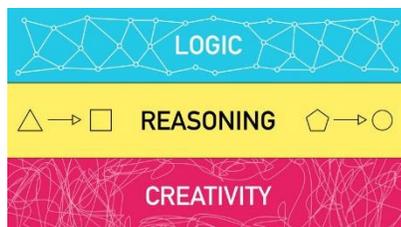# Critical Thinking and Decision-Making

Critical thinking is a term that gets thrown around a lot. You've probably heard it used often throughout the years whether it was in school, at work, or in everyday conversation. But when you stop to think about it, **what exactly is critical thinking** and **how do you do it**?

Definition

Simply put, critical thinking is the act of **deliberately analyzing information** so that you can **make better judgements and decisions**. It involves using things like logic, reasoning, and creativity, to draw conclusions and generally understand things better.

This may sound like a pretty broad definition, and that's because critical thinking is a **broad skill** that can be applied to so many different situations. You can use it to prepare for a job interview, manage your time better, make decisions about purchasing things, and so much more.

Improving your critical thinking

In order to become a better critical thinker, it's important to **ask questions** when you're presented with a problem or decision, before jumping to any conclusions. You can start with simple ones like **What do I currently know?** and **How do I know this?** These can help to give you a better idea of what you're working with and, in some cases, simplify more complex issues.

Real-world applications

Let's take a look at how we can use critical thinking to **evaluate online information**. Say a website posts a news article online and you're drawn to its headline. If you were to use your everyday automatic thinking, you might accept it as fact and move on. But if you were thinking critically, you would first analyze the available information and **ask some questions**:

- What's the source of this article?

- Is the headline potentially misleading?

- What are the general beliefs?

- Do their beliefs inform why they might have shared this?

- After analyzing all of this information, you can draw a conclusion about whether or not you think the article is trustworthy.
- Critical thinking has a wide range of **real-world applications**. It can help you to make better decisions, become more hirable, and generally better understand the world around you.

The challenge of making decisions

You might feel like you're bad at making decisions (or not good at making good ones). However, it's something we *all* struggle with due to the way our brains are made. Behind every decision, there are secret **psychological factors** that shape the way we think and act. Understanding these factors can make them easier to overcome.

Status quo bias

Many missteps in decision-making can be chalked up to **cognitive bias**. That's our tendency to think a certain way without even realizing it. Here's a simple example: Have you ever avoided switching Internet providers, even though you were unhappy with your current service?

Something called **status quo bias** might be to blame. That's our tendency to stick with what we know, instead of choosing something new and different. We see the alternative as a risk or just not worth the trouble, even if it might be better. Without realizing it, we can become overly resistant to change.

Anchoring bias

$350.00

Anchoring bias can also affect the choices we make. To understand how anchoring works, imagine you're shopping for a TV at a local store. The model you like is priced at $350.

Next, imagine the dealer offers you a discount. The car is now $249.99, a full hundred dollars less. Sounds like a can't-miss opportunity, right? Not necessarily.

$249.99

Anchoring suggests that we rely too heavily on the first thing we hear (in this case, the initial price of the TV). That's what makes the discount so appealing, but it shouldn't be the deciding factor. There are also **more objective** things to consider, like how much the TV is really worth, and whether you can find a better price elsewhere. If you're not careful, the anchoring effect can weigh you down.

Choice overload

Cognitive biases aren't the only things that can affect decision-making. More and more studies show that **stress** can have an impact—both on the quality of our decisions and on our ability to *make* them. Take this well-known study about jam.

At an upscale food market, researchers set up two displays offering **free samples of jam**. One gave customers six different flavors to choose from; the other gave them 24.
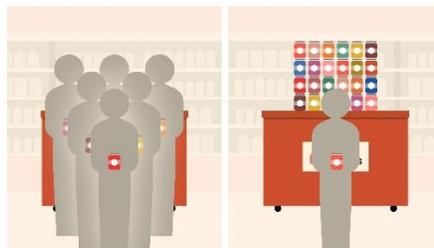
The larger display attracted more people, but they were six times **less likely** to actually buy a jar of jam (compared to those who visited the smaller display). The reason for this is a phenomenon now known as **choice overload**.

