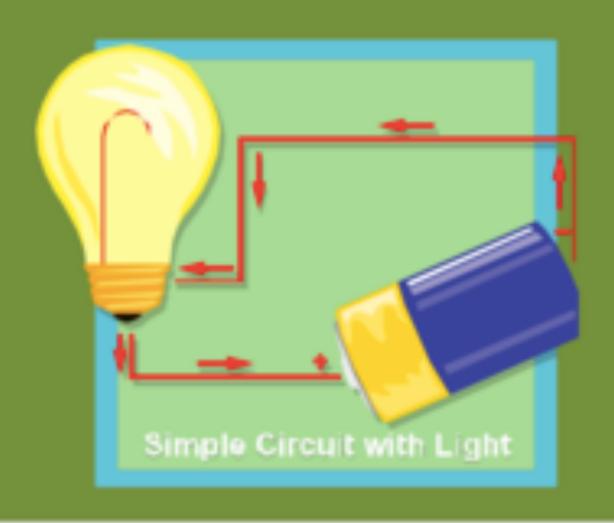
Year 6 Electricity



What can you remember about our Science topic from last half-term?

Light allows us to see different colours

Mirrors can be used to reflect light

Light travels in straight lines

When light is blocked by an object, a shadow is formed

Refraction is the bending of light as it travels between different mediums

Friday 26th February 2021

S.K.L.O: To create and present a prototype of an electrical circuit design

W.S.L.O: To identify scientific evidence that has been used to support ideas

Success Criteria:

To use learning to build own circuit
To recall electrical symbols
To present findings and prototype



Key Words

Vocabulary:

electricity

simple circuit

light bulb

cell

wire

buzzer

switch

motor

battery

series circuit

conductor

insulator

voltage

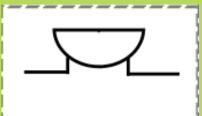
components

symbols

circuit diagram

RECAP: What did you learn yesterday?

What is the symbol for a buzzer?



What is voltage?

Voltage is the energy produced or used in a circuit.

What is the effect on a buzzer if you increase the voltage? The buzzer will make a louder noise.

Today, we are going to create our own design for a circuit. Be as ambitious as you can! Using everything that you have learnt this week.

Think about the purpose of your circuit. What could you build? What object could you create?

Some ideas:

Maybe you want to create a circuit which will be a coloured light show. Or an alarm to stop your belongings being taken! Or a game to play with friends ©

Watch this short video for some ideas: https://www.bbc.co.uk/bitesize/clips/z28b4wx

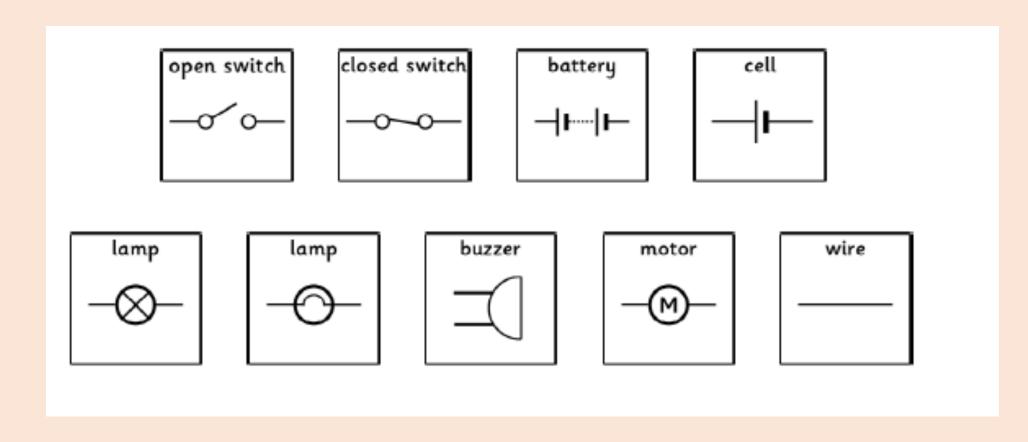
Task 1: Explore this website to build a circuit of your choice. Make that it works and use several different components.

https://phet.colorado.edu/sims/html/circuit-construction-kit-dc/latest/circuit-construction-kit-dc_en.html

- 1. Click onto Lab.
- 2. Drag and drop different parts of your circuit.

