

Yr 6 - Spring 1: Electricity

Things to include each half term:

- 1 x active learning
- 1 x outdoor science lesson
- 3 x experiments/investigations
- 1 x child-led investigation
- 3 x examples of working scientifically

Science display:

- Key vocabulary linked to electricity and prior knowledge
- Circuit symbols and component names
- Example of real circuit with switch
- Safety rules
- Images of uses of electricity

Science Adventure **Medium Term Planning**

Lesson 1 (KWL)

- Re-cap components children have come across before
- Matching activity (active learning) - children to match symbols with the component name
- Play 'Who am I?' - children choose a component and answer yes or no questions
- Children to make a circuit including a switch. Role play current flow (active learning) (re-cap y4 learning)
- Concept map in books with components and key words

Lesson 4

- Children to think of as many uses for electrical circuits as they can. Did anyone consider games, cards, traffic lights etc?
- Investigation: How could you make a wire loop game?
- Show video/diagram of loop game and instruct children to create their own. Children to select necessary equipment independently.
- Write instructions on creating loop game and explain why it works.

Lesson 2

- Investigation: What can you change in a circuit to make a bulb brighter? What can you change in a circuit to make a bulb dimmer?
- Children to make a prediction
- Children to draw each circuit they create (minimum of 3) using scientific symbols and rate them with 1 as the dimmest.
- Write conclusions

Lesson 5

- Show variety of series and parallel circuits on IWB and discuss similarities and differences between them.
- What has to be present for a circuit to work? Why?
- Children look at 5 different defective circuit illustrations. They explain why each circuit will not work. They change each circuit so that it will work, showing this in a circuit diagram. They test their improvements with simple apparatus.

Lesson 3

- Child-led investigation: What can you change in a circuit to make a buzzer louder? What can you change in a circuit to make a buzzer quieter?
- Children to work in small groups to plan and make predictions.
- Children to draw a diagram of each circuit and draw conclusions

Lesson 6

- Team quiz outdoors - chalk on playground to draw diagrams of circuit photographs
- Children complete the same concept map again in books, adding words between the arrows and then compare their concept map now to their original one.
- Fill in KWL grid
- Low stakes test