## **Homework** – Aristotle vs. Plato

**Instructions:** Use the attached reading on the next page to answer the questions below. Please answer in complete sentences. Make sure to explain your answer for full credit.

1. What is the difference between deductive and inductive reasoning? Explain and use examples.

2. Which philosopher is deductive in the way they reason? Which philosopher is inductive in the way they reason? Why? Explain.

3. According to Aristotle, where are the Forms and how do we learn about them? Explain.

4. What is Aristotle's argument against the Forms? Explain it.

# READINGS ON THE NEXT PAGE

# One world only

Plato's most brilliant student, Aristotle, did not agree with his mentor's theory of Forms. Instead, he proposed that we learn about the world through experience alone.

## Empiricism

Aristotle could not accept the idea of a separate world of ideal Forms (see pp.34–37). Plato had argued that the Forms—the qualities of being circular, good, or just, for instance—exist in a separate realm. Aristotle believed that there is only one cosmos, which we learn about through our experience of it. Although he accepted that "universal" qualities (such as redness) exist, he did not believe that they do so in a separate dimension. Rather, he said, they exist in each particular instance in this world.

For example, the idea of a "circle" is general: we have in our minds an idea of what constitutes a perfect circle. He explains that this is not because we have innate knowledge of the perfect (Form of a) 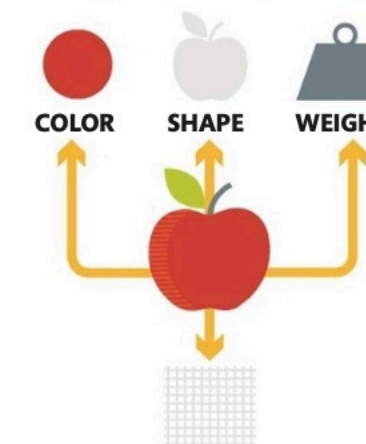circle, but because we experience circular things, and then generalize about them, having seen what they have in common. For Aristotle, we gather information about the world through our senses and make sense of it by using our intellect or reason. In this way, we build up ideas, apply labels to them, and make distinctions. As a philosophical stance, this is known as "empiricism," as opposed to Plato's "rationalism."

## ESSENTIAL AND ACCIDENTAL PROPERTIES

Aristotle argued that all things have two kinds of properties. An essential property is what makes a thing what it is. Its other properties are "accidental" properties.

> An apple's accidental properties include its color, shape, and weight. It is an apple whether it is green or red, round or oval, large or small.

> The apple's essential property is the substance that it is made from.

> The essential property of a ball, however, is its shape; the substance it is made of is an accidental property.

ACCIDENTAL PROPERTIES

COLOR    SHAPE    WEIGHT

ESSENTIAL PROPERTY

## ✓ NEED TO KNOW

> **Epistemology** is the branch of philosophy concerned with knowledge and the way in which we acquire it.

> **Inductive reasoning** is the logical process of making a general rule from a number of particular instances.

