

## **Take the Safety Hound Quiz!**

*(Some questions may have more than one answer.)*

### **1) What is a conductor of electricity?**

- a) Someone who directs an orchestra that play electric instruments.
- b) Something electricity travels through.
- c) The person who collects tickets on an electric-powered passenger train.

### **2) What is an insulator of electricity?**

- a) A material that keeps the power line from freezing.
- b) A material such as fiberglass or rubber that keeps electricity from travelling freely.

### **3) You are outside with your younger brother flying a new, kite he got for his birthday. Suddenly a blast of wind changes the kite's direction and it makes a rapid dive into a power line. What will you do?**

- a) Tell him to just let it go...turn it loose!
- b) Tell him to try making the kite go in another direction.
- c) All of the above.

### **4) The kite contacts the power line and hangs there. Do you...?**

- a) Try to dislodge and pull on the string.
- b) Leave it hanging and call the electric company.
- c) All of the above.

### **5) You called the electric company and told them your kite is caught in their power line. What will they do?**

- a) Tell you if they come out there will be a charge for removing it.
- b) Tell you to leave it alone and they will remove it for you at no charge.

**6) The electric company said you were smart because you didn't touch the string of the kite. Why is that dangerous?**

- a) You could get tangled in the string, fall and hurt yourself.
- b) Pulling the string could make the kite fall and become damaged.
- c) Moisture conducts electricity, the string could be damp and become a conductor.
- d) Electricity could travel through the string. You could be seriously injured or killed.
- e) All of the above.

**7) You and your friends are searching for a good tree for a treehouse. They find one with strong limbs which are close to the ground, but the tree is so tall that it's grown into a power line. What do you do?**

- a) Tell your friends a power line is touching the tree, but it's safe to climb on the opposite side of the power line.
- b) Tell your friends the tree limbs contain moisture and can conduct electricity; this is too dangerous and we should find another tree.
- c) All of the above.

**8) Electricity is always searching for...?**

- a) A power pole and an electric meter.
- b) The ground.
- c) A substation so it can send electricity to your home.
- d) All of the above.

**9) Electricity travels through conductors. Select three conductors of electricity.**

- a) A concrete block, a goat, a tree.
- b) A tire, a fiberglass fishing pole, a telephone.
- c) A piece of iron pipe, a bucket of water, a man.
- d) All of the above.

**10) Why are birds on power lines not electrocuted?**

- a) They have three toes.
- b) They have thick leather feet.
- c) They are not grounded.
- d) All of the above.

**(Answers below)**

## **ANSWERS**

**1-B:** Electricity must have a way to get from one place to another. It travels through a CONDUCTOR.

**2-B:** An insulator keeps electricity contained within a specific place. UCEMC line workers wear RUBBER GLOVES. The gloves are made from a special rubber that insulates them from electricity. Never try this using dishwashing gloves or any rubber glove. They are not designed for electrical work. You could be injured or die.

**3-A:** The kite string could contact high voltage electricity and travel into your body. You could be injured or die.

**4-B** Call UCEMC. We are trained and have proper equipment to remove the kite.

**5-B** The electric company, UCEMC, wants you to be safe! We will remove the kite at no charge.

**6-C:** Moisture (water) could be in the string. If you touch the string electricity could travel through your body. You could be injured or die.

**7-B:** Moisture (water) conducts electricity. The water in the ground travels into the roots, trunk, limbs and leaves. Water conducts electricity!

**8-B:** Electricity must always contact something grounded to work. When grounded the electricity makes a circuit or path to operate.

**9-C:** Three conductors are: metal, people and water. Our body contains about 65% water and that makes us great conductors of electricity!

**10-C:** Birds sit on power lines and are not shocked because they are not touching the ground (That includes anything contacting the ground, even the overhead wires). Yes, birds can sit on a high voltage line and not be shocked unless they touch the ground. The "ground" can be another wire near where they are sitting. Touching that grounded wire will electrocute them.

