Junior Level Lesson 3: The Journey of Electricity

Curricular Links

SESE › Energy and Forces › Magnetism and Electricity
SPHE › Myself › Safety and Protection

Objectives

1. Explore the use of electricity in everyday life
2. Identify appliances which use electricity
3. Explore, in simple terms, the journey of electricity from a power station to our homes and schools

Resources

Pencils, 'The Journey of Electricity' online activity sheet available at **www.esbnetworks.ie/education** or copies, paper and clipboards (1st and 2nd class).

Introduction

- Ask the pupils to guess what topic you will be discussing in class today (Electricity), by giving hints using the information below.
- When guessed correctly, have a whole class discussion about electricity, exploring the information in the fact box.

'What am I?' Electricity Game Fact Box

- I'm a type of energy.
- I give power to make objects work.
- I flow along wires.
- I can even flow through the air.
- I move when you turn on a switch.
- I can make lightning.
- I make lots of thing in your school work e.g. computer, lights.
- I make lots of things work at home e.g. lamp, fridge, television.
- You can find me in a battery.

Development

Write 'electricity at home' and 'electricity at school' on the board in two columns and ask the children to identify appliances for each category.

- Ask the pupils how they think electricity travels to these appliances to make them work. Elicit that electricity is a type of energy that moves along wires to get to appliances in our homes and schools.

Electricity Walk

- Draw an electricity danger sign on the board (see example below). Discuss and then explain that you are going on an 'electricity walk' and reinforce the importance of staying safe around electricity.
- Head on a walk near your school, asking the pupils to note any signs or objects related to electricity e.g. danger signs, electricity poles, overhead wires and mini pillars.
  (First and Second Class pupils could draw simple sketches, recording what they see on the walk).

***Remember to always Stay Safe, Stay Clear with electricity!**

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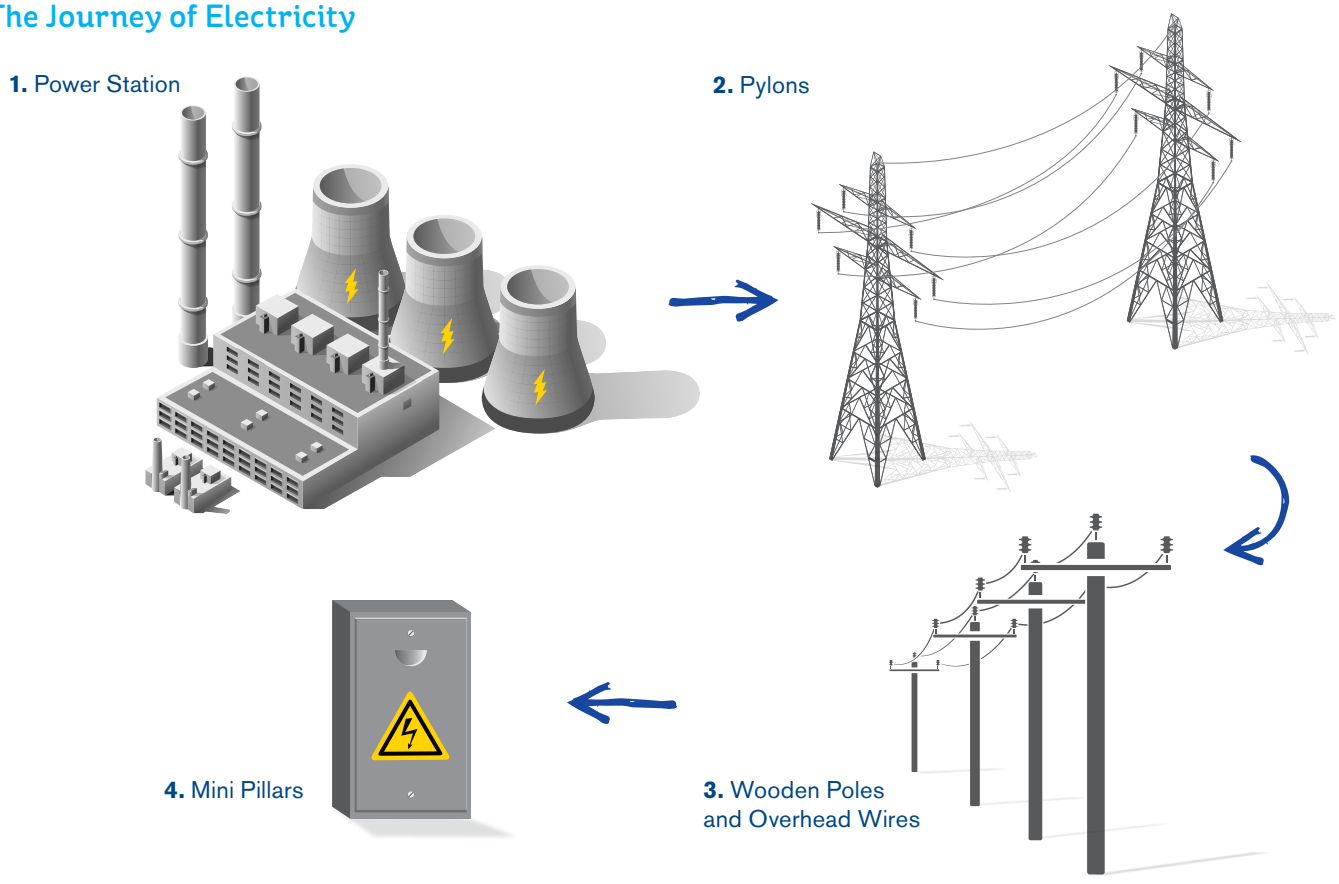
Back in the classroom

- Back in the classroom discuss observations noted on the electricity walk, writing any key words on the board e.g. wires, poles, mini pillars.
- Draw a simple diagram of the 'The Journey of Electricity' on the board (as in the example below). Identify and explore each stage with the pupils:
  1. Electricity is made in power stations.
  2. Pylons help electricity to travel from power stations along wires across long distances.
  3. Wooden poles and overhead wires help to bring electricity to towns and villages across Ireland.
  4. Mini pillars are metal boxes on the footpath or near buildings in the towns and villages. Mini pillars help to bring electricity into our homes and schools.

The Journey of Electricity



Conclusion

- Ask the pupils to draw and label 'The Journey of Electricity' diagram in their copies or download the online activity sheet for pupils to complete.
- Junior Infant pupils can illustrate the last stage only, of electricity travelling from mini pillars to homes/schools.

Extension Activity

- Divide the class into groups, assigning each a stage of the journey of electricity to illustrate. Create a class display.

***Remember to check out www.esbnetworks.ie/education for lots more resources about electricity.**