> **Empirical knowledge** is knowledge that is acquired by observation or experience rather than through reasoning.
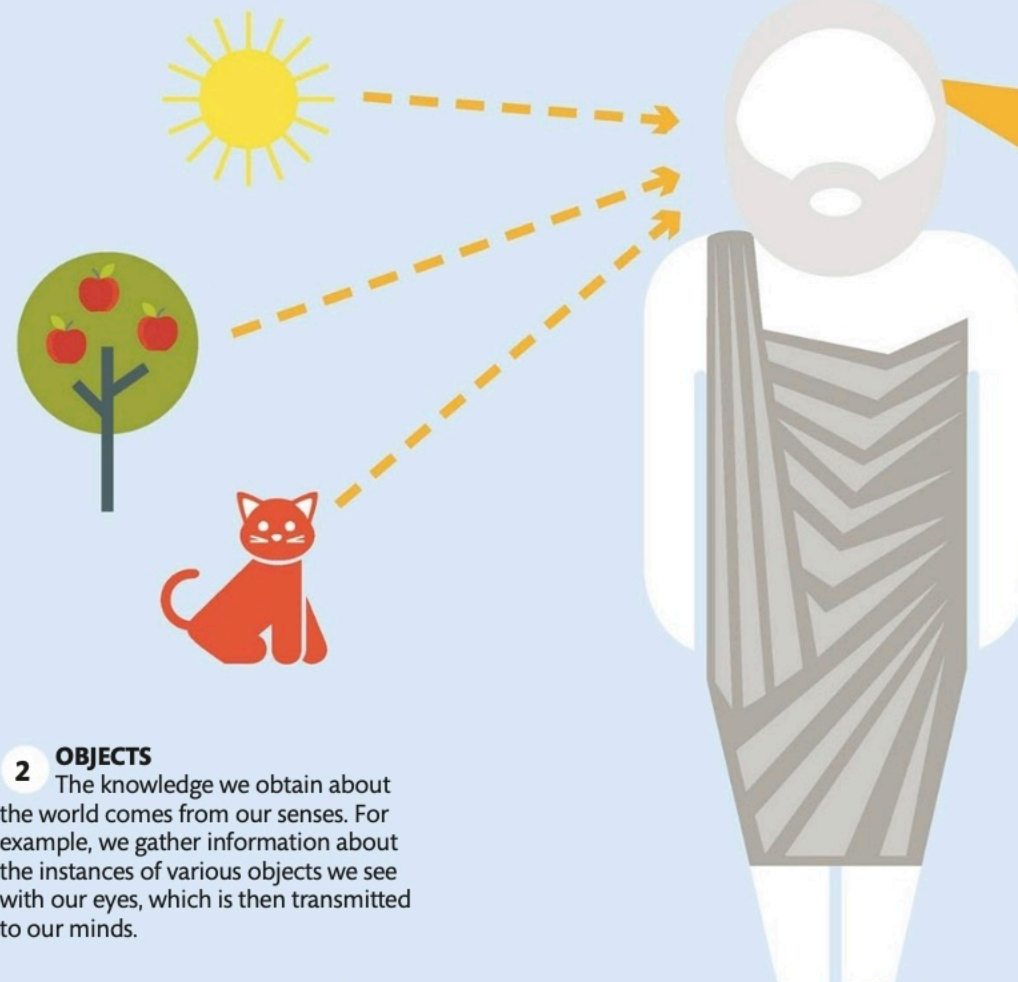
## Using experience

Aristotle argued that we learn general concepts by experiencing particular instances: our idea of a cat is built from our experiences of many different cats. We use reason to grasp the general idea "Cat."
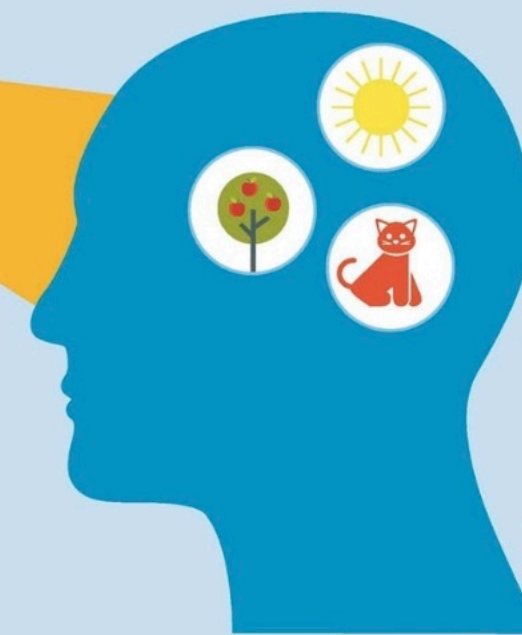
"Sun"

"Tree"

"Cat"

