

We use electricity every day, often without wondering how it works and how it makes our lives easier. Teachers and parents can help kids understand and appreciate electricity with a number of simple activities that explain where electricity comes from and how it can be used. These activities include making a simple battery, making a complex battery, making an electroscope and playing online simulation games.

Simple Batteries

Kids can build and test simple batteries to develop a better understanding of electricity. Have them roll a lemon on a surface and find a clean penny and dime. Cut two small parallel slits into the lemon, close together. Making sure the coins do not touch, put the penny in one lemon slot and the dime in the other. Ask the young scientists what they expect will happen when they touch their tongues to the lemon with the copper penny and silver dime in it. They can explain their reasoning and then identify the power source and circuit parts.

Complex Batteries

Kids can also create a more sophisticated battery and produce an electrical charge that will light a bulb. Make slits in a lemon and gather a copper strip and a zinc strip, two copper wire leads, a penny nail, a lamp or bulb holder and a galvanometer bulb. Make a small hole at the end of the strips, then put the copper strip in one lemon slot and the zinc strip in the other. Connect the wire leads to both strips. Tell the kids they will connect each end of the wire, one to the lamp and the other to the galvanometer, and have them hypothesize results.

Electroscope

Making an electroscope can introduce to kids the concept of static charge. Start with an insulated piece of electrical wire and cut off about one inch, then fashion the wire into a hook by bending it. Get a Christmas tree icicle or gum wrapper that is aluminum on one side and place it shiny side down over the wire's hook. Put the hook into a glass jar with a narrow neck only so far so that two inches of wire are out of the jar, then use modeling clay or a rubber stopper to cover the jar. Take a plastic comb and generate a charge by combing through hair or rubbing it on a piece of wool. Slowly move the comb towards the wire, without the comb and wire touching.

Online Activities

Students can also play a variety of interactive online games, simulations and activities to get them to understand more about electricity and how it works. This includes activities like Circuit World, Electricity Quiz. Circuits and Conductors, Power Discovery, Electro-Bot, Louie's Space: Electricity and Using Electricity. These online games will direct the kids through activities, and explain the meaning of their results.

Key Concepts

- electricity activities science
- kids electricity activities
- science kids electricity

References

- [NASAScience: Homemade Batteries Grade 3](http://scifiles.larc.nasa.gov/text/kids/D_Lab/activities/battery_3rd.html)
[http://scifiles.larc.nasa.gov/text/kids/D_Lab/activities/battery_3rd.html]
- [NASAScience: Homemade Batteries Grades 4 and 5](http://scifiles.larc.nasa.gov/text/kids/D_Lab/activities/battery_4-5.html)
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- [Woodlands Interactive Zone: Electricity Interactive Games](http://www.woodlands-junior.kent.sch.uk/revision/Science/electricity.htm) [http://www.woodlands-junior.kent.sch.uk/revision/Science/electricity.htm]
- [NASAScience: Electroscope](http://scifiles.larc.nasa.gov/text/kids/D_Lab/activities/electroscope.html)
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