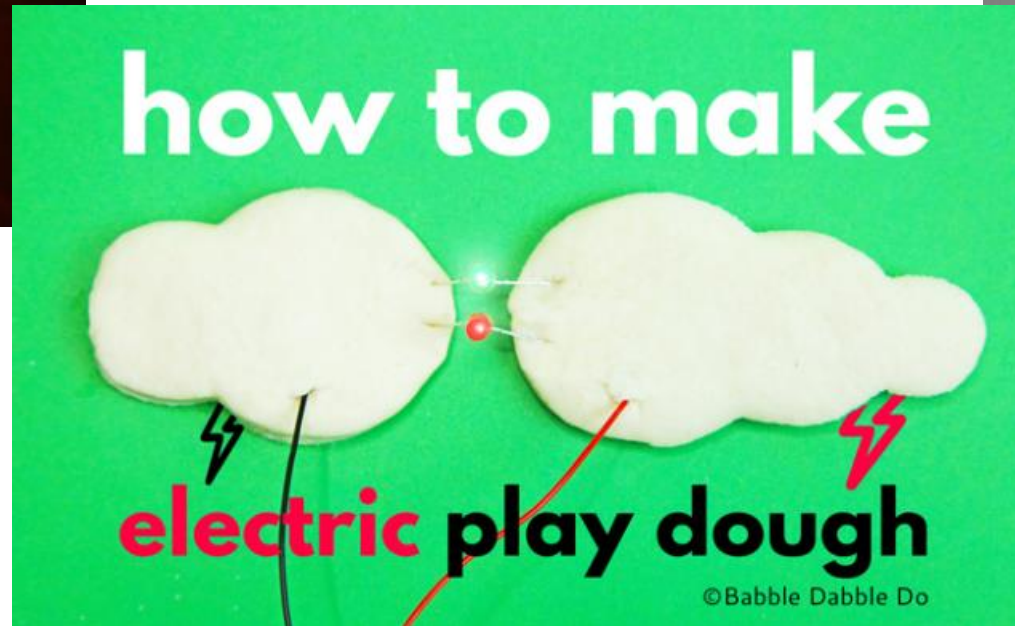


Science

What is electricity?

Today we will be learning about energy transferring into electricity. Here are some real pictures of what we be learning about today.



The materials needed for this lesson are...



- 1 battery pack (per class)
- 9V Battery (per class)
- 3-4 LED lights (per class)



Additional Materials for Playdough:

- Mixing bowl
- Spoon
- Measuring Cup
- Tablespoon
- Teaspoon

Needed for Playdough



hot water



flour



salt

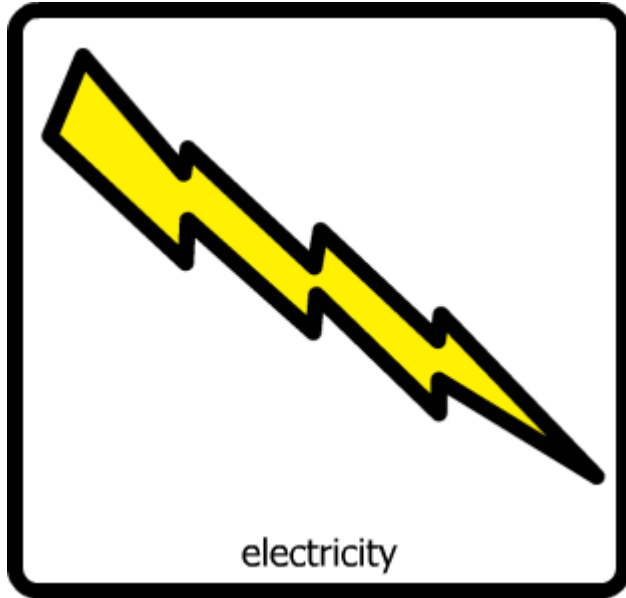


vegetable oil



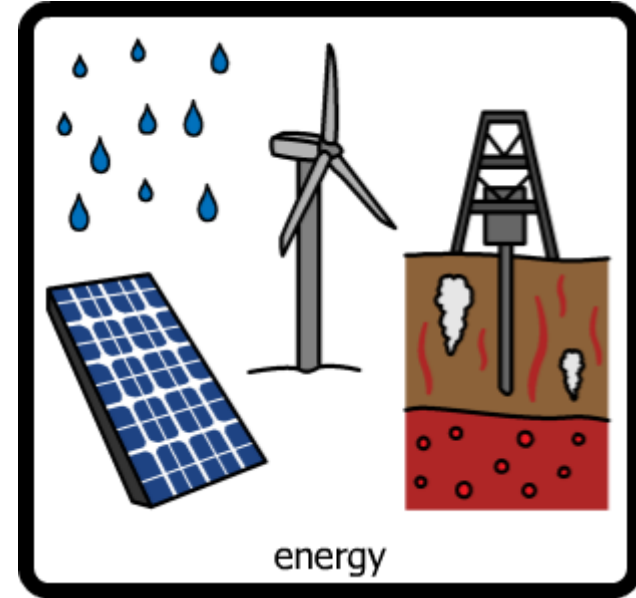
cream of tartar

The vocabulary for today's lesson is....



the flow of tiny particles called electrons and protons. It can also mean the energy you get when electrons flow from place to place.

*Electricity can be seen in nature in a bolt of lightning.



Energy is another word for power. Energy makes things move. It makes machines work. Energy also makes living things grow.

Step 1: Read story "Simon Asks, 'What is electricity?'"

Simon Asks, "What Is Electricity?"