Choice overload can happen any time we feel **overwhelmed** by the sheer number of options. We have such a hard time comparing them that we're less likely to choose anything at all. As in the jam example, many of us would sooner walk away empty-handed than deal with the stress of choosing from such a large selection.

Decision fatigue

A similar thing happens when we're forced to make multiple decisions one after another—a common occurrence in everyday life. We experience an effect psychologist call **decision fatigue**.

Decision fatigue suggests that making a **large number of decisions** over a **prolonged period of time** can be a significant drain on our willpower. The result? We have a harder time saying **no**—to things like junk food, impulse buys, and other tempting offers.

On the flip side, fatigue can also make it harder to say **yes**, especially to decisions that would upset the status quo.

Fatigue makes it difficult to even *think* about making decisions, let alone what's right or wrong, correct or incorrect. We follow the path of least resistance because it's the easiest thing to do.

The upside of uncertainty

Making decisions will always be difficult because it takes **time and energy** to weigh your options. Things like second-guessing yourself and feeling indecisive are just a part of the process.

How do you usually make decisions?

There are lots of ways to make a **decision**. For example, you could flip a coin. You could trust your gut and do what you think is right. Or you could avoid thinking about it at all, and just make a choice at random—for better or for worse.
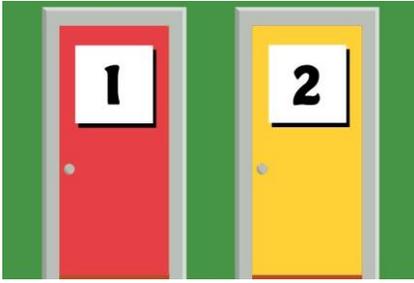
That's probably OK for small decisions, but what about more **important** ones? It's better to think carefully about your options and consider the many paths you could take.

With the right tools, you can learn to do this **objectively**, so you can make decisions you feel good about. We're going to cover several strategies that can help.

Making decisions objectively

The first step to making any decision is simple: **Identify the problem**. As an example, say you're trying to choose between two apartments. One is cheaper but farther away from work. The other is closer—and nicer!—but much more expensive.
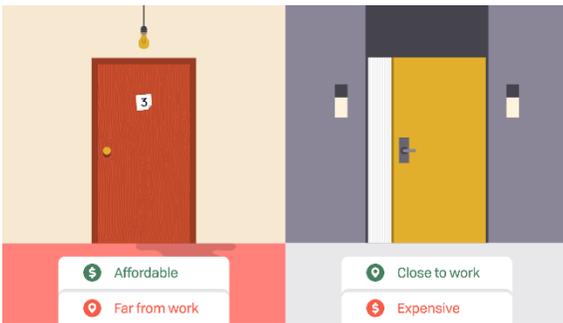
Which one would you choose? Depending on what you value, you probably have some idea. This initial response, the one tied to your **instincts and emotions**, is perfectly valid; however, you should also try to look at your options **rationally**.

Comparing your options

Start by **comparing** them. There are several ways to do this. For example, you could list all the factors that you're considering—things like price, location, and other amenities—then choose the **one thing** that's most important to you. With that in mind, which option comes out on top?

Creating a points system

You could go one step further and create a **points system**. Take that same list and turn it into a scorecard for each option.

In this example, it means the first apartment would score high on **affordable rent** (let's say a 10), but much lower on **location**. The other apartment would score about the opposite in the same categories.

Identifying pros and cons

Looking at it another way, you could evaluate **one option at a time** using a list of pros and cons. It sounds simple, but sometimes it helps to write these things down.

This time, it's OK to be **subjective**—certain factors can and should carry more weight than others. It's how you feel about them that counts, so be honest about what these things mean to you.

Thinking about the consequences

Imagining possible outcomes might give you some **perspective** on the decision. Say you're thinking about adopting a dog. What do you think the consequences might be in a month? In a year? How about several years from now?

