

PEMBRIDGE CE PRIMARY SCHOOL LEARNING JOURNEY ITINERARY

Pembridge 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: A

TERM: A2

YEAR GROUPS: 1/2

KEY QUESTION: Can I live off my favourite food?

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

Year 1,2 Children

- Know animals have different diets.
- 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.
- Find out about and describe the basic needs of animals including humans for survival (water, food, air)

Reception

- Demonstrate strength, balance and coordination when playing.
- Move energetically, such as running, jumping, dancing, hopping, skipping and climbing.

KS2

- 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.
- 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

Y6

- identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
- describe the ways in which nutrients and water are transported within animals, including humans.

End of Unit Objectives

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

- With support, understand that our heart, lungs and muscles are inside of our bodies and need to be kept healthy. Carry out an investigation to find out what happens to our breathing when we exercise. **KQ1**
- With support, sort different activities in to healthy and unhealthy. e.g. playing computer games sat down, walking the dog, playing in the park. Discuss why they might be good for us or why they might not. Create a game for a peer to play that will exercise all main muscle areas of the body. **KQ2**
- With support, begin to understand that there are different food groups and name some of them. Sort food in to the correct food group. **KQ3**
- With support, create a healthy lunch menu which contains a range of food groups. **KQ4**
- With support, observe pictures of germs. Take part in an experiment to see how far germs can travel on our hands. **KQ5**

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

- Understand that our heart, lungs and muscles need to be kept healthy and become stronger when we exercise. Carry out an investigation to find out what happens to our breathing when we exercise. Understand that increased breathing means that our heart, lungs and muscles are working harder, making them stronger. **KQ1**
- Sort different activities in to healthy and unhealthy. e.g. playing computer games sat down, walking the dog, playing in the park. Reason why they might be good for our health or why they might not. Create a game for a peer to play that will exercise all main muscle areas of the body. Think of the amount of time a peer would need to spend on them to get any benefit. **KQ2**
- Begin to know the food groups: Dairy, Fruit and Vegetables, Carbohydrates, Fat, Sugar, Protein. Match some examples of foods that would belong in that group. Know the affect these food groups have upon bodies. Begin to understand how much we need of each food group to have a balanced diet. **KQ3**
- Assess a range of food menus. Conclude which are the healthiest and why. Create a healthy lunch menu which contains a range of food groups. **KQ4**
- Begin to understand and explain what a germ is. List ways that we can keep clean. Take part in an experiment to see how far germs can travel on our hands. Understand what the experiment shows about germs. **KQ5**

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

- Compare 2 pictures (broken bike, racing bike) and explain their meaning in terms of the effect of exercise or a lack of it on the body. Make reference to the heart, lungs and muscles when explaining. Create 2 images to represent how exercise or a lack of it can affect the body. **KQ1**
- Consider how being healthy / unhealthy would affect a wild animal's chance of survival. How do humans differ to wild animals? **KQ2**
- Compare our diet with that of another animal – herbivore and carnivore. Know that all animals have different diets to suit their bodies. **KQ3**
- Explain what ingredients/food groups it contains and how these affect/ benefit our bodies. **KQ4**
- Understand the relationship between keeping clean and how this affects our bodies and health. **KQ5**

ASSESSMENT OPPORTUNITIES – What are children aiming for?

Children will be able to demonstrate their learning through:

- Describe the importance for humans of exercise, eating the right amount of different types of food and hygiene.
- Observe carefully using simple equipment
- Identify and classify
- Use observations and ideas to suggest answers to question
- 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:

- D.T – Create a healthy menu containing suitable food groups.
- English – Explanation texts, presentation of findings (report)

LEARNING BEHAVIOURS *Children will be expected to:*

Tries new things	learn the different food groups in a human's diet.
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.