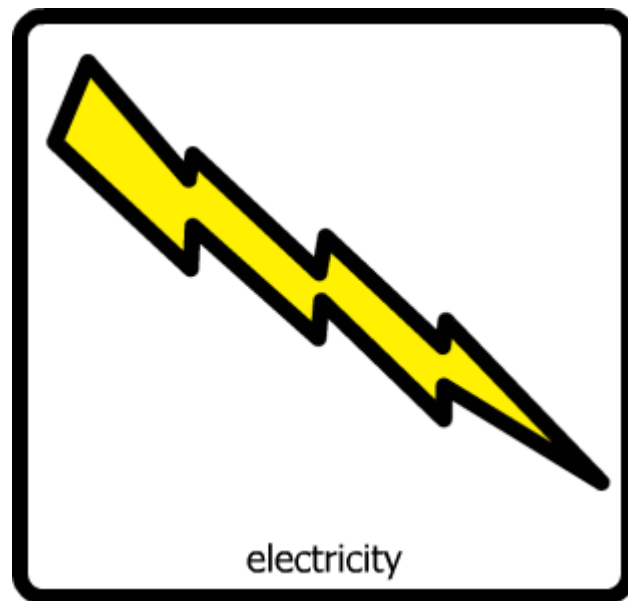
Level E

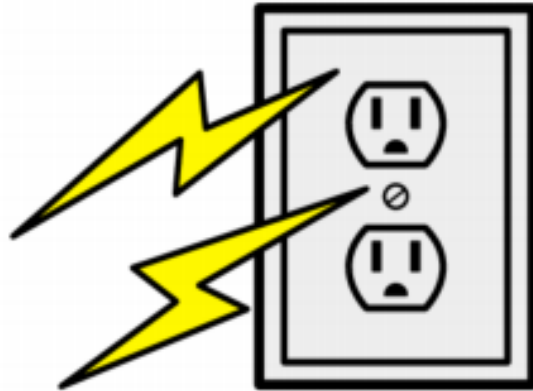


Written and Illustrated by Travis Schaeffer



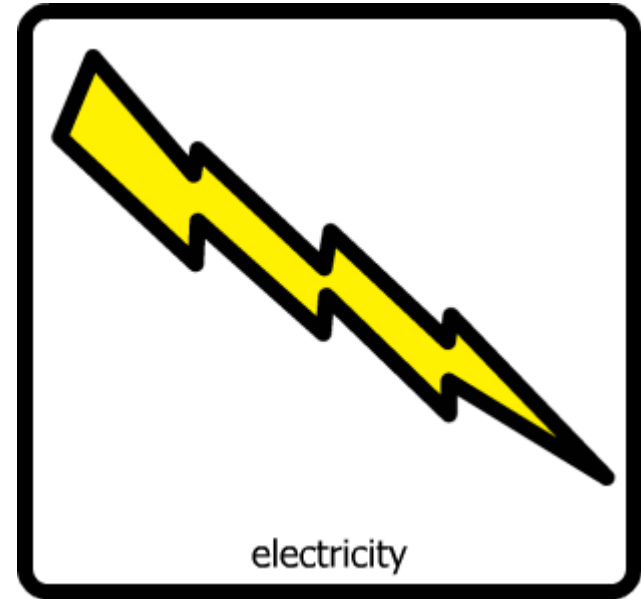
Electricity makes electronics work. Simon wants to learn about electricity. What is electricity ?





Scientists learn about electricity.

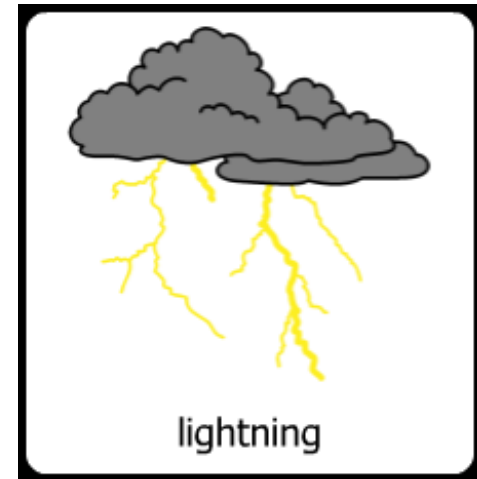
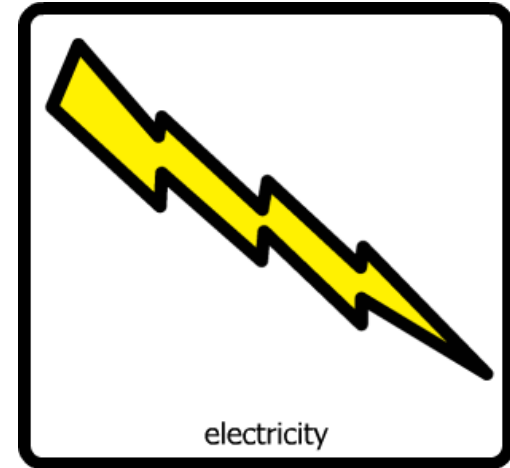
Electricity is a charge.

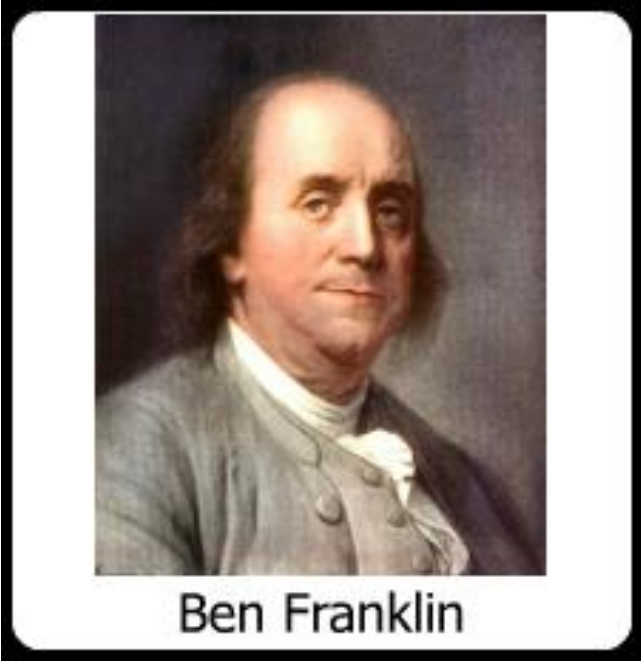




Scientists learn about electricity.

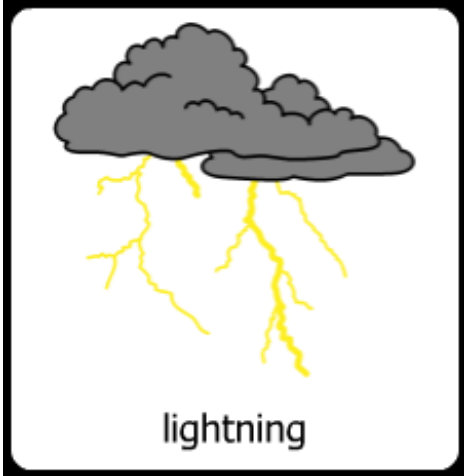
Electricity is in the air.



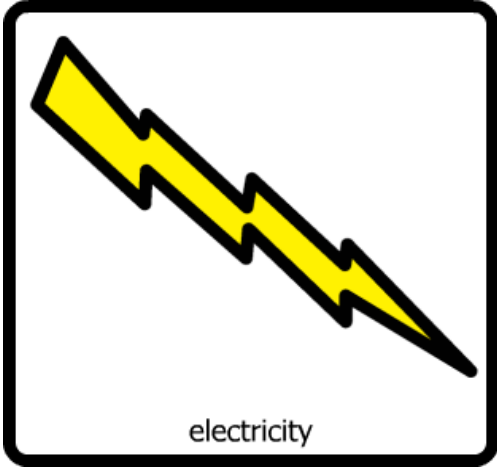


Ben Franklin

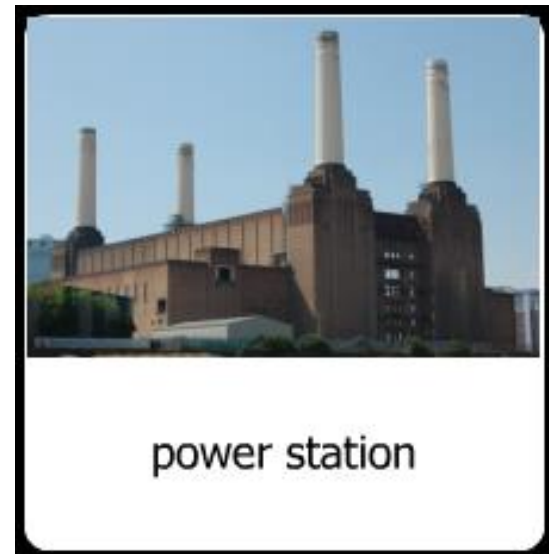
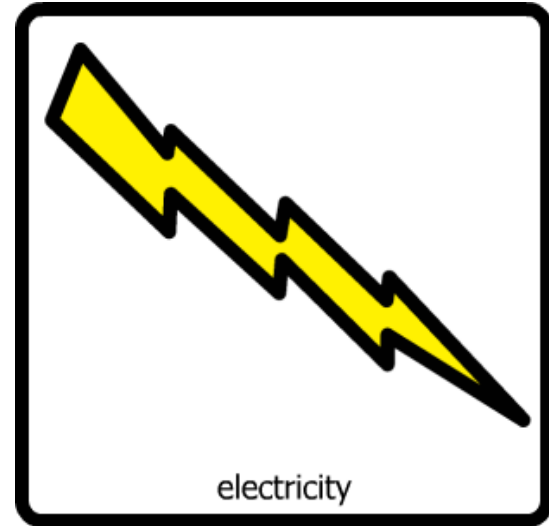
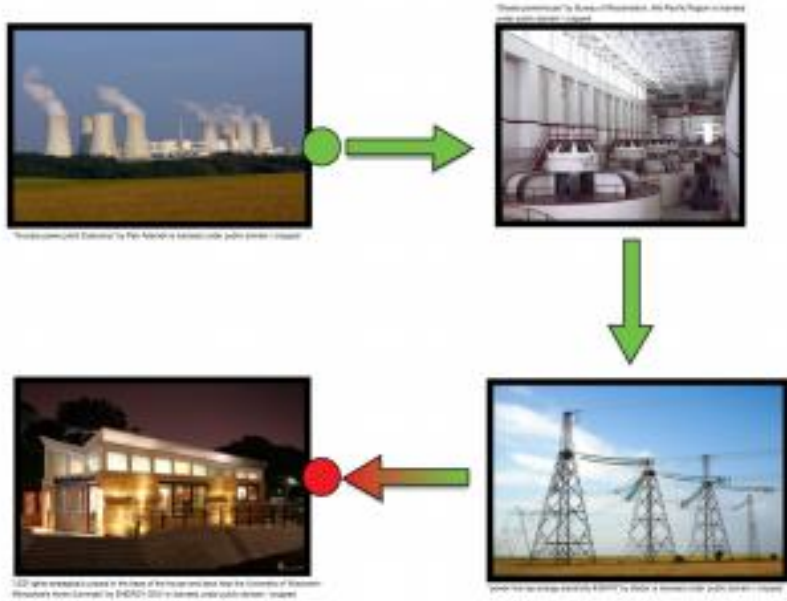
Ben Franklin learned about electricity. Electricity is in lightning.



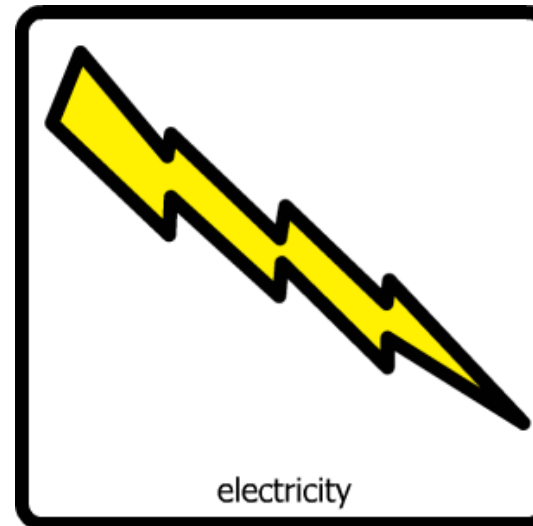
lightning



electricity



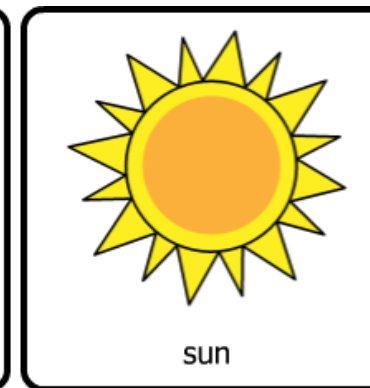
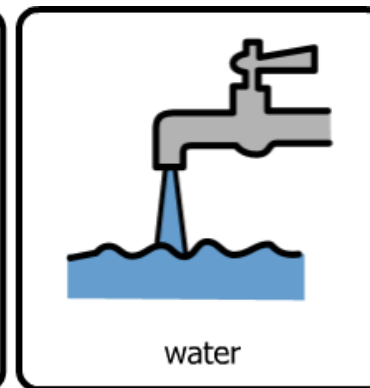
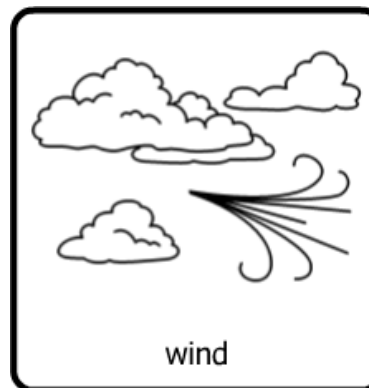
Scientists learn about electricity.
Electricity is in the power station.
Electricity is in Simon's house.



Water can make electricity.

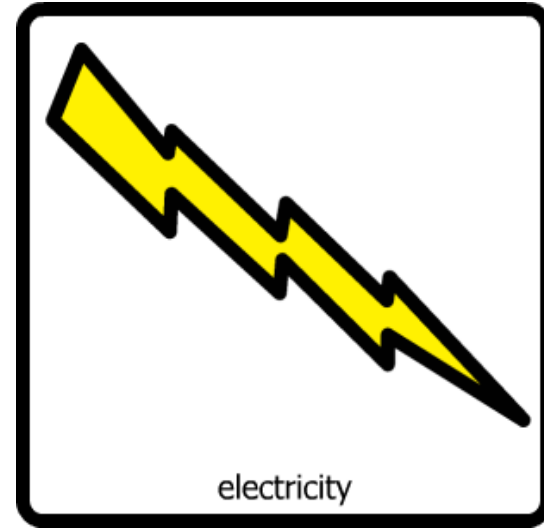
Wind can make electricity.

The Sun can make electricity.

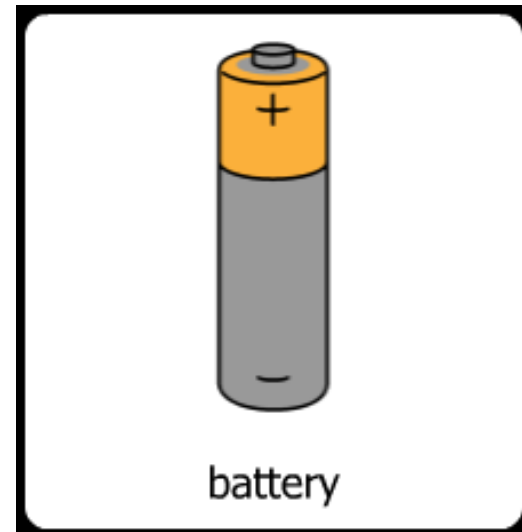




A battery has electricity.



electricity



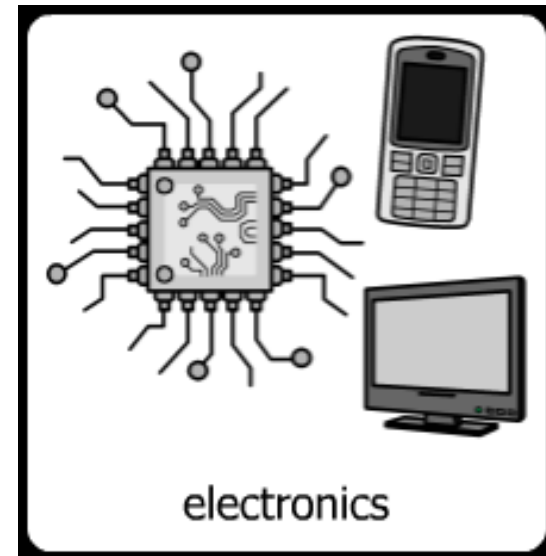
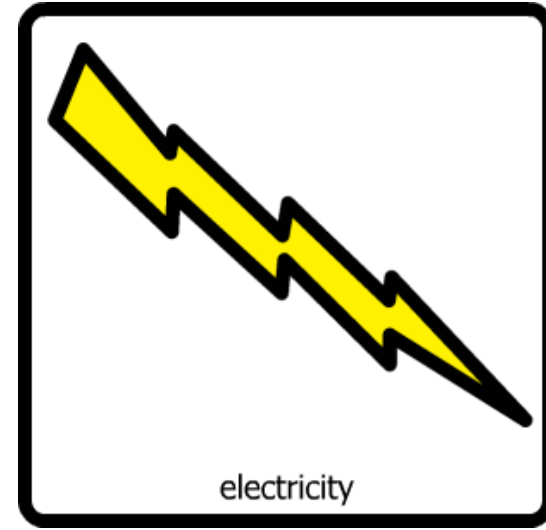
battery



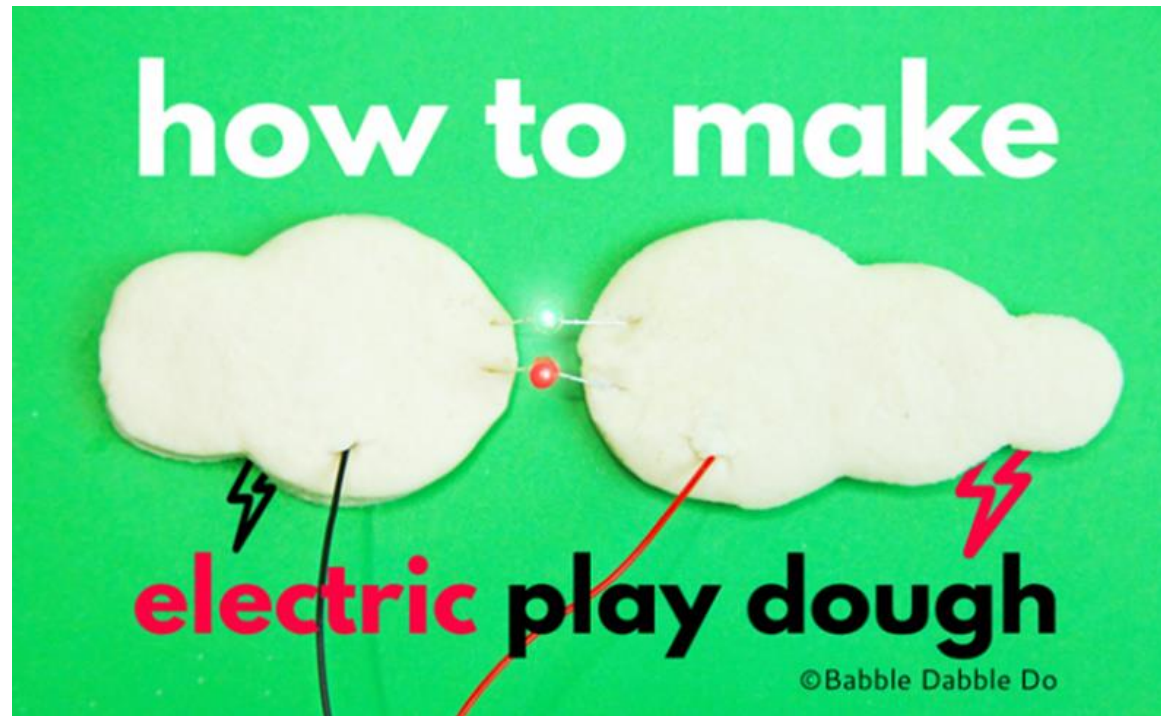
Simon learned about electricity.

Electricity makes electronics

work.



Step 2: Conduct an experiment that shows the transfer of energy from a battery to a light in the play dough



Gather the ingredients for the play dough:



hot water



flour



salt



vegetable oil



cream of tartar



bowl



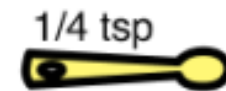
spoon



1 cup
measuring cup



1 tablespoon



1/4 teaspoon

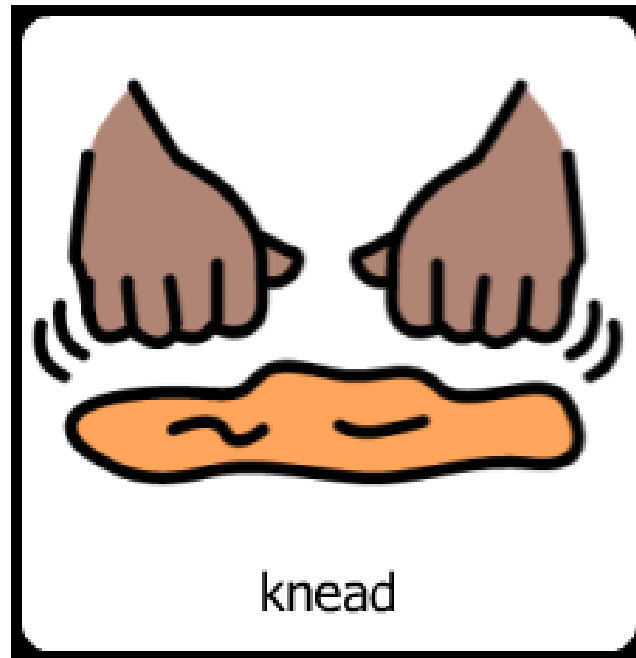
Mix ingredients: Mix flour, salt, cream of tartar, and oil in a large mixing bowl.



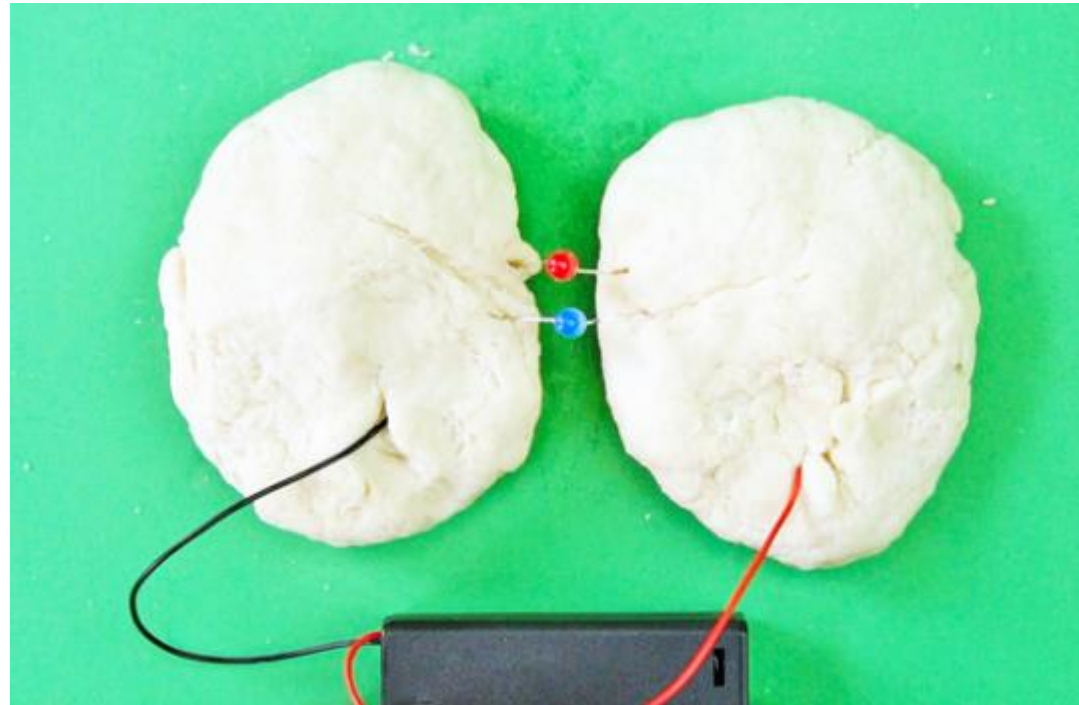
Add water: Slowly add the hot water. Stir until the dough starts solidifying.



Knead it: Once it's cool enough to handle, remove the dough from the bowl and begin kneading it. Knead the dough until it loses its stickiness, adding more flour (but not too much) as needed. If it's too dry add a little bit of water.



