

Learning Target S5P3.c I can plan and carry out an investigation to determine the best conductor of electricity.

Conductors vs. Insulators Interactive Activity

Conductivity is key to the flow of electricity and why specific materials are chosen for safety and efficiency.

Part 1: What are Conductors and Insulators?

Conductors: _____

Insulators: _____

Part 2: Identify the Materials

Look at the images below and label them as either **Conductor** or **Insulator**.

1. Metal Spoon



2. Plastic Ruler



3. Rubber Band



4. Copper Wire



5. Wooden Block



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Part 3: Experiment Observation

Imagine you are conducting an experiment to test conductivity. You have a circuit with a battery, a light bulb, and wires.

Instructions:

Predict which items will allow the light bulb to glow (**Conductor**) and which will not (**Insulator**).

Material	Prediction (Conductor or Insulator)
Aluminum foil	
Glass jar	
Steel nail	
Cotton cloth	
Pencil (graphite)	

Part 4: Matching Exercise

Match the material to its correct category by drawing a line from the material to the category.

Material
Rubber
Copper
Glass
Aluminum
Plastic

Conductors

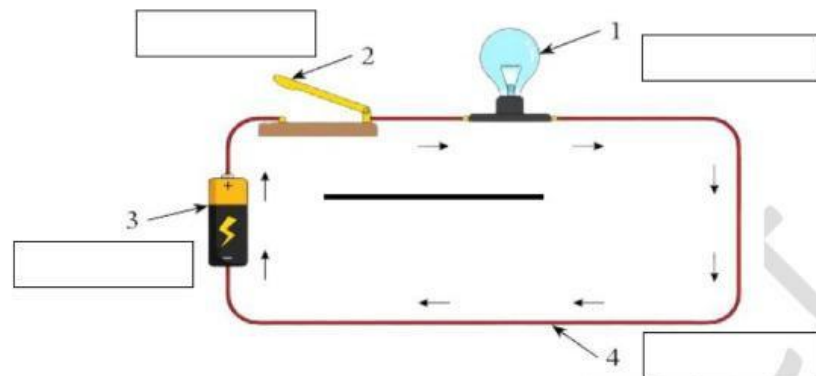
Insulators

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Part 5: Diagram Analysis

Below is a diagram of a simple circuit. Label the following parts:

- Battery
- Wires
- Switch
- Bulb



Question: What material would you use to connect the battery to the bulb and why?

Answer: _____

Part 6: Critical Thinking

1. Why is rubber used to coat electrical wires?

Answer: _____

2. Think of an example in your home where both conductors and insulators are used together. Explain their importance.

Answer: _____
