



Thinking Focus: **Brain**

A complex organ that controls all aspects of the human body.

Never trust anything that can think for itself if you can't see where it keeps its brain.

J.K. Rowling

Curriculum Focus

A basic understanding of the brain's function lays the foundations for self-regulation and metacognition. This kind of knowledge is important if we want pupils to be able to talk and think about their learning, their motivations, their actions and their emotions. In addition, understanding how the brain does things such as memory can help learners to improve those same functions.



Knowledge, Skills & Values

Pupils can gain a factual knowledge of the various parts the brain and their functions. They will also be able to contemplate deeper concepts such as mind, free will and motivation and the brain's involvement with these ideas. They will have the opportunity to make connections and to consider how the brain causes thought, feeling and action. This can then lead to philosophical thinking.

Starting Points

Text

<https://kidshealth.org/en/kids/brain.html>

Read and understand the 5 brain parts. Summarise each in 1 simple, accurate sentence.

Data

<https://faculty.washington.edu/chudler/facts.html>

Select at least 3 facts of interest and present them in a very memorable way.

Map

<http://atlas.brain-map.org/atlas?atlas=138322605>

Explore the map. Find one area with a complicated name. Find out what it does!

1. Basic Questions/Tasks

What is a brain and what does it do?

What are the main parts of the brain?

Find/research/investigate and record creatively:

- 5 words related to the brain
- 4 images related to the brain
- 3 functions of the brain
- 2 ways to have a healthy brain
- 1 awesome fact about the brain

Make a realistic model of the brain.

2. Deeper Questions/Tasks

How does the brain actually work? Record/Video yourself describing this.

Create a 10 question quiz about the brain. Include multiple-choice questions and drawings/sketches.

Make a piece of creative and colourful 3D art to express the brain and its functions.

The brain is one of the richest green fields of science. There's so much yet to be discovered.

Paul Allen



3. Long-term Questions/Tasks

Design a way to keep your brain healthy over the next two months.

Find out how memory works and link this to different parts of the brain - include long term, short term and working memory.

Find at least 2 questions about the brain that have not yet been answered.

Books

How Can I Remember All That?

by Dr. Tracy Packiam Alloway

All About Your Brain
by Robert Winston

Starting Points

Watch

<https://www.youtube.com/watch?v=pRFXSjpkKWA>

<https://www.youtube.com/watch?v=-nH4MRvO-10>

Act

<http://www.bbc.co.uk/scotland/brainsmart/brain/>

How well do you look after your brain?

Extend

Find connections, causes, similarities and other links between the facts discovered in these starting points.

Create a 'Brain Guide'

Which is best and why?