

## Flip the Switch

These questions will enable you to conduct a pre-assessment and post-assessment of your students' knowledge of electricity. The questions are directly related to the subject matter taught in the program. An answer key is provided. Please comment on the value of this material when submitting the program evaluation form.

1. Which part of an atom is directly related to electricity?
2. How do like charges react to one another?
3. How do opposite charges react to one another?
4. What are the two types of electricity? Give an example of each.
5. When a student touches the Van de Graaf generator, what happens to them?
6. What happens when a circuit is broken?
7. List 2 things that will conduct electricity.
8. List 2 things that will insulate against electricity.
9. Where is current electricity that we use in our homes generated?
10. Why should we try to conserve electricity?

## Answer Key

1. electrons
2. repel from each other
3. attract to each other
4. static – shock from doorknob, lightning  
current – electricity to run lightbulb, appliances
5. their hair stand up, the extra electrons are trying to find protons
6. the electricity cannot flow, therefore the appliance or light goes off
7. aluminum foil, metal spoon, coin, paperclip
8. cardboard, rubberband, plastic spoon
9. power plant
10. lower electricity bill, sometimes power plants burn coal which can cause pollution