

Building Batteries Student Sheet

Name _____

Watch as your teacher makes a battery.

1. What do you notice?
2. What questions do you have?
3. Guiding question: Which substances produce the best batteries?
4. Choose a battery type from the list below and research it using the internet.
5. Which internet resources did you look up?

6. What information did you find? Be ready to share with your class as directed by your teacher.

Primary Cells or Non-Rechargeable Cells	Primary or Non-Rechargeable Cells
Alkaline battery (zinc manganese oxide, carbon) Aluminum-air battery Atomic battery Bunsen cell Chromic acid cell (Poggendorff cell) Clark cell Daniell cell Dry cell Earth battery Frog battery Galvanic cell Grove cell Leclanché cell Lemon/potato battery Lithium battery Lithium air battery Magnesium battery Mercury battery Molten salt battery Nickel oxyhydroxide battery Oxyride battery Organic radical battery Paper battery Pulvermacher's chain Silver-oxide battery Solid-state battery Sugar battery Voltaic pile Penny battery Trough battery Water-activated battery Weston cell Zinc-air battery Zinc-carbon battery Zinc-chloride battery	Aluminum-ion battery Carbon battery Flow battery Vanadium redox battery Zinc-bromine battery Zinc-cerium battery Lead-acid battery Deep cycle battery VRLA battery AGM battery Gel battery Glass battery Lithium- ion battery Lithium-ion lithium cobalt oxide battery (ICR) Lithium-ion manganese oxide battery (IMR) Lithium-ion polymer battery Lithium-iron phosphate battery Lithium-sulfur battery Lithium-titanate battery Thin film lithium-ion battery Lithium ceramic battery Magnesium-ion battery Metal-air electrochemical cell Lithium-air battery Aluminum-air battery Germanium-air battery Calcium-air battery Iron-air battery Potassium-ion battery Silicon-air battery Zinc-air battery Tin-air battery Sodium-air battery Beryllium-air battery Molten salt battery Nickel-cadmium battery Nickel-hydrogen battery Nickel-iron battery Nickel metal hydride battery Low self- discharge NiMH battery Nickel-zinc battery Organic radical battery Polymer-based battery Polysulfide bromide battery Potassium-ion battery Rechargeable alkaline battery Rechargeable fuel battery

	<ul style="list-style-type: none">Sand batterySilicon air batterySilver-zinc batterySilver-calcium batterySilver-cadmium batterySodium-ion batterySodium-sulfur batterySolid-state batterySuper iron batteryUltra BatteryZinc-ion battery
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Adapted from: <https://energy.utah.gov/energy-education/curriculum/>