

Year 5 Science

Spring 2 Unit

Animals including Humans

Key Scientific Skills	Year 5 Animals, including humans
Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	
Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	
Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	
Use test results to make predictions to set up further comparative and fair tests	
Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	
Identify scientific evidence that has been used to support or refute ideas or arguments	

Human Gestation Period (9 months*)

The gestation period is when the **foetus** develops inside the **female**. It is different in all **mammals**.



Some animals give birth to 1 baby – the North American Opossum has between 16 and 20!

- Humans - 9 months
- Elephants – 23 months
- Basking shark – 42 months
- North American Opossum - 12 days

Progression of Knowledge

Unit	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Animals, including humans	<p>Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals</p> <p>Identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets)</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense</p>	<p>Notice that animals, including humans, have offspring which grow into adults</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</p>	<p>Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat</p> <p>Identify that humans and some other animals have skeletons and muscles for support, protection and movement</p>	<p>Describe the simple functions of the basic parts of the digestive system in humans</p> <p>Identify the different types of teeth in humans and their simple functions</p> <p>Construct and interpret a variety of food chains, identifying producers, predators and prey</p>	<p>Describe the changes as humans develop to old age</p>	<p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans</p>

Rocket Words

offspring	a child or young animal
foetus	the term for an unborn offspring still within the female mammal's body
dependent	an offspring needing others to look after it
adolescent	a mammal's young adult offspring
puberty	the period of life when a human's sexual organs mature
gestation	the period of time an animal is pregnant for
pregnant	when an animal contains a foetus within the body
toddler	the name of the stage given to a young child when they start to walk
prenatal	the stage before birth when the foetus is developing in the womb
breeding	mating and producing offspring
embryo	the name of the unborn offspring in the first few weeks of development
hormones	chemical messengers produced by the body

Human Young (0-3years*)

Young mammals (babies) are **dependent** - they:

- need milk
- have poor muscle control
- need lots of sleep
- cannot control toileting

Puppies are born with their eyes closed.

Human babies see light and dark.

Toddlers begin walking between 1-2 years.



Human Adolescents/Young Adults (12-21 years*)

- Shoulders broaden
- More muscly
- Hair on legs, chest and face
- Penis and scrotum develops
- Voice breaks

During puberty, hormones cause physical, mental and emotional changes. Some are the same for boys and girls:

- Hair on armpits and groin.
- Greasy skin/spots
- Mood swings

Human Youngsters (4-11 years*)

Human and other mammal youngsters walk **independently**, eat **independently** and toilet **independently**. They begin to learn new skills.



Human Adults (21-100 years*)

- Adults are fully grown.
- A dog reaches adulthood at about 2 years.
- Adults reproduce so the whole cycle starts again.



A middle-aged adult



An elderly adult

Lesson Sequence



1. Identify the key stages of a mammal's life cycle



2. Explore the gestation periods of mammals



3. Learn about foetal development



4. Investigate the hand span of different aged children



5. Learn about the changes experienced in puberty



6. Describe the changes humans may experience during old age