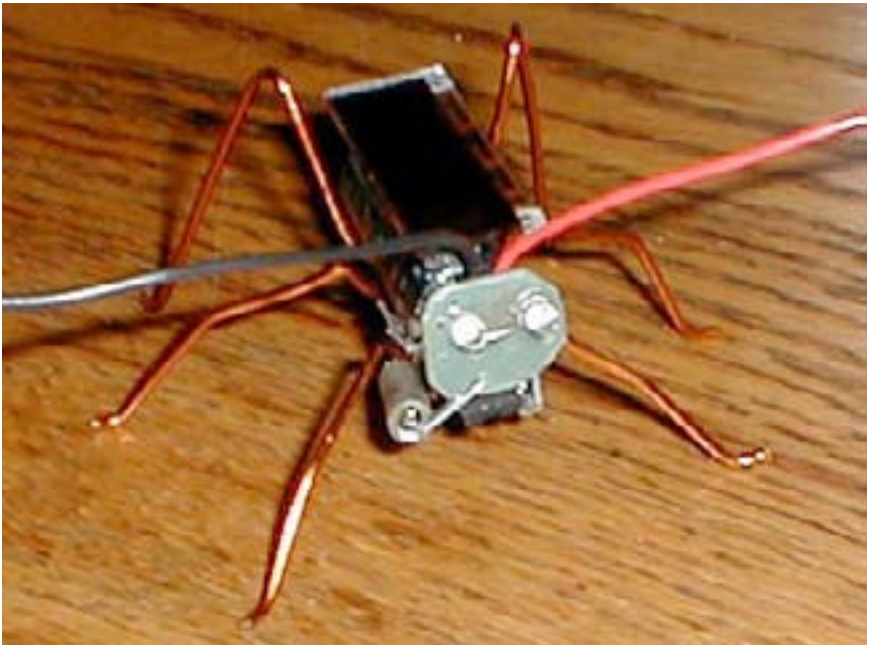


How does electricity flow through a circuit?



MSELL is a collaborative grant with Sam Houston State University and Texas A&M University funded by the National Science Foundation.

Dear Family,

Your child is learning about the changing forms of energy. We are learning the parts of a simple circuit, how electricity flows through a circuit, and what would happen if the circuit was missing.

In addition, your child is learning many new vocabulary words that describe energy. Help your child to make these words a part of his or her own vocabulary by using them when you talk together about the energy you use every day.

WORD

DEFINITION

identify

to give the name of something or to recognize something

demonstrate

to show clearly

circuit

a closed path through which electricity travels

electromagnet
(magnetic effects)

magnet created by an electric current, an electromagnet can be turned on or off

The following pages include activities that you and your child can do together. By participating in your child's education, you will help to bring the learning home.

Riddles

Q: Why did the foolish gardener plant a light bulb?

A: He wanted to grow a power plant.

Q: How did Benjamin Franklin feel when he discovered electricity?

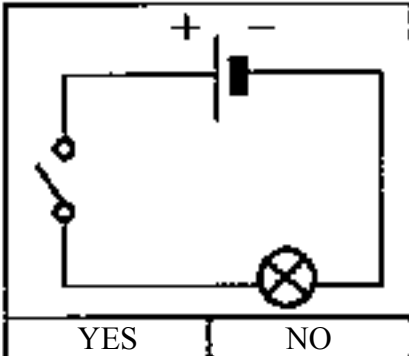
A: He was shocked!

Science Activity

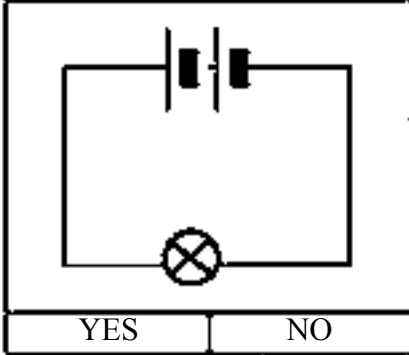
Will these circuits work?

1. Look at each circuit diagram below.
2. Do you think the bulbs will light?
3. Circle Yes or No below each diagram.

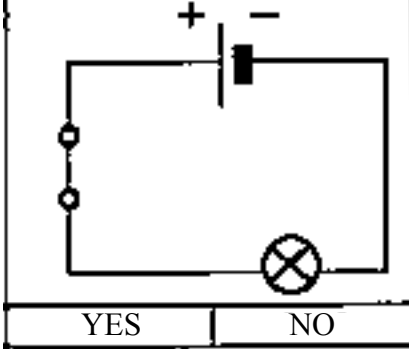
A.



B.



C.



Answers: A. No, B. Yes, C. Yes

Take Home Booklet

Forms of Energy-2

Helper's Signature _____

Helpers, please rate the activities in this booklet:

1-poor 2-needs improvement 3-good 4-excellent
(Please circle one number on each line.)

My child's performance on these activities was: 1 2 3 4

The quality of these activities was: 1 2 3 4

Once you have completed all the activities and experiments, complete this section, cut along the dotted line, and return it to your teacher.

Student's Name: _____

I worked with my _____ (ex: mom, aunt, brother, guardian) on these projects.

Now that you've had fun learning about the changing forms of energy, let's see what you remember.

- ENERGY IS . . . (check one)
 - WHEN THE SURFACES OF TWO OBJECTS RUB AGAINST EACH OTHER.
 - THE ABILITY TO DO WORK.
- WHICH WILL NOT MAKE AN ELECTROMAGNET STRONGER? (check one)
 - USE A BIGGER BATTERY
 - REVERSE THE POLES OF THE MAGNET
 - USE A LARGER NAIL
 - ADD MORE COILS OF WIRE
- A LIGHT BULB WILL NOT LIGHT UP UNLESS THE ELECTRICAL CIRCUIT IS A _____ CIRCUIT. (fill in the blank)
- WHEN THINKING ABOUT HOW A TV OR HAIR DRYER WORKS, WHICH IS A TRUE FACT ABOUT ENERGY? (check one)
 - ENERGY MOVES FROM LOW TO HIGH
 - ENERGY IS NEVER USED UP
 - ENERGY COMES FROM THE SUN
 - ENERGY CAN CHANGE FORMS
- WHICH OF THESE ELECTROMAGNETIC CHARGES DOES NOT REPEL EACH OTHER? (check one)
 - + +
 - + -
 - -
- SOUND ENERGY IS CAUSED BY AN OBJECTS VIBRATIONS. (check one)
 TRUE FALSE