Lesson 1

Features of science



Lesson Objectives

- Identify key features of scientific investigations.
- Review the main research methods used in psychology.

Key Terms

- The empirical method
- Objectivity
- Prediction
- Hypothesis testing
- Control
- Replicability
- Experimental methods
- Non-experimental methods

Extension activity:

Is psychology a science? Watch the following clip to explore the debate further: <u>https://www.youtube.com/watch?v=Zohkzd0MYil</u> Make brief notes and add them to your file.



Questions to guide your thinking ...

- What are the key features of science?
- What characterises scientific methods?
- What methods do psychologists use in their investigations?

What is Psychology?

The word 'Psychology' comes from the Greek word 'psyche' meaning 'mind' and the Greek word 'logos' meaning 'study of'. As you will see from your examination of the origins of psychology, the subject has a long history and has been influenced by philosophy and the development of the science.

Psychology as we know it today involves the scientific study of the human mind and behaviour: how we think, feel, act and interact individually and in groups.

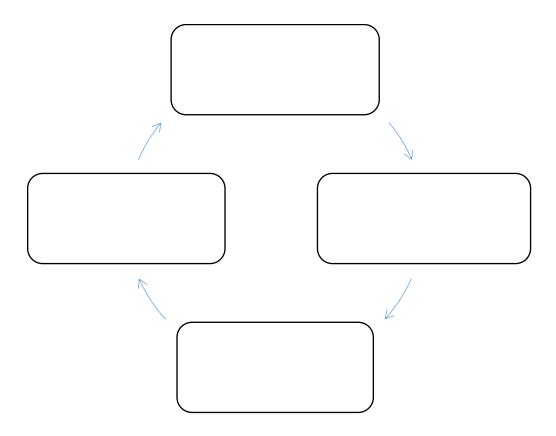
What is Science?

> Match the terms to the statements below to identify the key features of science:

Replicability	Hypothesis testing	Objectivity	Prediction	
	Control	Empirical		

Scientific evidence is gathered through direct observation and experience rather than reasoned argument or belief.	c
Scientific observations should be recorded without bias or influence by other factors of people.	
Scientific observations should take place under strict conditions that minimise the influence of extraneous variables.	
Scientists should be able to use results and knowledge gained from research to envisage future behaviour.	Ċ
Scientific theories generate precise statements that can be tested to either strengthen the support for a theory, or disprove it.	
Scientific investigations should be tested again to give confidence to results and ensure results are reliable.	

> Complete the diagram below to show the **scientific cycle** or process:



The scientific method refers to the use of methods that are **objective**, **systematic** and **replicable**.

> Can you remember the research methods used by psychologists?

Experimental	Non-experimental	

A LEVEL PSYCHOLOGY