

# Humans and Psychology

Core Lesson 1	Core Lesson 2	Option lesson 2a	Option lesson 2c	Core Lesson 3	Option lesson 3a
1 ¼ hours	1-2 hours	1 hour	½ hour	1 ¼ hours	30 minutes plus independent study
Organs in the body	Blood circulation and the lungs	Life support systems	Finding out about heart attacks	Where does your food go?	Problems of the digestive system
<p><u>Biology Objectives</u> Pupils review key ideas about organs from KS2, recall scientific names for organs and relate organs to their functions. They consider the benefits of organ transplants when organ failure</p>	<p><u>Biology Objectives</u> Pupils describe the main functions of the heart and lungs, and the consequences of not getting enough oxygen. They use a model to explain the circulatory system.</p>	<p><u>Biology Objectives</u> Pupils find out information regarding how life support systems solve problems arising from organ damage.</p>	<p><u>Biology Objectives</u> Pupils describe the main function of the lungs, the consequences of not getting enough oxygen</p>	<p><u>Biology Objectives</u> Pupils recall scientific names for organs and relate organs to their consider the process of digestion as a series of steps.</p>	<p><u>Biology Objectives</u> Pupils describe the main function of the organs in the digestive system</p>
<p><u>Key concepts and processes-</u> Pupils consider the ethical issues surrounding organ donation and communicate scientific information through written or oral presentations.</p>	<p><u>Key concepts and processes</u> Pupils trace the development of ideas and appreciate that modern science has its roots in different societies and cultures. They recognize change when they are not supported by evidence.</p>	<p><u>Key concepts and processes</u> They test attitudes to the implications of science and the ethical issues involved in the use of life support systems, including how decisions are made to remove life support.</p>	<p><u>Key concepts and processes</u> Pupil's describe the main function of the lungs, the consequences of not getting enough oxygen and find out about the causes and symptoms of a Heart attack. They consider how heart attacks are Treated and what advice can be given to prevent a heart attack.</p>	<p><u>Key concepts and processes-</u> Pupils apply knowledge of the stomach and intestines to a model of the digestive system.</p>	<p><u>Key concepts and processes</u> Pupils describe the main function of the organs in the digestive system, the consequences of organ damage and find out about one common problem of the digestive system. They communicate their findings using scientific terms, possibly using ICT.</p>
<p>PLTS - Explore issues, events or problems from different perspectives by recognising that others have different beliefs and attitudes about organ transplants. Show fairness and consideration to others by listening to and taking account of differing views</p>	<p>PLTS - Support conclusions using reasoned arguments and evidence, by using evidence to explain the modern understanding of the circulatory system</p>	<p>PLTS - Plan and carry out a research-type investigation Consider the influence of circumstances, beliefs and feelings on decisions by recognising that although science informs personal decisions, these are also affected by ethical and moral beliefs</p>	<p>PLTS - Analyse and evaluate information, judging its relevance and value. Consider the circumstances, beliefs and feelings on decisions and events by recognizing that although science informs personal decisions, these are also affected by ethical and moral beliefs.</p>	<p>PLTS - Collaborate with others to work towards common goals by dividing tasks fairly to produce an information leaflet</p>	<p>PLTS - Plan and carry out research into a problem of the digestive system by describing the symptoms, causes, preventative measures and treatment.</p>
<p>Technician's notes - Explore: enlarged (and possibly laminated) diagrams from CD, Velcro or pins Extend: poster paper,</p>				<p>Technician's notes Poster paper, pens, cutaway model of male and female reproductive organs; videos, booklets or other school resources on puberty; optional - access to computers, the internet and multimedia projectors.</p>	

pens: optional video camera, podcast equipment, computer and multimedia projector.					
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**Assessment:** During each lesson each student should assess their own level using the pupil speak level ladders and show their partner where the evidence is for that level. They should record this in the grid at the front of the book. The member of staff should then assess the level of a maximum of 2 students work each lesson. At the end of each lesson there will be an end of topic test to check the content level.