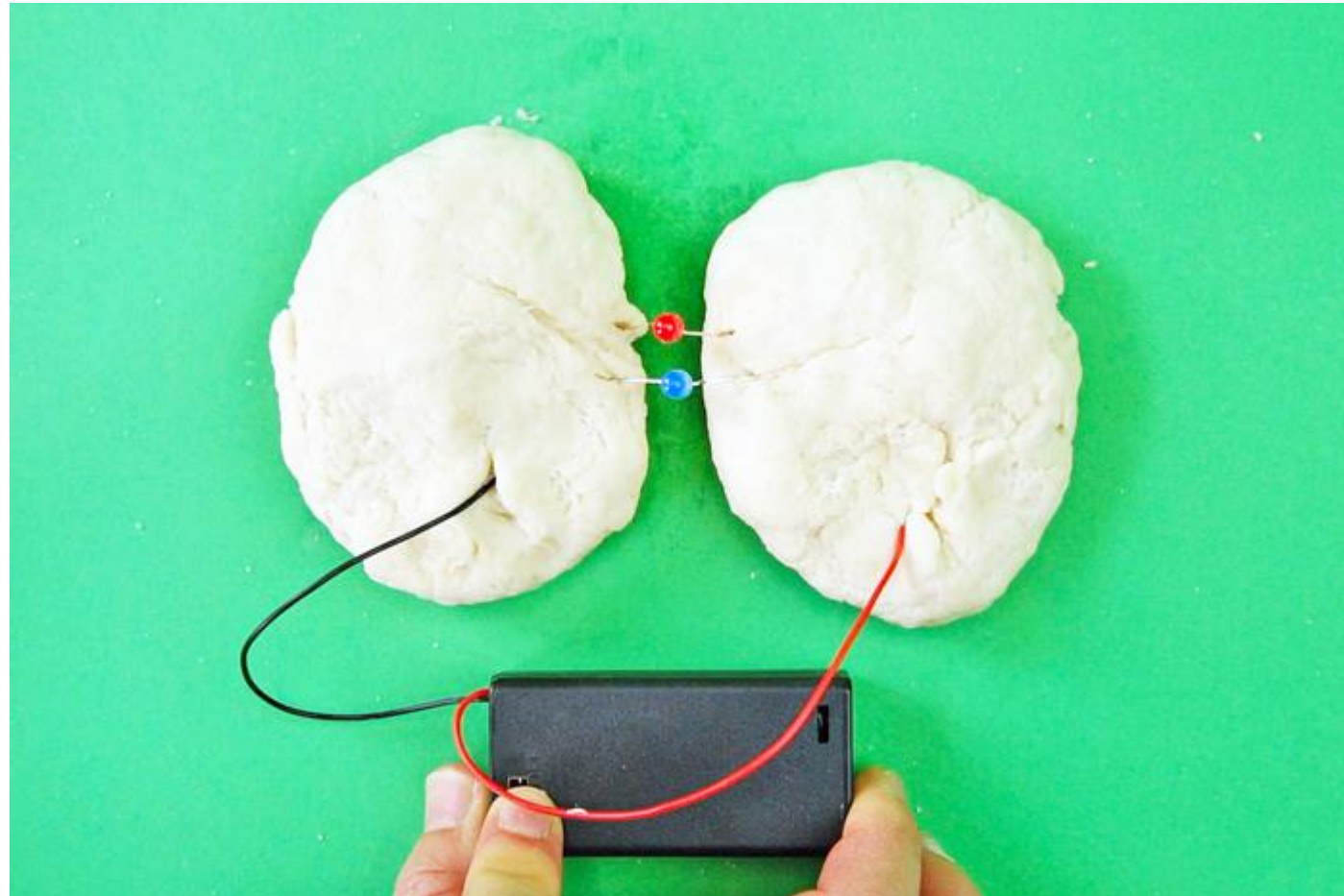
Electrify it!: Roll the play dough into two equally sized spheres. Place the balls near to each other but not touching. Place one lead from the battery pack into one sphere and press into dough. Repeat with the second lead in the other dough sphere.



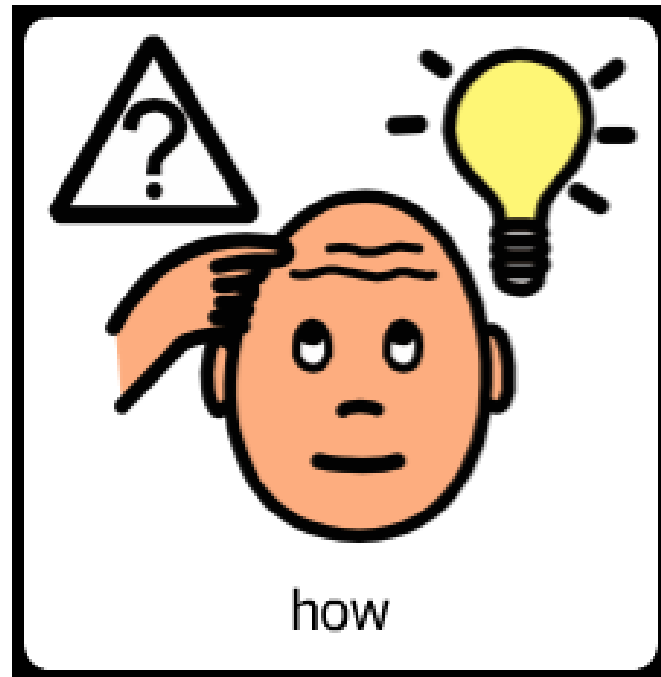
Add light: Spread the LED legs open. The longer lead is the POSITIVE side of the LED. Place the long LED leg in the dough sphere with the red wire embedded in it. Place the other leg in the dough with the black wire.



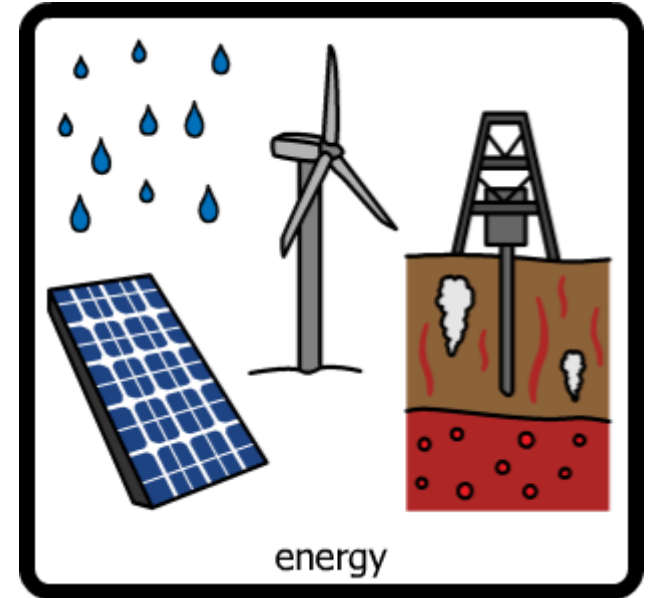
Test your dough: Turn on the battery pack on. The LED should light up! You now have a complete circuit!



