### **Holmer C E Academy - Science**

## **Topic: Animals including humans**

## 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 <b>adult</b>	
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 <b>organ</b> of your body do something	
independent	If someone is <b>independent</b> , 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 <b>matures</b> , it becomes an <b>adult</b>	
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 <b>puberty</b> to the <b>menopause</b>	
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 <b>mature</b>	
rapid	A <b>rapid</b> 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	

#### Practical Investigations:

- 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 healthylife 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.
- Research how plants reproduce

## What will I know by the end of the unit?

What are the main stages of the human life cycle?

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

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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.

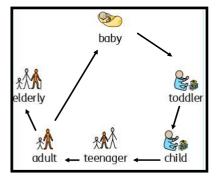
early **adulthood** - this is when humans are usually at their fittest and strongest.

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**.



#### **Related Reads:**

Human Body Hands on Book. Katie Stokes. See Inside you Body. Katie Daynes.

Ask A Scientist: Professor Robert Winston. Robert

Winston.
The Science of Animals: Inside their Secret World.
Chris Packham.

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Question 1: Place these in order in which they happen using numbers 1-4.

adolescent newborn adulthood toddler

End of

unit:

Question 2: Which life process happens when adults produce offspring?	End of unit:
growth	
reproduction	
movement	·
nutrition	

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Question 3: Write one thing in each section to make this Venn diagram true.	End of unit:
infant adolescent	

Question 4: Name three things that happen during puberty.	End of unit:

Question 5: Name a time in a human's life when there is rapid change. Give an example of something that happens during that time.	End of unit: