

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

YEAR: A

TERM: Autumn 2

YEAR GROUPS: 5/6

KEY QUESTION: *How can we make – and translate – circuit diagrams?*

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

- Say how important electricity is and where it may come from.
- Name the basic components of a simple circuit.
- Make a simple circuit.

End of Unit Objectives

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

- Name a range of items that use electricity. **KQ1**
- Match images of simple circuits to a circuit diagram. **KQ2**
- With support, experiment with ways of changing a circuit. **KQ3**
- Discover the effect of changing the voltage of a battery. **KQ4**
- With guidance, use electricity to make a simple game. **KQ5**

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

- Understand where electricity comes from. **KQ1**
- Draw simple circuit diagrams from images supplied. **KQ2**
- Experiment with ways of changing a circuit including making both series and parallel circuits. **KQ3**
- Use their understanding of the effect of changing the voltage a battery to recognise safety issues. **KQ4**
- Solve problems related to the circuit while making a game. **KQ5**

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

- Appreciate the impact of electricity on the way in which we live. **KQ1**
- Draw circuit diagrams of circuits made. **KQ2**
- Suggest ways in which a circuit might be changed and compare series and parallel circuits. **KQ3**
- Use their understanding of the effect of changing the voltage a battery to recognise safety issues in wider electrical contexts (mains). **KQ4**
- Try more complex systems such as making traffic lights. **KQ5**

ASSESSMENT OPPORTUNITIES – What are children aiming for?

Children will be able to demonstrate their learning through:

- Verbal responses during discussion in lessons and further questioning to extend their understanding.
- The completion of practical tasks based on learning
- The ability to solve problems.

ENRICHMENT OPPORTUNITIES –

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

We will endeavour to include:

- The chance to put learning in a more practical context such as making a game

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:

- DT –designing and making a moving vehicle.

LEARNING BEHAVIOURS *Children will be expected to:*

Tries new things

Willing to try something even though it may not be successful at first.

Works hard

Responds to pink marking and discussion with a teacher order to further understanding.

Concentrates

Completes tasks within the given time frame and shows that they are using learning in subsequent tasks.

Self-motivates

Asks questions to extend knowledge and understanding.

Imagines

Visualises ways of achieving a goal/challenge set.

Improves

Responds positively to feedback.

Understands others

Works collaboratively to solve problems and to enhance achievement across the class.

Doesn't give up

Perseveres with challenges that are set.