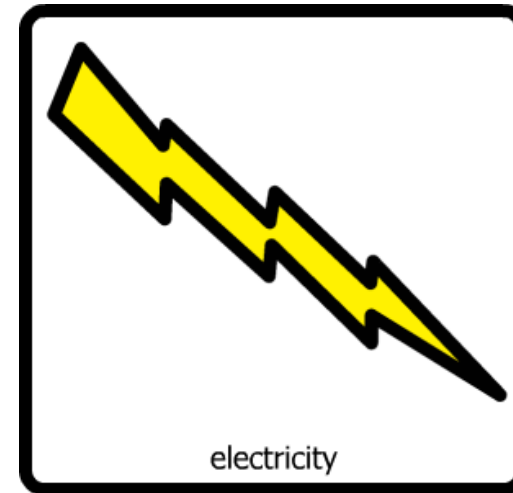
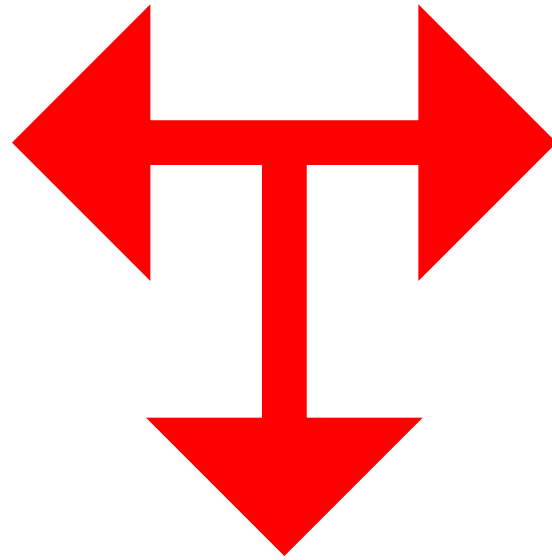
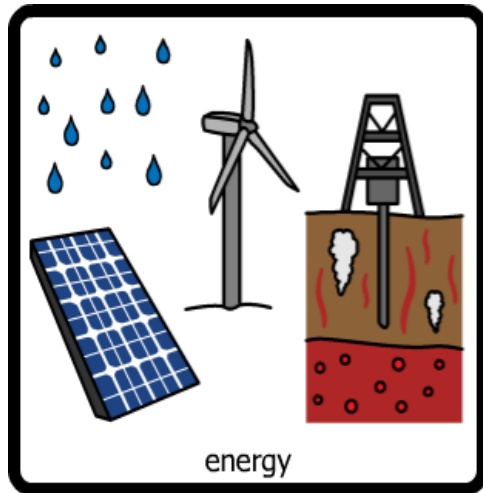
Let's talk about HOW this happened!!!



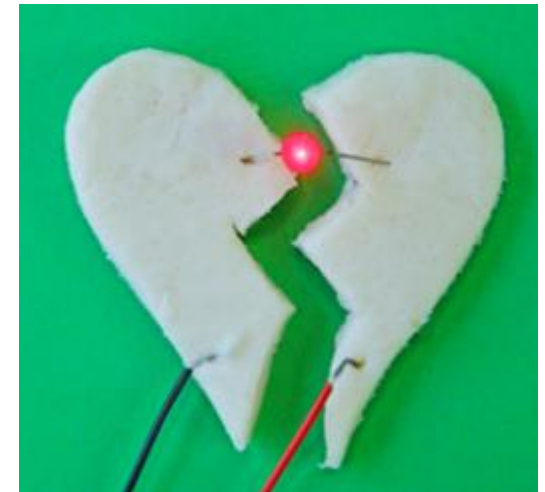
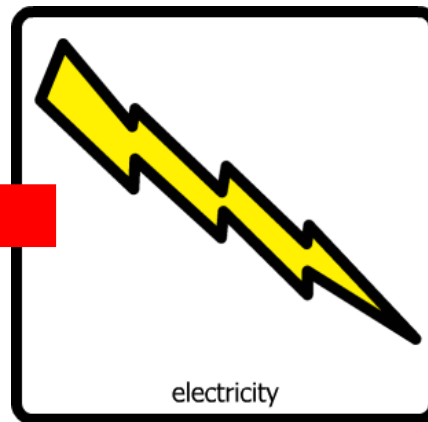
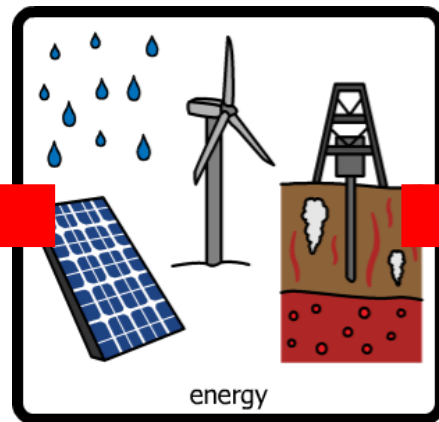
The battery pack provided the energy to light up the bulbs.



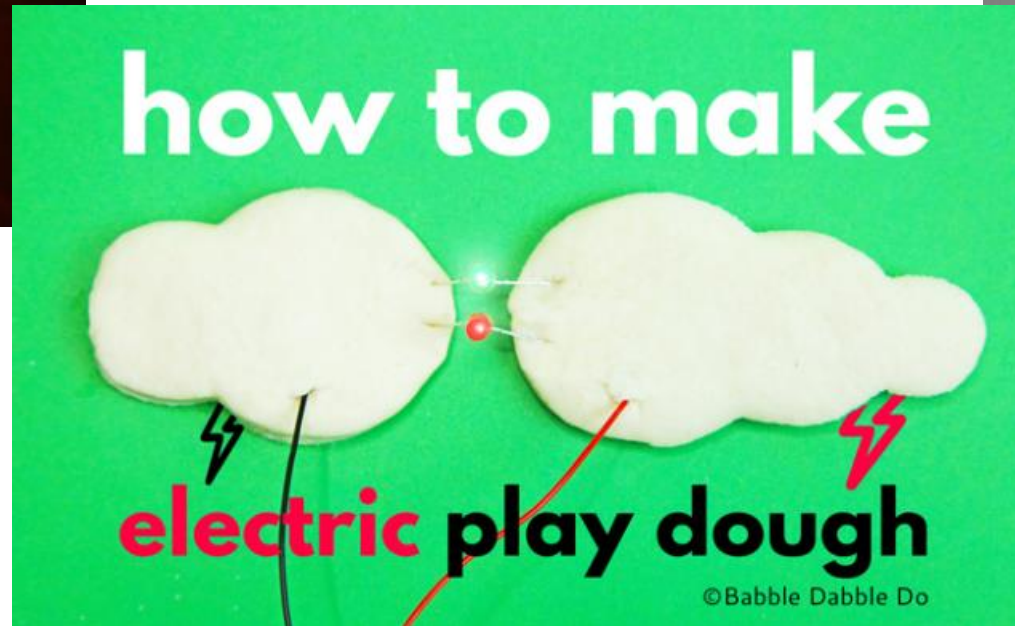
The energy transferred from the battery pack into electricity with the help of the salt in the play dough.



The salt helped turn the energy into electricity for the bulbs to light up.

