

<p>Year 5 – Animals including humans</p>	<p>Main Outcomes:</p> <ul style="list-style-type: none"> Describe the changes as humans develop to old age. <p>Please note that this unit of work should follow on from year 5 - Living things and their habitats, and should be taught in conjunction with E4S.</p>	<p>Focus: Science – biology</p>
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What should I already know?

- Animals, including humans, have offspring that grow into adults.
- The differences in life cycle between a mammal, an amphibian, an insect and a bird.
- The process of reproduction in some plants and animals.
- That mammals reproduce using sexual reproduction and that they give birth to live babies.

What I will do

I will have weekly or blocked science lessons. In lessons, I will be taught a skill and I will gain knowledge and understanding through the process of scientific enquiry (observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources).

Possible lines of enquiry

- Draw a timeline to indicate stages in the growth and development of humans.
- Learn about the changes experienced in puberty.
- Research the gestation periods of other animals and compare them with humans.
- Find out and record the length and mass of a baby as it grows.

Vocabulary	Meaning
adoltescence	the process of changing from a child into an adult
adoltescent	a young person who is no longer a child but who has not yet become an adult
adult(hood)	a human or other organism that has reached sexual maturity (when a person has reached sexual maturity)
aging	the process of becoming older
baby	any child from birth to age 4 years old, thus including newborns, infants, and toddlers
bar chart	displays information (data) by using rectangular bars of different heights; it has a vertical axis with numbers on it, and a horizontal axis showing values of something that has been investigated
causal relationships	when one thing is responsible for causing the other thing
child(hood)	a young person (when a person is young)
comparison	identifying similarities and/or differences between two or more things
conception	the fertilisation of an egg by a sperm
death	the end of life
development	five periods of time within a child's life between birth and reaching school age
egg	a single female germ cell, or reproductive cell
elderly	people who are old (usually defined as around 70 or over)
fertilisation	when the male and the female germ cells join together
fœtus (fœtal)	the stage that an organism goes through before it is born as a baby
gestation	the time period between conception until birth, during which fœtal development takes place in the uterus
life cycle	the stages that a plant or animal goes through during its life
line graph	plotted on a graph as a series of points joined with straight lines, it displays information which changes over time
nutrition	all the stuff that's in your food, such as vitamins, protein, fat, carbohydrates and more
old age	the last stage of human development
puberty	the time when the human body begins to develop and change as you move from child to adult
reproduction	making new living things
scatter graph	a diagram which compares two sets of data
diagram	a drawing, image, or sketch that is used to help the reader visualise what is being described in the text
sperm	a single human male germ cell, or reproductive cell
support/refute	to prove right (support) or wrong (refute) by argument or evidence
teenager	someone who is between thirteen and nineteen years old
uterus	also called the womb, it is the organ where a baby develops until its birth

See also vocab in Hamilton session 4 resource

Resources

Hamilton Science planning: animals including humans <https://www.hamilton-trust.org.uk/science/year-5-science/animals-including-humans-life-explorers/> (all planning also saved on SharePoint).

Knowledge to understand

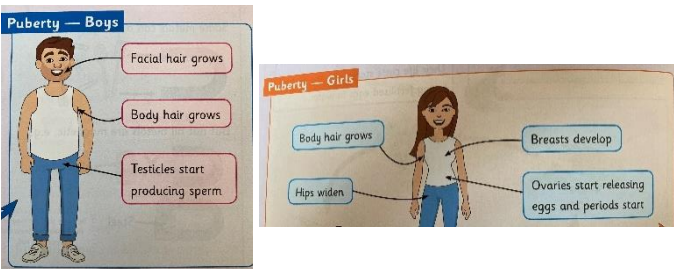
Humans are mammals. The human **life cycle** starts with a **fertilised egg** growing inside the mother's **uterus**.

The major stages of the human life cycle include **pregnancy**, infancy, the toddler years, **childhood**, **puberty**, older **adolescence**, **adulthood**, middle age, and **old age**.



Puberty happens during **adolescence**.

Puberty is when the body changes between the ages of about 10 and 18 years of age. It is different for boys and girls.



Skills to learn

- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- reporting and presenting 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
- identifying scientific evidence that has been used to support or refute ideas or arguments

Cross-curricular (computing)

- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Equipment to become familiar with

Anatomical torso model of a pregnant female (in resources room).

Evidence of Learning

- Science books
- Photos
- Videos
- Pupil conferencing
- Teaching and learning observations
- Learning walks
- Data analysis

How will I know what I've learnt?

See KS2 teacher assessment exemplification for science
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763065/2018_key_stage_2_teacher_assessment_exemplification_science.pdf

See also Hamilton Science_Assessment_Y5 (saved in planning folder on Sharepoint).

KS2 quizzes:

<https://gcequiz.com/quiz/ks2-science-quizzes>

<https://churchfieldsjunior.com/test-your-skills-science/>