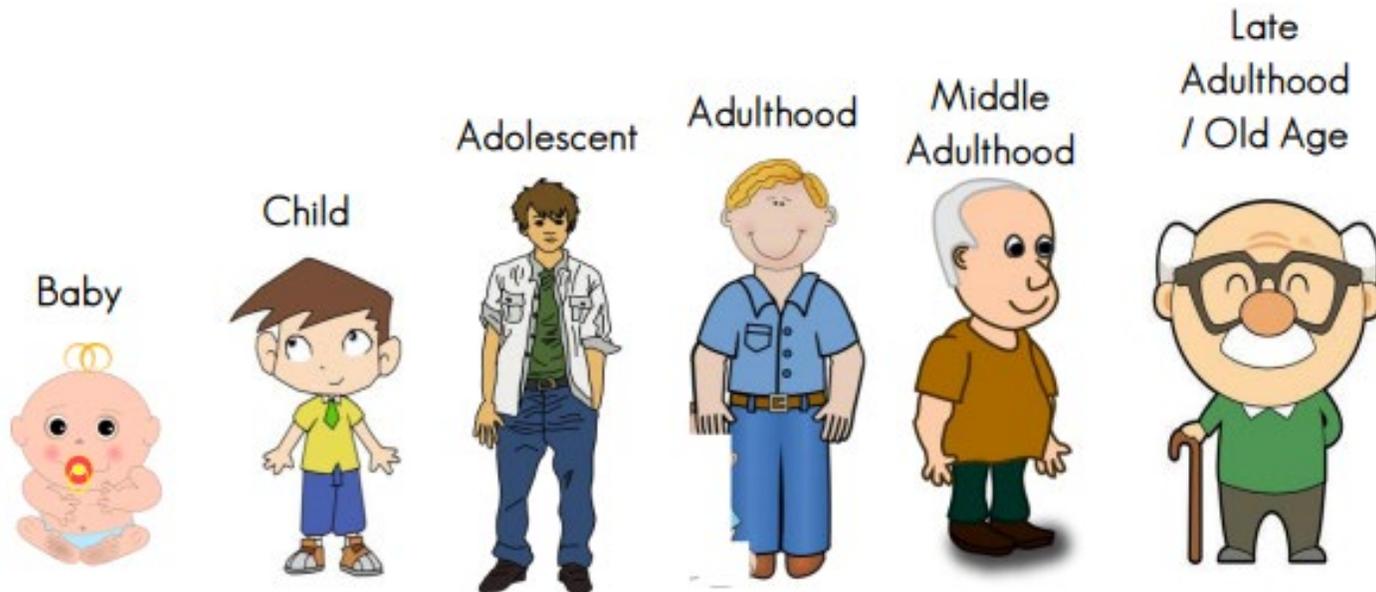


Year 5: Animals including humans

What should I already know? Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions. Construct and interpret a variety of food chains, identifying producers, predators and prey.

Science - Science is a subject where you ask questions about how the world works and find out the answers

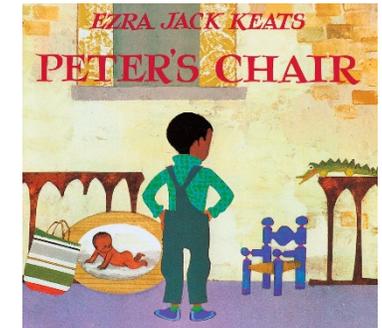
Describe the changes as humans develop to old age.



Mammal	Gestation period in days
Cat	63
Chimpanzee	240
Lion	108
Human	266
Rabbit	31
Squirrel	44
African elephant	650
Whale	360
Horse	336
Polar bear	241
Giraffe	435
Mouse	21
Rhinoceros	480
Hamster	16
Dog	61
Camel	400

Significant Information

- The strongest muscle in the human body is the tongue.
- The lifespan of a human hair is 3-7 years.
- Human shed and regrown their outer skin every 27 days.
- Humans are the only species that produce emotional tears.



Interesting facts - During your lifetime you will produce enough saliva to fill two swimming pools.

Glossary/Key Questions

Puberty	The time when your body begins to develop and change as you become an adult.
Gestation	The length of time a mammal carries her offspring inside her body before giving birth.
Adolescent	Developing from a child into an adult.
What is a baby?	Babies drink milk after they are born. They usually start eating solids when their teeth start to appear at about 6 months. Many can crawl by 9 months and begin to walk after they are 1. All babies are different and develop at different times.
What is a child?	Running, talking and learning to read, write and count are all developing in a child. They are developing skills in sports, art and music as well as developing socially, emotionally, physically and psychologically.
What is an adolescent?	During the ages of 9-19, humans become more independent, begin puberty ready and become ready for adulthood.
What is adulthood?	The human body is at its physical peak of fitness and strength and are able to be completely independent.
What is late adulthood?	Body declines in fitness and health from 60 years onwards and there is an increased dependence on others to look after them as time goes on. The life cycle ends when a human dies.

