

Science – Year 5

Animals, including humans

Do all animals change as they develop to old age?

NC objectives - areas of study	End point of area of study	Vocabulary		
<ul style="list-style-type: none"> describe the changes as humans develop to old age. 	Children are able to draw a timeline to indicate stages in the growth and development of humans. They can identify the changes to humans during puberty- linked to learning in PSHE. They know what a gestation period is and compare that of different animals.	Basic	Adventurous	Technical
		Baby, Toddler, Teenager, Elderly, Growth, Development, life cycle, adolescence, death		Foetus, Embryo, Womb, Gestation, Puberty, reproduce

Knowledge

Substantive Knowledge	Disciplinary Knowledge
<ul style="list-style-type: none"> Retrieval- children know the names of different animals and their young and the lifecycle of some. They are able to identify different types of animals and describe them as herbivores, carnivores or omnivores. They know the basic needs of animals including humans and for humans the importance of a balanced diet, exercise and good hygiene. Children know the purpose of the skeleton and muscles and the importance of a healthy diet for growth and nutrition. From Y4 pupils know the different types of teeth, their function and how this links to diet. They are able to describe the process of digestion and the function of the basic parts. Lesson 1 To know the stages of human development. Baby, Toddler, Teenager, Elderly, Growth, Development, life cycle, adolescence, death 	<p>Working as bio-chemists and biologists, children identify observable differences between humans of different ages and genders.</p> <p>Similarities and differences Children can talk about similarities and differences of humans of different ages and their appearance. They learn about the changes during puberty and the similarities and differences between genders.</p> <p>Use of evidence Using evidence presented to them and independent research, they can explore the different gestation periods of different animals. Using facts about different animals, they ask further questions to research and make connections and comparisons between different animals and gestation periods. Using information presented to them, they find out about the</p>

- Know that humans go through stages of development; they begin as fertilized eggs and then develop into embryos before developing into babies; once they are born, these newborn babies become infants (roughly 2 months to 2 years) then into young children (roughly 2-12 years old); children develop into adults during adolescence (roughly 12-16 years old) at which age they become physically capable of reproduction; as adults develop into old age (roughly 55+ years old) they experience changes in their body which require them to move more carefully and rest more frequently.

- Children use information presented to them, they find out about the growth of babies, their length and mass- recording information in tables and line graphs.

Appreciate that everyone develops at different rates.

- Lesson 2

- To know the changes to the body during puberty.

- Puberty, changes

- Link to PSHE learning
- Pupils identify the main changes that happen to humans during puberty.

- Lesson 3

- To know the different gestation periods of animals.

- Pregnancy, gestation

- Retrieval- animals and their young from KS1.
- Pupils are able to talk about animals and their young. They learn key facts about the gestation periods of different animals and make comparisons between them.

Reflect on the beauty of new life.

NB: the changes of adolescence in humans is taught as part of mandatory sex and relationship education; it must be taught with due sensitivity to children's backgrounds and reflects the school's PSHE curriculum

growth of babies, their length and mass- recording information in tables and line graphs.

If possible speak to new parents and make observations of real babies as appropriate.

Concepts

Biology

Chemistry

Physics

SKILLS

1. Compare	2. Explore	3. Identify	4. describe	5. classify
6. Question	7. observe	8. test	9. record	10. research

ASSESSMENT

KNOW MORE, REMEMBER MORE, DO MORE...

In this unit of learning, progress has been made when a learner knows more. This 'distance travelled' from the starting point is evidenced through them remembering more and doing more: in books, low stakes quizzes, retrieval, use of mind maps, answering the big question and being able to feel more confident about this unit.