

Learning Target: I can describe and explain the differences between static electricity and human-harnessed electricity.

Static Electricity vs. Human-Harnessed Electricity Interactive Activity

Instructions:

1. Observe the pictures below carefully.
2. Answer the questions that follow each section.
3. Be ready to discuss your answers in class!

Part 1: Static Electricity

Image 1



Image 2



Questions:

1. What caused the balloon to stick to the child's hair?
 - a. Magnetic force
 - b. Static electricity
 - c. Human-harnessed electricity
2. Why does rubbing the balloon create static electricity?
 - a. It adds heat to the balloon.
 - b. It transfers electrons between the balloon and the hair.
 - c. It produces sound energy.
3. Write down one example of when you have experienced static electricity in your daily life:

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Part 2: Human-Harnessed Electricity

Image 1



Image 2



Questions:

4. How is human-harnessed electricity generated in the image of the wind turbine?

- a. Using chemical reactions
- b. Using moving air to turn blades
- c. Using a battery

5. What allows the light bulb to glow?

- a. Static electricity
- b. Current electricity flowing through wires
- c. Electrons stopping inside the bulb

6. Name one way you use human-harnessed electricity in your daily life: _____

Part 3: Compare and Contrast

Write or drag and drop the description number in the **Chart** below to compare **static electricity** and **human-harnessed electricity**.

Static Electricity	Both	Human-harnessed Electricity

1. Needs a circuit to flow	2. Form of energy	3. Steady flow of electrons	4. Do not need a circuit
5. A buildup of electrons	6. Constant flow of electrons	7. Electrons stay in one place until they jump to an object	8. Needs a conductor

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Bonus Activity:

Lightning



Power Lines



1. How does lightning differ from the electricity flowing through power lines? _____

2. Which one is safer to use? _____ Explain why. _____