Today, we are going to create our own design for a circuit. Be as ambitious as you can! Using everything that you have learnt this week.

Task 2: Draw your electrical circuit using symbols into your books.



Task 3: Present Your Circuit

Present your circuit to an adult at home if you can © Explaining the design of your prototype, how it works and what its function is. Reflect on why you have chosen this design!

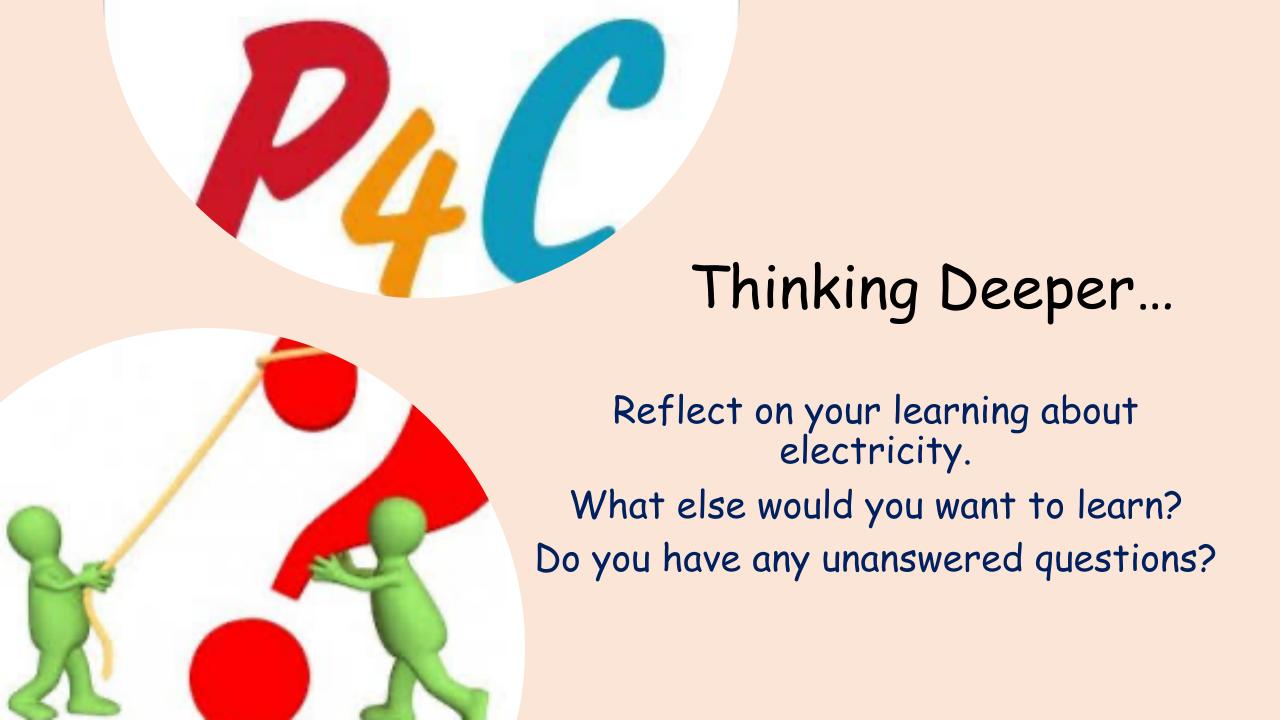
If you want to, why not create a poster to advertise your product!

Task 4: End of Electricity Quiz!

Check your learning this week by completing this short quiz online.

https://www.educationquizzes.com/ks2/d-and-t/circuits-and-switches/

Make sure to tell your class teacher your score ©



Email a picture of your work to your class teacher!

mjames@kingsavenue.Lambeth.sch.uk ksutherland@kingsavenue.Lambeth.sch.uk