

Science Play



Suggested Activities For Educators



Extend your students' learning after their visit to KidsSTOP™ with the activity provided!

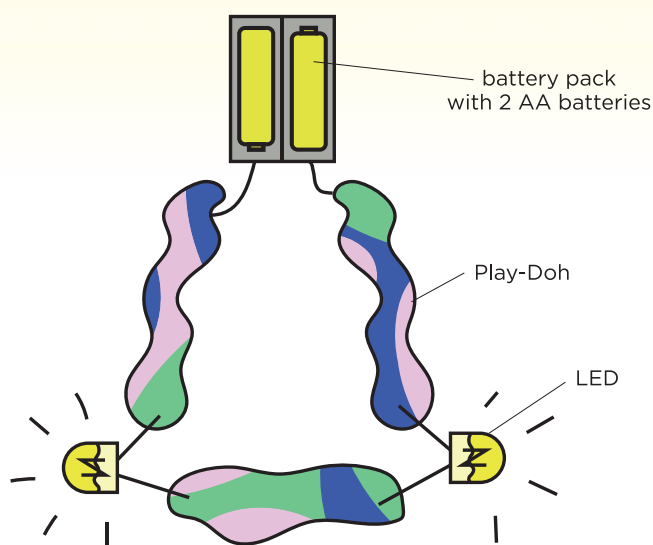
Watt is Electricity? Making Play-Doh circuits

What you will need

- Play-Doh
- Batteries
- LED

DIY Conductive Dough

- 1 cup of water
- 1½ cup of flour
- ¼ cup of salt
- Food colouring



Leaving a gap between the LED terminals prevents short-circuit and allows the LED to light up.

PROCEDURE

1. Using different coloured Play-Doh, create thin strips to resemble wires.
2. Connect two strips of Play-Doh to both ends of a battery.
3. To complete the circuit, place an LED (light-emitting diode) to the other end of the strips of Play-Doh. When connected accurately, the LED will light up.
4. You can also make your own conductive dough by referring to the recipe above!



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QUESTIONS TO ASK

- Does the LED light up when we replace the Play-Doh with clay? Why not?
- Why do we need to add salt when making the conductive dough?
- Why doesn't the LED light up when we connect it incorrectly?



SCIENCE CONCEPTS

- Play-Doh contains salt and water, which allows electric current to pass through. In this case, the Play-Doh acts as the wire that connects the LED to the batteries.
- The LED terminals have to be connected accurately to the battery to allow for a difference in the electric charges. The electric charges flow from the negative end of the battery to the Play-Doh, through the LED, then to the positive end of the battery.



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