

Batteries

Name _____

Phenomenon: Watch as your teacher makes a battery:

What do you notice?

What questions do you have?

Guiding question: Which substances produce the best batteries?

Obtain information on which battery? _____ (Choose a battery type to research from the list below.)

Which internet resources did you look up? (Use the names of the pages)

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

Battery Types:

Primary Cells or Non-Rechargeable	Secondary Cells or Rechargeable
<ul style="list-style-type: none"> ● Alkaline battery (zinc manganese oxide, carbon) ● Aluminium–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 <ul style="list-style-type: none"> ○ Oxyride battery ● Organic radical battery ● Paper battery ● Pulvermacher's chain ● Silver-oxide battery ● Solid-state battery ● Sugar battery ● Voltaic pile <ul style="list-style-type: none"> ○ Penny battery ○ Trough battery ● Water-activated battery ● Weston cell ● Zinc–air battery ● Zinc–carbon battery ● Zinc chloride battery 	<ul style="list-style-type: none"> ● Aluminium-ion battery ● Carbon Battery ● Flow battery <ul style="list-style-type: none"> ○ Vanadium redox battery ○ Zinc–bromine battery ○ Zinc–cerium battery ● Lead–acid battery <ul style="list-style-type: none"> ○ Deep cycle battery ○ VRLA battery ○ AGM battery ○ Gel battery ● Glass battery ● Lithium-ion battery <ul style="list-style-type: none"> ○ 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 ^[5] ^[6] ● Magnesium-ion battery ● Metal–air electrochemical cells <ul style="list-style-type: none"> ○ Lithium air battery ○ Aluminium–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 <ul style="list-style-type: none"> ○ Low self-discharge NiMH battery ● Nickel–zinc battery

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| | <ul style="list-style-type: none">● Organic radical battery● Polymer-based battery● Polysulfide bromide battery● Potassium-ion battery● Rechargeable alkaline battery● Rechargeable fuel battery● Sand battery● Silicon air battery● Silver-zinc battery● Silver calcium battery● Silver-cadmium battery● Sodium-ion battery● Sodium–sulfur battery● Solid-state battery ^[7]● Super iron battery● UltraBattery● Zinc ion battery |
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