

Pioneer Federation
Medium term plan
Ks1- Cycle 2, Term 6
Science



Subject: Science

Key Concept/ Theme: Animals including humans

Prior Learning links:

Year 3: Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. Identify that humans and some animals have skeletons and muscles for support, protection and movement.

Year 4: 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.

In term 5 the children will have learnt about animals life cycles and asexual/sexual reproduction in plants.

Vocabulary:

Gestation

Fetus

Fertilisation

Species

Baby

Toddler

Adolescent

Adult

Elderly person

Puberty

Hormones

Pituitary gland

Testosterone

Estrogen

Individual schools: please refer to the SRE jigsaw planning for lesson on puberty to check for specific year group requirements.

1. Deeper learning question for the term:

Prior learning reconnection (year group, cycle & term): Link to previous term's learning about the life cycles they have learn and connect to gestation periods this term of different animals. Previous learning:

Enquiry skill: questioning which will then be answered throughout the term- guide questing around the themes covered in the lessons.

LO: Let's reflect about what we know about the different stages of human life.

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	<p>Activity: Create a scenario for the children whereby aliens have made contact with us. They have been secretly visiting the same houses on Earth over a period of many years. They now want to know what happened to some of the 'small people' that they saw 80 years ago. They are a little confused, as on their planet they are born a certain size and shape, and then they stay like this until they finally die. Children to reflect on what they know about the stages of life for a human and use this to explain to the aliens. At the end of the session ask the children to then think of questions they might have which they can answer throughout the term. This will be a page they can come back to and reflect of their questions after each session taught.</p> <p>Future learning links: Links to SRE/PSHE</p>
2.	<p>Deeper learning question: How long are the gestation periods of different animals? Reconnection: What do we know about the different stages of human life? Where do you think the word gestation will fit? LO: Let's learn about the gestation period of different mammals. Enquiry skill: presenting results and conclusions Activity: Is there a relationship between the mass of adult animal and the length of the gestation period? Children to use the tables on page 6-7 on Kent scheme to draw their own scatter graph to start to look for patterns. Develop a conclusion from the scatter graph.</p>
3	<p>Deeper learning question: How does the length of a baby change over time? Reconnection: What do we know about the gestation period of different mammals? LO: Let's understand how humans grow over time. Enquiry skill: results Activity: Give the children the table on page 11 (Kent Scheme) and ask the children what information they can draw from this table. Note down their ideas. Explain that babies and children are measured for their height and weight. They will then conduct their own survey. Survey – What is the height of children of different ages? The children must decide what type of enquiry this is (i.e. a survey). The children could decide how to do this scientific enquiry. They could make decisions as to the ages of children that they want to include in their survey, the number of children from each age that they will measure, and the method by which they will display their findings.</p>
4	<p>Deeper learning question: What happens to the human body during puberty? Reconnection: We looked at length last week- what do you know about the length/height of children during puberty? LO: Let's understand the changes in our bodies during puberty. Enquiry skill: sort and classify Activity: This session will link to the SRE unit covered in jigsaw, please refer to this when planning this session to know what is relevant for each year group. Children to find out about the changes in puberty- see page 12 (Kent scheme). Children to produce their own posters to reflect on their understanding of the stages of puberty.</p>

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5	<p>Deeper learning question: – What happens to adults as they become older?</p> <p>Reconnection: How do bodies change at certain time periods in their life?</p> <p>LO: Let's understand how humans change when they become older.</p> <p>Activity: Explain that different parts of the body change when humans get older. Use the science museum website to look at the ear and how it changes when the human is elderly. Then look at how the nose changes. Why might these changes occur? How might this affect humans? How has science developed to help older people? Focus on hearing aids and technology for people who cannot hear.</p> <p>Children to write a letter to the aliens with diagrams to explain how they would identify an older person and encourage them to describe how science has helped to support this change.</p>
6	<p>Quiz and sorting/classifying activity</p> <p>Enquiry skill: sorting and classifying</p> <p>Give the children pictures relating to the different stages and ask them to sort and classify the pictures. Can they create a classification tree for the aliens to use so they can work out what age the humans are?</p>

End points:

To be able to describe the main changes in the human body from childhood to adulthood to old age. To identify the physical signs of human aging.

To compare and contrast the physical appearance of children and adults.

To compare the gestation period of animals and humans.

To understand the changes in puberty.

To be able to draw and interpret data from graphs about the aging process.

To group and sort/classify information about growing and changing.

To draw conclusions from the results collected.