**1 UNSCRIBED TABLET**
According to Aristotle, we have no innate knowledge. When we are born, our minds are like "unscribed tablets" waiting to be written on. We build up our knowledge by learning from our experiences.
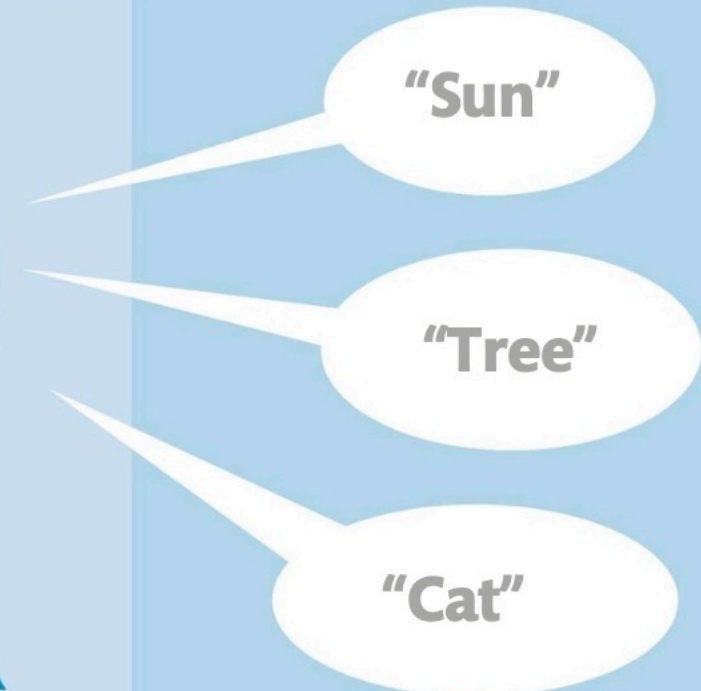
**2 OBJECTS**
The knowledge we obtain about the world comes from our senses. For example, we gather information about the instances of various objects we see with our eyes, which is then transmitted to our minds.

**3 IDEAS**
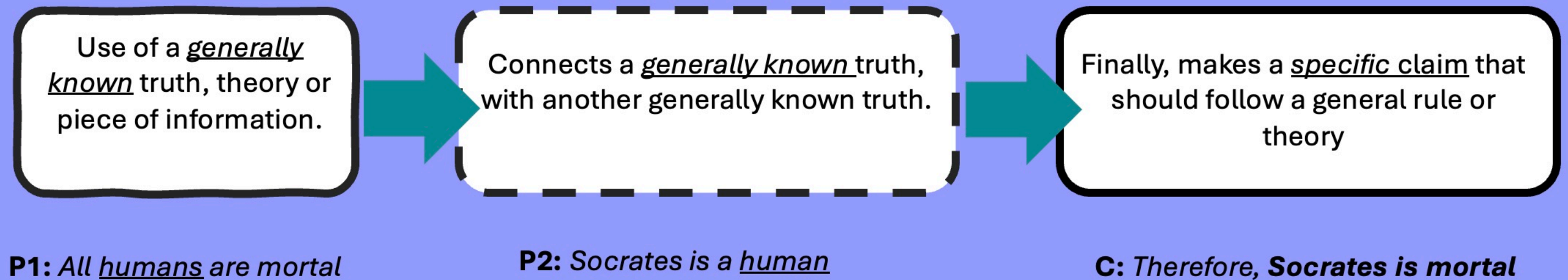By using this information from our senses, we can form ideas in our minds. For instance, from our daily experience of the Sun, we build an idea of the form of the Sun and its defining characteristics.

**4 NAMES**
We then attach labels to these ideas, giving names to the forms in our minds. In this way, we learn to recognize things by their characteristics and to distinguish between different things.

# Deductive

| Use of a *generally known* truth, theory or piece of information. | → | Connects a *generally known* truth, with another generally known truth. | → | Finally, makes a *specific* claim that should follow a general rule or theory |
|---|---|---|---|---|
| **P1:** *All humans are mortal* | | **P2:** *Socrates is a human* | | **C:** *Therefore, Socrates is mortal* |

# Inductive

| Use of a *specific observation* or *judgement*. | → | Creates an educated sense-based *guess* as to how that observation connects to other patterns. | → | Finally, makes a *hypothesis* that has the potential to be a new general rule or theory. |
|---|---|---|---|---|
| **P1:** *Whenever I eat shellfish, I feel sick.* | | **P2:** *Being sick every time I eat shellfish is a symptom of having allergy.* | | **C:** *I am allergic to shellfish.* |