baby



child



teenager



adult



old age



Science Year 5 - Animals including humans

National Curriculum Objectives:

- describe the changes as humans develop to old age

Prior Objectives:

- Describe the simple functions of the basic parts of the digestive system in humans
- Identify the different types of teeth in humans and their simple functions.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Lesson 6
<p> Skill - describe</p> <p> Knowledge - know what the stages of development are</p> <p><u>WALT: Describe the stages of human development</u></p> <p>WILF: -describe how human life begins -recognise different stages of development</p> <p>In pairs/groups discuss what they think the stages are from baby to adult Groups feedback to rest of the class Teacher - basic explanation of how human life begins.</p> <p>Look at given pictures - in pairs/groups chn to order up to old age -explaining why choices were made</p> <p>Recording: Place the pictures in the correct place on the growth sheet - explain what happens at each stage HAPs include the picture of embryo</p>	<p> Skill - Interpret</p> <p> Knowledge - known what happens when babies grow</p> <p><u>WALT: Explain how babies grow and develop using information and data</u></p> <p>WILF: - Describe development of babies -Present data in appropriately -Share results with class</p> <p>What is information? What is data? What is the difference? Show table with information about the growth of babies. What does this data show us? What are the categories? What is the unit of measurement? In a graph, what should be shown on the x/y axis? What kinds of graph should be used to present this data? Chn match the names, pictures & uses of different types of graphs & charts. Encourage chn to ask questions about aspects of using the graph they don't understand - e.g. why are line graphs better to use for data over time? In groups, chn prepare graphs presenting given data on growth and development of babies.</p> <p>Recording: Group 1- prepare graph looking at growth in height of babies using given information Group 2- growth in height of boys & girls. Group 3 - growth in height & weight of boys & girls.</p>	<p> Skill - describe and explain</p> <p> Knowledge - know basic changes in puberty</p> <p><u>WALT: Describe and explain some changes during puberty</u></p> <p>WILF: -Understand why changes occur in the adolescent body -understand some changes are gender specific</p> <p>Ground rules need to be established about being sensitive to each other's feelings during the lesson and making sure sensible questions are asked. On cards show chn a selection of changes which might occur with humans (some will be changes in old age, some in childhood, some in teenagers) In pairs/groups, chn group the changes according to when they think they occur.</p> <p>Recording: take one group at a time and chn suggest how the group changes over time - produce the written work together on the whiteboard. Try to add more detail to the teenage group - introducing puberty and changes that occur here - if possible let chn initiate the ideas.</p>	<p> Skill - identify changes</p> <p> Knowledge - know what happens in old age</p> <p><u>WALT: Identify changes which take place in old age</u></p> <p>WILF: -understand the changes which take place in old age -Distinguish between facts and myths about old age</p> <p>Losing mobility in finger joints - Put on a pair of thick gloves and attempt to open a plastic bottle, button up a shirt, write something etc. Mobility in knee joints - wrap crepe bandages around knees, tight enough to restrict their movement. Loss of hearing - Cotton wool balls in their ears. Play Chinese whispers. Loss of sight, Wear scratched glasses and draw a picture. In groups, chn look at the old age true/false cards and classify them - look at any cards unsure about and address misconceptions.</p> <p>Recording: using the cards create a poster about facts and myths surrounding old age.</p>	<p> Skill - explain gestation</p> <p> Knowledge - to know what happens in each stage</p> <p><u>WALT: Explain gestation period for animals</u></p> <p>WILF: -Define gestation -use the given information to complete the bar chart</p> <p>Watch a video which shows gestation in animals - mammal. Look up the meanings of the words: viviparous, live young, fertilisation, egg cell, zygote, embryo, foetus and baby - give chn words on cards - feedback as a class the meanings they have found. Arrange the words to have an order to what happens in the gestation period Chn look at the table with gestation period of different mammals and round the last column to the nearest 10. Use the information to complete the bar chart to show gestation period of different mammals</p> <p>Recording: Write what happens in the gestation period Complete a bar chart</p>	<p> Skill - describe changes</p> <p> Knowledge - to show understanding of stages</p> <p><u>WALT: Describe changes as humans develop to old age</u></p> <p>WILF: -Order key stages in human life -Create a human timeline</p> <p>Lesson -chn to look through work done so far to create a visual timeline and representation of growth. Include the key stages of a human life and associated developments or changes in the body - take into account nutrition, heredity etc</p> <p>Recording: using examples from previous work, internet/Ipads and books create a timeline of growth to old age - explaining each stage - chn share a stage with class explaining how and why they chose that representation - is there one aspect of the topic which was completely new to them and what did they learn from it?</p>

Assessment: use vocabulary mats to assess prior knowledge and use mats again to look at what has been learnt

Key Vocabulary: viviparous, live young, fertilisation, egg cell, zygote, embryo, foetus, baby, gestation



baby



infancy



childhood



Adolescent



Adulthood



Old



age



puberty



live



young



fertilisation



egg



cell



embryo



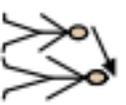
foetus



gestation



human



growth



mobility