



# Peak Performance Cognition

## Key Takeaways

- 1 What First Principles Thinking Is
- 2 Why It's So Important
- 3 How To Do It
- 4 What Cognitive Biases Are
- 5 Why It's Important To Avoid Them
- 6 How To Avoid Them
- 7 Key Critical Thinking Skills (Second Order Thinking)
- 8 Why They're Important For Flow And Peak Performance
- 9 How To Deploy Them

## Quote:

“ Discernment is not knowing the difference between right and wrong. It is knowing the difference between right and almost right ”

— *C.H Surgeon*

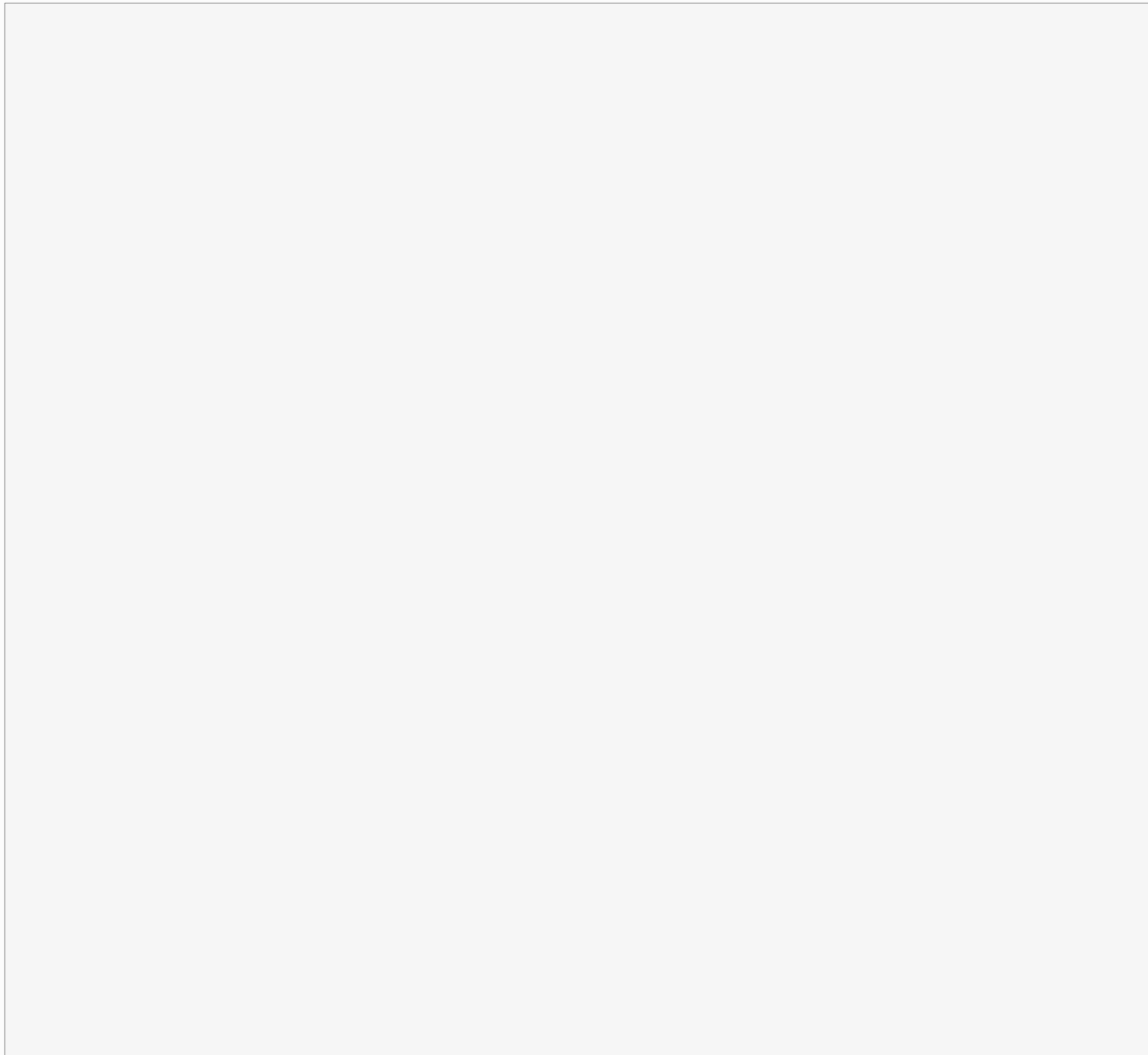
## Exercise

**Critical Thinking Training"**

See next page for details

## Critical Thinking Training"

1. **Practice Naivete** – Question everything, all the time. The Five Whys – Ask why, repeatedly until you hit a first principle or roadblock. E.g. Why do dogs live on land?
2. **Generate Awe** – The “watchtower effect” from an awe experience can improve perspective and critical thinking.
3. **Question Assumptions** – Abstract away assumptions until clarity is reached. Rebuild from a clear premise.
4. **Separate Problem From Solution** – When thinking, keep these separate. Solutions have consensus inbuilt. Focus on the problem and create space for an original solution.
5. **Socratic Questioning** – Why do I think this? What exactly do I think? How do I know this is true?



## Exercise 1

### Second-Order Thinking Template

#### STEP

1

#### First Solution

- Note down the first solution that comes to your mind with its immediate positives and negatives.
- This is the first order thinking

#### STEP

2

#### Consequences

- Ask what will be the future consequences of this decision to evaluate 2nd, 3rd level... nth level consequence.
- For each decision and level, while it's corresponding, positives and negatives.

## Exercise 1

### Second-Order Thinking Template

#### STEP

# 3

#### Question

- Ask questions, more and more questions to yourself to learn from those questions
- What are my risks associated with this decision
- How does my decision impact others
- What do others think about my decision

#### STEP

# 4

#### Decision

- Choose the decision where second and third order consequences are positive
- First consequence may not be positive - short term pain in favour of long term gain

## Exercise 1

### Second-Order Thinking Template

#### STEP

# 5

#### Feedback

- Learn to recognise and apply feedback loops.
