Nova’s Bright Ideas: All About Electricity

Learning objective: To identify common appliances that run on electricity and understand how to use them safely.

Read the text carefully. Use the word bank to help you understand the tricky words. Write your answers in the boxes below.

Nova the owl loves to read by her lamp at night. She knows that electricity is a very powerful force. Many things in our homes need electricity to work. These are called electrical appliances. Some appliances, like a small torch, use batteries. Other appliances, like a fridge or a television, need to be plugged into the wall. This is called mains electricity. Mains electricity is very strong and can be dangerous if we are not careful. Nova always reminds her friends to keep water away from plugs. She also tells them never to touch a socket with wet hands. When a plug is pushed into a wall, it creates a circuit. This is a path for the electricity to flow through to power the machine. If the circuit is broken, the machine will stop working. Using electricity safely helps us keep our homes bright and warm. Always ask a grown-up if you are not sure about a plug or a wire. Electricity is amazing, but safety must always come first in our investigations.

Word bank: Appliance: A machine used in the home. · Circuit: The path that electricity travels along. · Mains: Electricity that comes from wall sockets. · Hazard: Something that is dangerous.

1. Name two things from the text that use mains electricity. (2 marks)

2. What does Nova say you should never do near a plug? (2 marks)

3. Why do you think the author says to ask a grown-up for help with plugs? (2 marks)

4. If a lamp stops working, what might have happened to the circuit? (2 marks)

5. Why is electricity important for our daily lives? Give one reason. (2 marks)

Draw: Draw a picture of an electrical appliance you use at home and draw a safety sign next to it to show how to use it carefully.

Extension challenge: Make a list of five things in your classroom that use electricity. Which ones use batteries and which ones use the mains?