Making decisions can be a roller coaster ride, especially when there are **long-term consequences** to think about. We can't see into the future, but we can try to be prepared.

Other mental tricks

At this point, it's normal to feel overwhelmed, even stuck. With so much to consider, how do you know you're making the right choice? There are a couple more techniques that can help you fire up your brain and trick it into **thinking differently**. Try these the next time you need a mental reset.

The two-minute diversion

Distract yourself with a **two-minute activity** that you find **moderately difficult**. Maybe you like playing mobile games, or solving math problems for fun—whatever works for you.

Thinking in third person

Sometimes it helps to step outside yourself and pretend you're helping **someone else**. Studies show we're able to think more objectively in **third person**—that's why it's easier to give advice than it is to receive it.

If a friend or family member were struggling with the same decision, what **questions** would you ask them? What **compromises** would you suggest?

Really think about it. Adopting a different point of view might help you see the situation in an entirely new way.

Making decisions with confidence

Making decisions isn't like taking a test. There are no right or wrong answers, per se—it just depends on the situation.

Focus on taking the time to think about your options and what you hope to achieve so you can feel **confident** about the choices you make. It's not as easy as flipping a coin, but it's worth the extra effort.

Using brain teasers to build critical thinking skills

Here's a brain teaser: A rooster is on the roof of a barn facing east. The wind is blowing to the west at 10 miles per hour. The rooster lays an egg. Which direction does the egg roll?

The answer appears below the image.

Answer: There is no egg. The rooster didn't lay one because roosters are male. Did you get it right? Let's pick this apart and see why so many people have difficulty with this brain teaser, and so many others.

The answer is in the details

It's easy to **overlook details** or accept them without questioning. In the brain teaser above, the answer could be found in the second word: **rooster**.

In hindsight, we realize it's impossible for roosters to lay eggs. But it's easy to overlook this when it's casually mentioned in the brain teaser.

Misdirection

Another process at work in this brain teaser is **misdirection**. There were several details included that we may have paid too much attention to: The fact that the rooster was facing east, and that the wind was blowing west at 10 miles per hour.
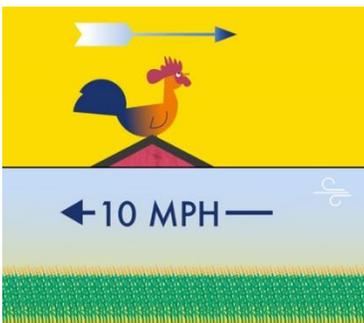
In the end, these details had nothing to do with the actual answer. However, they seemed important in the context of the brain teaser! This directed us away from the relevant information.

Applying these ideas to the real world

The same techniques we use to solve brain teasers can also be **applied to real-world situations**. When you're trying to figure something out, it's important to analyze the information that's available to you and ask the following questions:

- Are there any key details I may be missing?

- Am I being misled by something?

- Could I be thinking about this in another way?

- Brain teasers not only help to keep your mind sharp, but can help improve your critical thinking skills as well.

Let's finish things off with another brain teaser...

- You are in a dark room with a single match. The only objects available to you are a candle, an oil lamp, and a gas stove. Which item do you light first? The answer appears below the image.
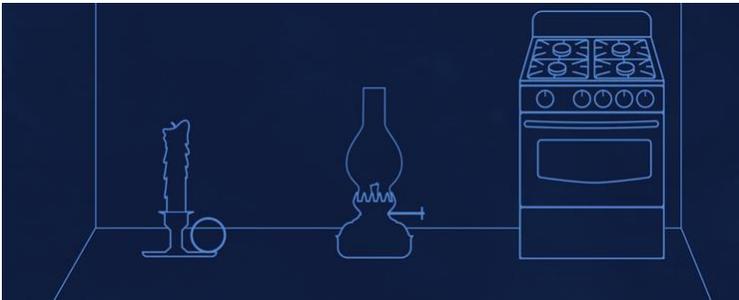
Answer: The match!