- It may not help with your current decision, but over time it will enable you to make better decisions.

## Glossary

**Accurate Flow:** Activities leading to goals and wellbeing + flow

**Critical Thinking:** Critical thinking is a necessity to identify the accurate flow states in your life

**Deductive Reasoning:** Deductive logic starts from a hypothesis and helps you identify its surrounding. “Assuming that this hypothesis is true”, deductive logic goes, “what other things should be observable?” Deductive logic helps you identify which analysis you need to conduct to decide whether your hypothesis is acceptable—but the key thing is you start with a base layer hypothesis that you’ve generated.

**Inductive reasoning:** Inductive logic allows you to use the evidence you have gathered to assess the likelihood of your hypothesis. Example: All these individual swans I’m seeing are white so all swans are white.

**Reasoning By Analogy:** Reasoning from analogy is a special type of inductive argument, whereby perceived similarities are used as a basis to infer some further similarity that has yet to be observed. Analogical reasoning is one of the most common methods by which human beings attempt to understand the world and make decisions.

Example: “Most healthy people I now eat three meals a day. → I must eat three meals a day to be healthy”.

**First Principles Thinking:** A first principle is a foundational proposition or assumption that stands alone. We cannot deduce first principles from any other proposition or assumption.

Example: “Research shows meal timing has no correspondence to health outcomes. → I can eat one meal a day and be healthy”.

## Notes



## Lesson Resources

1. [What is deductive reasoning?](#)  
By Alison Doyle
2. [What is inductive reasoning?](#)  
By Alison Doyle
3. [How Strategists really think: Tapping the power of analogy](#)  
By Giovanni Gavetti and Jan W. Rivkin
4. [First Principles: The building blocks of true knowledge](#)  
by FS Blog
5. [The Cook and the Chef: Musk's secret sauce](#)  
by Tim Urban
6. [Second-Order Thinking: What Smart People Use to Outperform](#)  
by FS Blog
7. [Thinking, Fast and Slow](#)  
By Daniel Kahneman
8. [Our favorite Farnam street posts from 2020](#)  
By FS Blog
9. [Why is negotiation so difficult?](#)  
By The Decision Lab
10. [First Principles: Elon Musk on the power of thinking for yourself](#)  
By James Clear