## **Electricity WebQuest**

Part 1: www.sciencemadesimple.com/static.html

1. An atom that loses electrons has a \_\_\_\_\_\_ charge and an atom that gains electrons has a \_\_\_\_\_\_ charge.

Charged atoms are called \_\_\_\_\_.

- 2. What is an insulator? Give 4 examples.
- 3. What is a conductor? Give an example.
- 4. How can we move electrons from one place to another? What actually causes the electrons to move?
- 5. Static electricity is \_\_\_\_\_
- 6. Explain the attraction and repulsion of charges.
- 7. Why does a balloon stick to the wall?
- 8. Why does your hair stand up when you take off your hat?
- 9. Why do you get a shock when you walk across a carpet?
- 10. When is static electricity most noticeable and why?
- 11. State the Principle of Conservation of Charge.

12. The invisible electric force field around charged objects depends on \_\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_\_\_,

13. What is the relationship between the charges and the field strength?

What is the relationship between the field strength and the distance between the charges?

Part 2: www.school-for-champions.com/science/dc.htm

1. What is DC?

What is AC?

- 2. Name 3 ways to get DC.
- 3. What is an electrical circuit?
- 4. What is voltage?

What is current?

What is resistance?

What causes heat and light in a wire?

5. Which electricity do we use in our homes?

## CLICK ON ALTERNATING CURRENT

- 1. Explain AC.
- 2. Who invented the light bulb?
- 3. Who really invented AC?
- 4. Who discovered the advantages of AC over DC?
- 5. How is AC made?
- 6. What is the main advantage of AC over DC?