

Science Knowledge Organiser

Topic: Animals including humans

Year: 5

Strand: Biology

What should I already know?

Animals can be grouped into **vertebrates** (and then further into fish, reptiles, amphibians, birds and **mammals**).
Some examples of **life cycles** (including those of plants and humans)
Reproduction and **growth** are two of the seven **life processes**.
How to live a healthy lifestyle.

Vocabulary

adolescence	the period of your life in which you develop from being a child into being an adult
adulthood	the state of being an adult
development	the gradual growth or formation of something
foetus	an animal or human being in its later stages of development before it is born
genitals	the reproductive organs
gestation	the process in which babies grow inside their mother's body before they are born
growth	an increase in something
hormones	a chemical, usually occurring naturally in your body, that makes an organ of your body do something
independent	If someone is independent , they do not need help or money from anyone else.
infancy	the period of your life when you are a very young child
life cycle	the series of changes that an animal or plant passes through from the beginning of its life until its death
life processes	There are seven processes that tell us that living things are alive
mature	When a child or young animal matures , it becomes an adult
menopause	the time during which a woman gradually stops menstruating , usually when she is about fifty years old
menstruation	the approximately monthly discharge of blood by non-pregnant women from puberty to the menopause
offspring	a person's children or an animal's young
organ	a part of your body that has a particular purpose
puberty	the stage in someone's life when their body starts to become physically mature
rapid	A rapid change is one that happens very quickly
reproduction	when an animal or plant produces one or more individuals similar to itself
toddler	a young child who has only just learned to walk
vertebrate	a creature which has a spine

Investigate!

Research the **gestation** periods of other animals and comparing them with humans
Collect data around school about height and hand span of different age ranges of pupils. Record the mean, mode and median height of pupils of different ages. Create a graph summarising results.
Create a life story for a fictitious adult that has made healthy life choices.
Compare the growth pattern of humans to other animals.
Consider why humans take so long to learn to walk in comparison to other animals.
Create a Venn diagram to show what the similarities and differences are between children, adolescents and adults.

What will I know by the end of the unit?

What are the main stages of the human **life cycle**?

foetus - an unborn animal or human being in the very early stages of **development**

newborn - this is a baby that has just been born.

infancy - this is a period of **rapid** change. Many **toddlers** learn to walk and talk at this stage.

childhood - children learn new things as they grow. They become more **independent**.

adolescence - this is when the body starts to change and prepare itself for **adulthood**. **Hormonal** changes take place over a few years. This is also known as **puberty**.

early **adulthood** - this is when humans are usually at their fittest and strongest.

middle **adulthood** - changes such as hair loss may happen. There are also some **hormonal** changes again and the ability to **reproduce** decreases.

late **adulthood** - there is a decline in fitness and strength.

What is **puberty**?

Puberty is the change that happens in late childhood and **adolescence** where the body starts to change because of **hormones**.

Some changes include **growth** in height, more sweat, hair **growth** on arms and legs, under the armpits and on **genitals**, and **growth** in parts of the body such as male **genitals** and breasts.

Females begin to **menstruate**.

