Leintwardine Endowed CE Primary School Learning Journey Itinerary

'Letting Our Light Shine'

SUBJECT : Science	YEAR : B	TERM : Spring 2	YEAR GROUPS : 3/4

Key Question: What makes a circuit complete?

Previous Knowledge – Know that electricity is used to power household items. Know that electricity components can be powered by batteries or mains. Know that electricity can be dangerous.

END OF UNIT OBJECTIVES

Some children will not yet have met what is expected and will show that they are **emerging** because they can:	Most children will show that they have reached the **expected** level because they can:	Some children will have gone beyond the expected level and will show that they are **exceeding** because they can:
• Children can define what an electrical appliance is and are starting to identify those that are mains- or battery-powered. • With support, children can identify different circuit components and explain what they do. • With support, children can build series circuits, identifying whether they are complete or incomplete. • With support, children can explain what electrical conductors and insulators are and give some examples of these. • With support, children can identify some different switches and start to explain how switches work in a circuit. • With support, children can apply their knowledge of electricity to different situations. • With support, children can group and classify things (appliances) and record their findings using labelled diagrams. • With support, children can use a range of (electrical) equipment and record findings using labelled diagrams. • With support, children can make predictions, use a range of (electrical) equipment and draw simple conclusions from their results. • With support, children can decide how to set up a simple practical enquiry, make predictions and draw simple conclusions from their results. • With support, children can report and present their results and conclusions to others in oral forms. • With support, children can use straightforward scientific evidence to answer questions and identify similarities, differences, patterns and changes relating to simple scientific ideas and processes.	• Children can define what an electrical appliance is and identify those that are mains- or battery-powered. • Children can identify different circuit components and explain what they do. • Children can build series circuits, identifying and explaining whether they are complete or incomplete. • Children can explain what electrical conductors and insulators are and give several examples of these. • Children can identify several different switches and explain how switches work in a circuit. • Children can apply their knowledge of electricity to different situations • Children can group and classify things (appliances) and record their findings using labelled diagrams. • Children can use a range of (electrical) equipment and record findings using labelled diagrams. • Children can make predictions, use a range of (electrical) equipment and draw simple conclusions from their results. • With some guidance, children can decide how to set up a simple practical enquiry, make predictions and draw simple conclusions from their results. • Children can report and present their results and conclusions to others in oral forms. • Children can use straightforward scientific evidence to answer questions and identify similarities, differences, patterns and changes relating to simple scientific ideas and processes.	• Children can define what an electrical appliance is and identify a variety of appliances that are mains- or battery-powered, including more unusual appliances. • Children can confidently identify different circuit components and explain what they do. They can explain the terms 'battery' and 'cell'. • Children can confidently build series circuits, identifying and explaining whether they are complete or incomplete. They can independently explain how to make an incomplete circuit complete. • Children can confidently explain what electrical conductors and insulators are and give a range of examples of these. • Children can identify a range of different switches and confidently explain how switches work in a circuit. • Children can confidently apply their knowledge of electricity to different situations in depth. • Children can confidently group and classify things (appliances) and record their findings independently using labelled diagrams. They can use their scientific reasoning skills to answer questions on these classifications. • Children can confidently use a range of (electrical) equipment and record findings using labelled diagrams. They can identify patterns in their results. • Children can independently make predictions, use a range of (electrical) equipment and draw simple conclusions from their results. • Children can independently decide how to set up a simple practical enquiry, make predictions and draw simple conclusions from their results. • Children can confidently report and present their results and conclusions to others in oral forms. • Children can confidently and independently use straightforward scientific evidence to answer questions and identify similarities, differences, patterns and changes relating to simple scientific ideas and processes.

ASSESSMENT OPPORTUNITIES

Class discussions, End of unit assessments, Work produced in books, Kahoot quiz.

ENRICHMENT OPPORTUNITIES **Helping children to remember more**	SUBJECT SPECIFIC VOCABULARY	CROSS-CURRICULAR LINKS **Links that we can make to help children make sense of what we want them to know and be able to do.**
Creating electrical circuits. Fixing broken electrical circuits. Creating a torch.	appliance, mains, battery, electricity, powered, device, electricity, circuit, series, bulb, wire, buzzer, switch, cell, battery, component, diagram, complete circuit, incomplete circuit, energy ball, conductor, insulator, material, object, equipment, prediction, result, conclusion, closed, open, on, off, slide switch, toggle switch, selector switch, push button switch, battery-powered, mains-powered,	