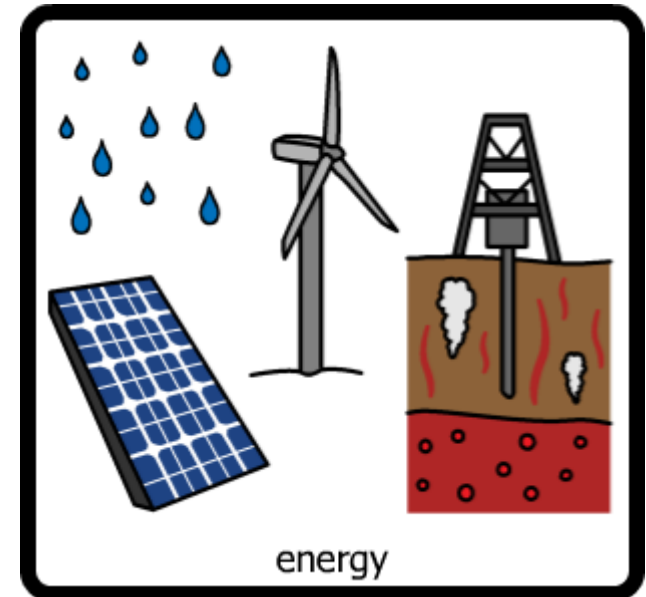
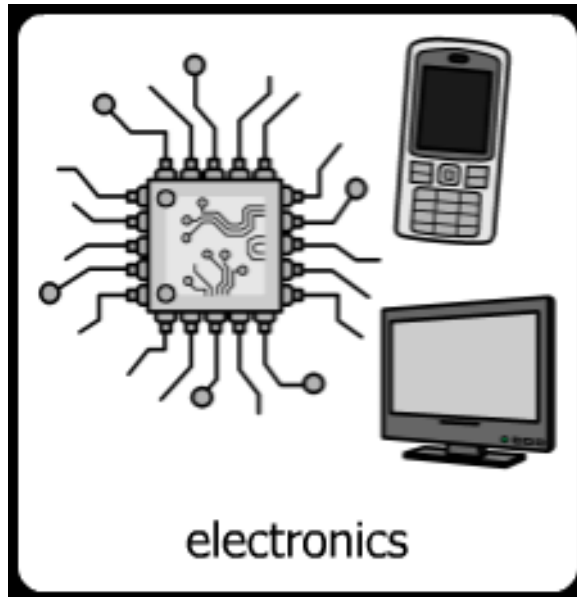
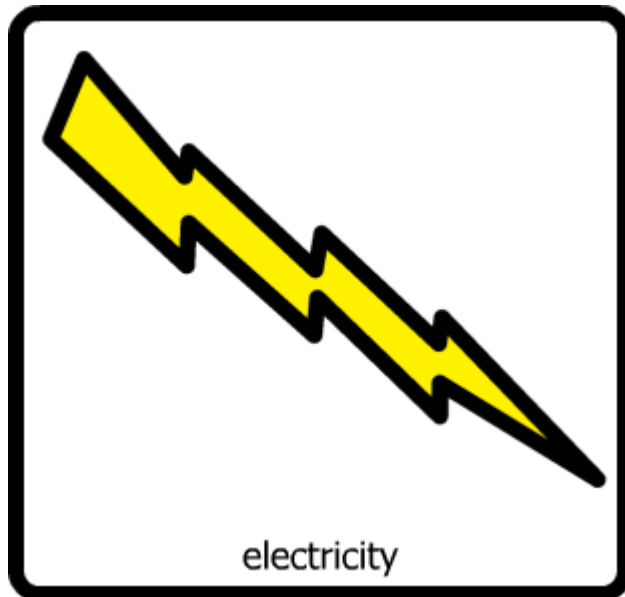


Today we learned about energy transferring into electricity. Here are some real pictures of what we be learning about today.



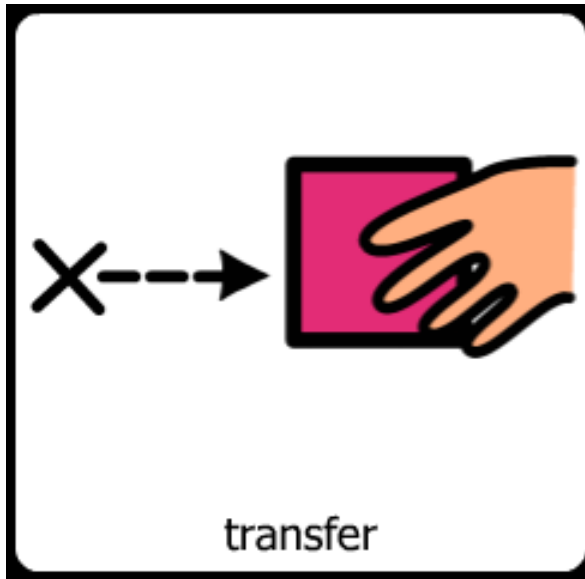
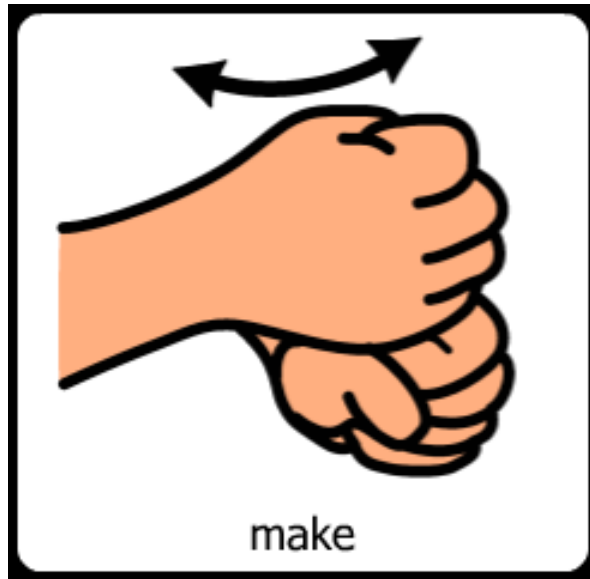
Quiz Questions about today's lesson:

1. Which vocab word means "another word for power"?



Quiz Questions about today's lesson:

2. Fill in the blank: Energy can _____ into electricity.



We are ALL DONE!

- Teacher says “_____ is All Done! Time for _____!”
- Teacher says “Everyone check schedule!”
- Teacher changes the classroom schedule.
- Paras will assist individual students with checking schedules.



Visuals to use during story (optional)