**Homework:** For each topic there is a task booklet that students should use for homework.

Core Lesson 4	Option lesson 4a	Core Lesson 5	Core Lesson 6	Option lesson 6a	Core Lesson 7
1 hour	30 minutes	1 hour	1 1/4 hours	20 minutes	1 hours
Reproductive organs and puberty	Problems of infertility and possible solutions	Sex and reproduction	Pregnancy and foetus development	The homunculus theory of reproduction	Brain and spine
<u>Biology Objectives</u> Pupils recall scientific names for reproductive organs and relate organs to their function(s). They consider the process of puberty as one step in the human life cycle.	<u>Biology Objectives</u> Pupils describe the main function of the ovary and testis, and the consequences of not producing eggs or sperm.	<u>Biology Objectives</u> Pupils recall scientific names for reproductive organs and relate organs to their functions.	<u>Biology Objectives</u> Pupils recall scientific names for reproductive organs and relate organs, such as the placenta, to their functions. They consider the processes of conception, pregnancy and birth as steps in the human life cycle.	<u>Biology Objectives</u>	<u>Biology Objectives</u> Pupils explore their reaction times and relate this to processing by nerves and the brain. They consider brain structure and functioning, effects of brain damage and applications of science in brain imaging
<u>Key concepts and processes</u> Pupils communicate their scientific knowledge of the reproductive system using ICT to create timelines, reports or presentations.	<u>Key concepts and processes</u> Pupils describe the main function of the ovary and testis, and the consequences of not producing eggs or sperm. They consider how infertility arising from organ damage can be treated, and communicate their findings using scientific terminology.	<u>Key concepts and processes</u> Pupils identify and describe patterns in data on the number of eggs and internal and external fertilisation.	<u>Key concepts and processes</u> Pupils communicate their scientific knowledge of pregnancy and foetal development, possibly using ICT to create timelines, reports or presentations	<u>Key concepts and processes</u> Pupils investigate how ideas about reproduction have changed over time and recognise that theories change when they are not supported by evidence.	<u>Key concepts and processes</u> Pupils manipulate reaction time data and draw conclusions; they also analyse simple brain images and observations to draw conclusions.
PLTS - Collaborate with others to work towards common goals by dividing tasks fairly to produce an information leaflet	PLTS - Consider the influence of circumstances, beliefs and feelings on decisions and events by recognising that although science informs personal decisions, these are also affected by ethical and moral beliefs	PLTS - Analyse and evaluate information, judging its relevance by stating their viewpoint and supporting it with reasons	PLTS - Organise time and resources, prioritising actions to produce a quality presentation on time	PLTS - Support conclusions, using reasoned arguments and evidence by using knowledge of sperm from the testes and eggs from the ovaries to explain how the idea of the homunculus must be wrong	PLTS - Analyse and evaluate information, judging its relevance and value, and support conclusions using reasoned arguments and evidence, by analysing what MRI scans tell us about the brain.
Technician's notes Poster paper, pens, cutaway model of male and female reproductive organs;					

videos, booklets or other school resources on puberty; optional - access to computers, the internet and multimedia projectors.					
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Core Lesson 7	Option lesson 7a	Option lesson 7b	Option lesson 7c	Core Lesson 8	Option lesson 8a
1 hours	30 minutes	40 minutes	40 minutes	1 hours	40 minutes
Brain and spine	Learning from brain injury patients	Investigating the Stroop effect	Dreaming and the brain	Perception and the brain	Learning from experience
<u>Biology Objectives</u> Pupils explore their reaction times and relate this to processing by nerves and the brain. They consider brain structure and functioning, effects of brain damage and applications of science in brain imaging	<u>Biology Objectives</u>	<u>Biology Objectives</u>	<u>Biology Objectives</u>	<u>Biology Objectives</u> Pupils find out how the perception function of the brain can be fooled. They sequence perception as input-processing-response and link this to nerve pathways.	<u>Biology Objectives</u>
<u>Key concepts and processes</u> Pupils manipulate reaction time data and draw conclusions; they also analyse simple brain images and observations to draw conclusions.	<u>Key concepts and processes</u> Pupils describe the symptoms of damage that can be caused to the brain by injury or stroke and find out how evidence from these observations, and from modern imaging techniques, is being develop ideas about location of function	<u>Key concepts and processes</u> Pupils plan and carry out an investigation and use scientific methods to test the idea that interference affects reaction times.	<u>Key concepts and processes</u> Pupils plan and carry out a research enquiry and produce a report on what happens to our brains sleep.	<u>Key concepts and processes</u> Pupils choose a visual perception test and identify a factor to test and suitable observations. They consider the effect of sample size on the reliability of their data.	<u>Key concepts and processes</u> Pupils consider examples of animals that show changes in learned behaviour and the benefit to the organism of this response to an external stimulus. They plan and carry out a focused research enquiry, selecting and analysing relevant information from secondary sources to find out and explain a further example of how a change in learned behaviour can benefit an animal, and consider the methods ethologists use to study animal behaviour.
PLTS - Analyse and evaluate information, judging its relevance and value, and support conclusions using reasoned arguments and evidence, by analysing what MRI scans tell us about the brain.	PLTS - Identify questions to answer, and plan and carry out research to find the answer to their enquiry question relating to what MRI scans tell us about used to brain injuries in the brain.	PLTS - Plan and carry out research by investigating the Stroop effect	PLTS - Identify questions to answer, and plan and carry out when we out research into what happens to our brains when we sleep	PLTS – Generate ideas and explore possibilities by devising and carrying out a visual perception test.	PLTS - Identify questions to answer and problems to resolve by raising an enquiry question and planning how to answer this
				Technician's notes Rulers, poster paper,	

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At the end of each lesson there will be an end of topic test to check the content level.

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