

Year 6 -Term 2 – DT



Electrical systems – lighthouse nightlight.

Curriculum Key Question: How can I take care of myself and others?

Topic: Letters from the lighthouse

What should I already know?

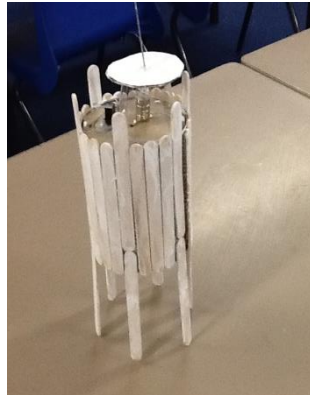
Circuits and switches:
Confidently select appropriate materials including electrical components.
To be able to make a torch.

Term 2 science - to make a series circuit with a bulb and switch as well as an LDR.

DT skills:

Generate, develop, and model innovative ideas, through discussion, prototypes, and annotated sketches.
Formulate a clear plan, including a step-by-step list of what needs to be done and resources to be used.
Evaluate their product, identifying strengths and areas for development, and carry out appropriate tests.

Examples of Year 6 lighthouses:



Research into night lights and lighthouses:



Equipment needed for lighthouse:



Key Vocabulary

Nightlight - A light that lights up when dark.
Automatic - something that works without any input on its own.
Series circuit - a circuit where flow of electricity flows in one path through all components in order.
Parallel circuit - a circuit where the flow of electricity splits into different paths and passes through components at the same time.
LDR - Light dependent resistor.
Output device - components that produce an outcome (e.g. bulb)
Input device - components that are used to control a circuit (e.g. switch, LDR)
User - who the product is intended for.
Purpose - what the product is being used for.