Logical fallacies

If you think about it, vegetables are bad for you. I mean, after all, the dinosaurs ate plants, and look at what happened to them...
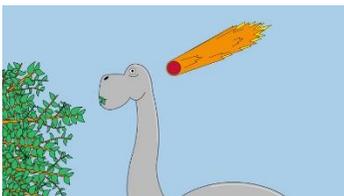

Let's pause for a moment: That argument was pretty ridiculous. And that's because it contained a **logical fallacy**.

A logical fallacy is any kind of **error in reasoning that renders an argument invalid**. They can involve distorting or manipulating facts, drawing false conclusions, or distracting you from the issue at hand. In theory, it seems like they'd be pretty easy to spot, but this isn't always the case.

Sometimes logical fallacies are intentionally used to try and win a debate. In these cases, they're often presented by the speaker with a certain level of **confidence**. And in doing so, they're more **persuasive**: If they sound like they know what they're talking about, we're more likely to believe them, even if their stance doesn't make complete logical sense.

False cause
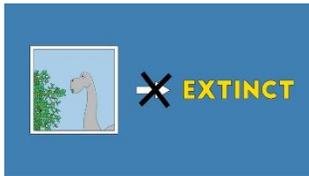
One common logical fallacy is the **false cause**. This is when someone **incorrectly identifies the cause** of something. In my argument above, I stated that dinosaurs became extinct because they ate vegetables. While these two things did happen, a diet of vegetables was not the cause of their extinction.

Maybe you've heard false cause more commonly represented by the phrase **"correlation does not equal causation**", meaning that just because two things occurred around the same time, it doesn't necessarily mean that one caused the other.

Straw man

A **straw man** is when someone takes an argument and misrepresents it so that it's **easier to attack.** For example, let's say Callie is advocating that sporks should be the new standard for silverware because they're more efficient. Madeline responds that she's shocked Callie would want to outlaw spoons and forks, and put millions out of work at the fork and spoon factories.

Begging the question
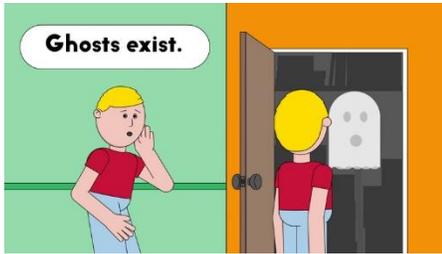
Begging the question is a type of circular argument where someone includes the conclusion as a part of their reasoning. For example, George says, "Ghosts exist because I saw a ghost in my closet!"

George concluded that "ghosts exist". His premise also assumed that ghosts exist. Rather than assuming that ghosts exist from the outset, George should have used **evidence** and **reasoning** to try and prove that they exist.

Since George assumed that ghosts exist, he was less likely to see other explanations for what he saw. Maybe the ghost was nothing more than a mop!

False dilemma

The **false dilemma** (or false dichotomy) is a logical fallacy where a situation is presented as being an **either/or** option when, in reality, there are **more possible options** available than just the chosen two. Here's an example: Rebecca rings the doorbell but Ethan doesn't answer. She then thinks, "Oh, Ethan must not be home."
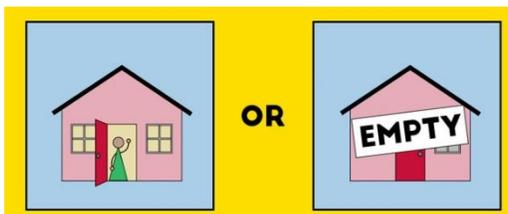
Rebecca suggests that either Ethan answers the door or he isn't home. In reality, he could be sleeping, doing some work in the backyard, or taking a shower.

Most logical fallacies can be spotted by **thinking critically**. Make sure to ask questions: Does their "proof" actually lead to the conclusion they're proposing? By applying critical thinking, you'll be able to **detect logical fallacies** in the world around you and prevent yourself from using them as well.