








ANIMALS INCLUDING HUMANS





Year 5 (INTENT)

National Curriculum Aims	Pupils should be taught to: <ul style="list-style-type: none"> Describe the changes as humans develop to old age. 			
Vocabulary	adolescent adult baby birth child development- stages egg elderly	embryo foetus gestation- period growth hormones infant juvenile life cycle	lifespan menstruation mental- health offspring ovaries penis periods puberty	pubic hair reproduction senior sperm testicles uterus vagina womb
Significant Individuals	Midwife (Science Capital)			

Properties and changes of materials						
						







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	Learning Objective	Overview of Teaching
PROGRESSION OF LEARNING (IMPLEMENTATION)	WALT: : draw a timeline to indicate the stages of the growth and development of a human	<p>The children will be introduced to the different stages of human development: embryo (foetus), juvenile, adolescent and adult and the important stages that take place to move from one to another: birth, growth, puberty and reproduction. Each stage will then be broken down, giving the children background knowledge on – how long the stage lasts and what happens during the stage. The life cycle of a human will then be introduced. The children's independent task will be to create their own timeline of the different stages of development.</p> <p>A selection of specific fruit and vegetables would be placed around the classroom (and images shown on the board). The children will think about how they could be organised. The different sizes represent the different stages of development of an embryo/foetus. It will be made clear, to the children, the difference between an embryo and foetus, and that pregnancy can be known as gestation. They will then learn about the different stages in foetal development. The children will not be taught how a baby is conceived, only that a male sperm and a female egg is part of the process and that this is known as sexual reproduction. Following this, they will then be introduced to data, collected by hospitals, on a foetus's length and mass. This enables them to then create a line graph representing the selected data. They will then answer the question: 'Why do you think it is important to know this data about a foetus?' The children will then have a discussion on growth, potential diseases and defects.</p>
	WS: I can record data in a timeline. 	
	SE: I can identify the different stages in growth and development and explain why. 	
	WALT: : understand the stages of foetal development.	
	WS: I can record data using a line graph. 	
	SE: I can notice changes over time. 	





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	Learning Objective	Overview of Teaching
PROGRESSION OF LEARNING (IMPLEMENTATION)	WALT: make observations of the different stages of the juvenile development.	<p>Who am I? (Science Capital) The children will be introduced to a midwife to discuss their job role and the skills they need to possess. Juvenile development will be introduced and the children should recognise that it is divided into the different key stages at school (birth to 2, 2 to 5, 5 to 7 and 7 to 11). The vocabulary communication, social and emotional, physical, independence and cognitive will be introduced at this stage. (They are not expected to know these and can remember them in simpler terms such as: how children play with each other).</p> <p>They will be provided with recorded evidence of a baby and they will then visit Southdale's feeder schools to observe children: playing outside, reading, having a conversation and writing as well as making observations of themselves. They will record their findings and see if their findings are supported or refuted by professionals.</p> <p>The topic of puberty will be introduced and the children, to start, will be given a basic overview about how the body changes and when and where it takes place. 'Operation Ouch', supported by the teacher (and discussions), will provide the children with the knowledge. Independently, they would then label the features around a (genderless) body; making a key for boys, girls and both. The changes during puberty that they are introduced to are: sweating more, pubic and underarm hair, stretch marks, voice deepening, periods (menstruation), acne, bigger reproductive organs, greasier hair and skin, breasts develop and facial hair.</p>
	WS: I can make careful observations of juveniles. 	
	SE: I can use research and my own subject knowledge to support or refute my findings. 	
	WALT: understand what happens to the human body during puberty.	
	WS: I can record my learning using scientific diagrams and vocabulary. 	
	SE: I can identify changes in the body. 	



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PROGRESSION OF LEARNING (IMPLEMENTATION)	Learning Objective	Overview of Teaching
	<p>WALT: find patterns in gestation in different mammals.</p>	
	<p>WS: I can record results using a bar chart and can explain the results.</p> 	<p>Big Question – Do all animals have the same gestation period? Why? The children will be given a specific mammal to conduct their own research on. The children are to decide what questions could be important to ask e.g. What is the animal's life expectancy? What is the average adult mass? How long is its gestation period? Children would then create their own animal fact card with the specific questions discussed as a class. They will then move around the classroom collecting data from other children. The children will then create a bar chart of the gestation periods of the mammals they have collected.</p>
<p>SE: I can look for patterns when considering gestation periods of mammals.</p> 	<p>They would then answer the questions: What have you found out? What do you think affects a gestation period of an animal? The answer of an animal's mass affects a gestation period as they typically produce larger offspring, will be discussed.</p>	



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CORE KNOWLEDGE AND SKILLS (IMPACT)

Pupils will know:

- The 4 main stages of development are: embryo, juvenile, adolescent and adult.
- The stages that take place between each of these are: birth, growth, puberty and reproduction.
- The gestation period in a human is 9 months or 40 weeks.
- A baby is created through sexual reproduction when a sperm and egg fuse together.
- An embryo comes first and it then becomes a foetus when the organs are formed.
- An embryo/foetus develops in the womb.
- A foetus's length and mass are measured to make sure they are developing correctly.
- Some midwife roles: support before, during and after pregnancy, ultrasounds of the baby to check its development, parenting classes, support during the birth, how to feed and care for a baby.
- The different developmental groups in the juvenile stage: cognitive, physical, independence, social and emotional and communication. These terms can be simplified.
- The different developmental stages: birth to 2, 2 to 5, 5 to 7, 7 to 11 or preschool, early years, key stage 1, key stage 2.
- The changes during puberty: sweating more, pubic and underarm hair, stretch marks, voice deepening, periods (menstruation), acne, bigger reproductive organs, greasier hair and skin, breasts develop and facial hair.
- The gestation period is different in all mammals.
- Mass/size has an effect on a gestation period because if they usually produce bigger offspring; it will take longer to develop.



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CORE KNOWLEDGE AND SKILLS (IMPACT)

Pupils will be able to:

- Create a timeline of the different stages of development.
- Create a line graph on the length and mass of a baby during foetal development.
- Observe the effects over time of a foetus's development.
- Make observations, in the real world, of juvenile development.
- Conduct their own research on juvenile development and then investigate whether professional research supports or refutes their idea.
- Recording evidence on a diagram of the human body.
- Venn diagram to sort changes at puberty into male, female and both.
- Create a bar chart on the gestation periods of different animals.
- Look for patterns in gestation to be able to explain why animals have different gestation periods.