

PEMBRIDGE CE PRIMARY SCHOOL LEARNING JOURNEY ITINERARY

Pembroke is a school where we encourage everyone to be inspired through faith in God and to live by Christian values so that our teaching and learning is of the highest quality, our whole community flourishes and we reflect all that is worthy of praise.

SUBJECT: Science
(biology)

YEAR: B

TERM: Autumn 1

YEAR GROUPS: 1/2

KEY QUESTION: Why can't I live underground?

PREVIOUS KNOWLEDGE *We would expect most children to already be able to:*

Year 1 Children

- Name a variety of common animals and pets.
- Look at similarities and differences in the appearance of animals.
- Know animals have different diets.

Year 2 children

- Identify and name a variety of common animals
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores
- Describe and compare the structure of a variety of common animals
- Identify, name, draw and label the basic parts of a human body.

Reception

Explore the natural world around them, making observations and drawing pictures of animals

KS2

Y4 - construct and interpret a variety of food chains, identifying producers, predators and prey

Y5 - describe the changes as humans develop to old age

Y6 - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

End of Unit Objectives

*Some children will not yet have met what is expected and show they are **emerging** because they can:*

- With support, recognise and observe that animals and humans change throughout their lives. Discuss observations. **KQ1**
- With support, investigate the statement: The oldest pupils in the class are the tallest. Make a prediction using my knowledge. **KQ2**
- With support, understand that all animals have life cycles; look at the life cycles of different animals and order correctly. Discuss how I have ordered them and why. **KQ3**
- With support, consider what humans might want to make them comfortable and happy and what they need to survive. Sort different pictures in to wants and needs. **KQ4**
- With support, create a poster / presentation to argue for or against the question: Why can't I live underground? Draw upon learning from the term. **KQ5**

*Most children will show that they have reached the **expected** level because they can:*

- Order the different stages of a human's life; correctly label a human's life cycle explaining parts of the cycle using scientific vocabulary; understand that adults have offspring. **KQ1**
- Investigate the statement: The oldest pupils in the class are the tallest. Make a prediction and carry out an investigation to measure pupils in my class; compare age and height to reach a conclusion. **KQ2**
- Sequence the different stages of a butterfly's life in the correct order; compare the life cycle of a human and a butterfly and explain if there are any similarities and differences. **KQ3**
- Discuss the difference between wants and needs. Know that humans need water, food and air for survival. Understand how each one allows our body to function. **KQ4**
- With support, create a poster / presentation to argue for or against the question: Why can't I live underground? Draw upon learning from the term. **KQ5**

*Some children will have gone beyond the expected level and show that they are **exceeding** because they can:*

- Discuss the statement: It is better to be a child than an adult - create lists of *for* and *against* drawing upon understanding of the needs of humans at different stages of their lives. **KQ1**
- Consider how our conclusion from the investigation can help us understand humans and animals better. Reason *for/against* the statement: Humans don't change, we just get bigger'. **KQ2**
- Consider what animals change the most throughout their lives; reason what animal's life cycle is most like that of a human and why. **KQ3**
- Explore the term 'drought' and reason what animal you would rather be during time of drought; consider how climate change is causing more drought and how this will impact the world. **KQ4**
- Pose a question centred upon humans living underground. Consider how the answer could be found out and which would be the most appropriate method:
 1. Survey – count the number of things
 2. Do a test - find out what happens to something when we change something about it
 3. Classifying – put things into groups
 4. Investigation over time – watch or measure something over time
 5. Secondary source – use a book or internet **KQ5**

ASSESSMENT OPPORTUNITIES – What are children aiming for?

Children will be able to demonstrate their learning through:

- Notice that animals including humans have offspring which grow in to adults.
- Find out about and describe the basic needs of animals including humans for survival (water, food, air)
- Explaining what they have found out using scientific vocabulary.
- Asking simple questions and recognising they can be answered in different ways (survey, test, classify, investigate, research using a secondary source).
- Observe carefully using simple equipment
- Identify and classify
- Gather and record data to help answer questions.

ENRICHMENT OPPORTUNITIES –

What can we give children along the journey to help them remember more?

We will endeavour to include:

- Investigations using scientific equipment.
- Practical experiences – observing, making, recording.
- Time to share and compare their investigations with those of their peers and draw overarching conclusions.

CROSS-CURRICULAR LINKS –

What links can we make to help children make sense of what we want them to know and be able to do?

This itinerary fits with our other learning through:

- Computing – record data from investigation as a chart / graph.
- Maths – measure height of children in class.
- English – Explanation texts

LEARNING BEHAVIOURS *Children will be expected to:*

Tries new things	learn different stages of a human and animal's life cycle and the vocabulary associated with each stage.
Works hard	use scientific vocabulary to explain their findings.
Concentrates	listen attentively in group sessions and make predictions and conclusions.
Self-motivates	work in a group to share knowledge and use each other's strengths to help one another.
Imagines	create their own way of presenting their research to their peers.
Improves	understand the needs of humans and particular animals within the world to survive.
Understands others	gain a greater understanding of the way an environment creates a suitable place for animals to live.
Doesn't give up	continue to work hard to understand how there are similarities between humans and other animals and how these similarities can be grouped and organised in to categories.

