

Test Your Electrical Savvy

On February 11, 1847 the genius inventor of the electrical age, Thomas Edison, was born. Nearly 160 years later, his most famous invention, the light bulb, still has an essential place in the home. With often no more than four hours of sleep per night and his personal creed of, "Genius is 1 percent inspiration and 99 percent perspiration," his work with electricity is legendary.

For all the work done by Edison and his predecessors, most people know only as much about electricity as is absolutely necessary to go about their daily lives; in other words, not very much. But ignorance isn't always bliss. A little information can prevent shocks and reduce power bills. Here are a handful of true/false questions to test your Electrical IQ:

1. If lights flicker or dim repeatedly, you should call an electrician.

TRUE. "Anytime you're getting flickering or dimming lights, there is a problem and you should call your electrician," said Douglas Sutton, Sr., president of Sutton Siding and Remodeling in Springfield, Ill. "Power outages due to power line accidents, strong wind, storms or extreme heat can cause brief interruptions. Customers can call their power company to find out details on the situation, or check their circuit boxes for those outages. But flickering or dimming lights signifies an overload, and a professional should be contacted." You should also call your electrician if you are constantly resetting circuit breakers or changing fuses, smell burning electricity or need to replace faulty wiring.

2. It's cheaper to leave fluorescent lights on when exiting a room than it is to turn them back on when you return.

FALSE. This is a commonly held belief, based on the erroneous notion that fluorescent bulbs use a lot of power to get started. While it is true that a compact fluorescent bulb does require a brief surge when switched on, it works out to be around the same amount of energy as five seconds of normal use, according to the Environmental Protection Agency (EPA). So turning the lights off for more than five seconds will save more energy than leaving them on.

2. House wiring never needs replacing.

FALSE. Depending on the amount of use, insulation on house wires can become frayed or broken, creating a fire hazard. If you have any doubts about your wiring, have a qualified electrician perform a complete inspection. Houses built between 1965 and 1973, in particular, are at risk because many were built with aluminum wiring, which the U.S. Consumer Product Safety Commission says is 55 times more likely to reach "fire hazard conditions" than regular copper wire.

3. A circuit breaker is not designed to protect against a ground fault.

TRUE. Circuit breakers are designed to protect against high levels of electrical current caused by a short circuit. Ground Fault Circuit Interrupters (GFCIs) protect against ground faults, when current leaking from an appliance goes to ground through a person touching the appliance. Even a small amount of current passing through a person this way can be lethal; a GFCI will trip if there's a ground fault, whereas a circuit breaker won't.

4. A two-parter: Computer screen savers save energy, and your computer will last longer if you leave it on all day, instead of shutting it off when you're not using it.

FALSE AND FALSE. Screen savers only save screens, not energy. If you want to save energy, turn the monitor off. In fact, the EPA recommends you turn the computer off, too, if you aren't going to use it within a half hour. They claim the lifetime of the hard disc is limited by use, rather than start-ups.

5. You can damage a power tool by using the wrong size extension cord.

TRUE. If your electric lawn mower, hedge trimmer, or leaf blower doesn't get enough power, either because the extension cord is too thin or too long to deliver it, it can damage and eventually destroy the motor. Also, overloading an extension cord can cause a fire or shock hazard. Be sure to use a cord rated to provide the proper amperage the tool requires, listed on the tool.

Remember, when dealing with electrical issues in your home, safety should be your number one priority. "We've seen homeowners put themselves in dangerous situations by thinking they could do a job cheaper by themselves," said Frank Malpere, Jr., owner/president of Quality Building and Remodeling in Effort, Pa. "If it's more than changing a light bulb, call a professional. Or take a how-to class at a local community college."

Just a little electrical knowledge can go a long way. **You can find qualified electrical contractors through the Greater Hattiesburg Home Builders Membership.** On our home page (www.hattiesburgbuilders.org) click on the "Members" tab and search for an electrician.