



Home Electrical Safety Challenge



Home Electrical Safety Challenge

Why is there a different kind of outlet in my bathroom? What does that "TEST" button do? Why does the circuit breaker trip every time my portable air conditioner comes on? What's the difference between a power strip and a surge protector?

Do you know everything you should about your home's electrical system and the electrical products you use in it every day? If you're like most people, the answer is probably "no." It's time to change that. Electrically-related home fires and incidents result in hundreds of deaths, thousands of injuries and more than a billion dollars in property damage each year. A healthy respect for electricity and a basic knowledge of electrical safety practices can help keep your home and family safe from electrical hazards all year long.

The Home Electrical Safety Challenge provides a simple exercise to help you give your home an electrical safety "check-up." Each week during National Electrical Safety Month, use the Challenge worksheets in this section to take a look at a different area of your home. Learn to identify potential electrical hazards and correct them. Making a few easy changes to improve safety can also lead to increased energy efficiency and savings on your utility bills.

Is your home ready for the challenge?

The Home Electrical Safety Challenge was developed to help raise awareness about potential home electrical hazards. This exercise is not a substitute for an electrical system inspection performed by a licensed, qualified electrician.

Many of the conditions that cause electrical fires and incidents can be detected during a home electrical system inspection.

ESFI recommends that you have an electrical system inspection conducted if:

- Your home is 40 years old or older
- You purchase a previously-owned home
- Your home has undergone a major renovation
- You have added major new appliances in the last 10 years



Use this worksheet to help you evaluate the electrical safety of your kitchen. Mark your answers below. Then, check them against the ESFI-recommended answers on the Answer Key. Visit ESFI's *Virtual Home* at http://virtualhome.esfi.org to learn more about home electrical safety.

Week 1: Cooking Up Safety in the Kitchen

- ΥΝ
- I. Are the range, oven, and exhaust hood clean and free of debris?
- 2. Is the cooking area around the range/oven clear of combustibles, such as towels, napkins, and pot holders?
- **3**. Is there enough room to allow for air circulation behind the refrigerator?
- 4. Are the refrigerator coils free of dirt buildup that reduces efficiency and creates a fire hazard?
- **5**. Are there electrical appliances placed near the sink?
- 6. Have you tested your ground fault circuit interrupters (GFCIs) this month?
- 7. Do you plug all of your counter top appliances into GFCI-protected outlets?
- 8. Are all electrical cords in good condition with no signs of fraying, cracking, or other damage?
- 9. Are there any appliance cords placed close to a hot surface like the toaster, oven or range?
- 10. Do you have appliance cords that are dangling from counters or tables where they could be pulled on or tripped over?
- □ □ 11. Do you leave your toaster, coffee maker, and other counter top appliances plugged in when you are not using them?



Use this worksheet to help you evaluate the electrical safety of your family room. Mark your answers below. Then, check them against the ESFI-recommended answers on the Answer Key. Visit ESFI's Virtual Home at http://virtualhome.esfi.org to learn more about home electrical safety.

Week 2: Plug Into Safety in the Family Room

- ΥΝ
- 1. Is your home equipped with tamper resistant receptacles (TRRs) to reduce the risk of electric shock injuries to children?
- 2. Are all of your light switch and outlet cover plates in good condition and not cracked or broken?
- **3**. Are any of the light switch plates or outlet cover plates hot to the touch?
- 4. Is furniture arranged so that outlets are available for all of your lamps, entertainment equipment, and appliances without the use of extension cords?
- **5**. Are you using an extension cord as a permanent power solution?
- 6. Do you check extension cords before each use to ensure they are in good working order with no signs of fraying, cracking, or other damage?
- 7. Are you using power strips because you have too few outlets to meet your needs?
- 8. Do you know the capacity of the circuit to which your power strip is connected and the power requirements of the equipment being plugged in?
- 9. Is your computer and other electronic equipment protected from power surges by a surge protector?
- 10. Does your surge protector have cable and phone jacks to provide protection for your phone, fax, modem, cable receiver, and television?
- 11. Is your surge protector plugged directly into a three-prong grounded outlet?
- 12. Do your entertainment center and computer equipment have plenty of space around them for ventilation?
- 13. Are liquids, including drinks, kept away from electrical items like televisions and computers?





Use this worksheet to help you evaluate the electrical safety of your bedroom. Mark your answers below. Then, check them against the ESFI-recommended answers on the Answer Key. Visit ESFI's Virtual Home at http://virtualhome.esfi.org to learn more about home electrical safety.

Week 3: Wake Up to Safety in the Bedroom

ΥΝ

- 1. Do you have working smoke alarms in each bedroom, outside each sleeping area, and on every level of your home?
- 2. Have you tested your smoke alarms this month?
- 3. Are combustibles like paper or fabric located near your lamps or light bulbs?
- 4. Do you know the recommended bulb wattages for your light fixtures?
- 5. Are you using bulbs with the correct wattage?
- 6. Are all light bulbs screwed securely into the sockets?
- **7**. Is your portable air conditioner plugged into its own dedicated circuit?
- 8. Have you cleaned your portable air conditioners in preparation for the summer season?
- 9. Does your ceiling fan have a wobble?
- 10. Have you dusted/cleaned your ceiling fan recently?
- 11. Do you leave portable electronic devices and/or their battery chargers plugged in even after they are fully charged?





Use this worksheet to help you evaluate the electrical safety of your basement. Mark your answers below. Then, check them against the ESFI-recommended answers on the Answer Key. Visit ESFI's Virtual Home at http://virtualhome.esfi.org to learn more about home electrical safety

Week 4: Build a Foundation of Safety in the Basement

- ΥΝ
- 1. Does your circuit breaker box have a label to indicate when your last electrical system inspection took place?
- 2. Are all of your circuit breakers labeled to indicate their correct amperage and which outlets/circuits/rooms they service?
- 3. Have your standard circuit breakers been replaced with arc fault circuit interrupters (AFCIs) that offer a higher level of fire protection?
- 4. Did you test your AFCIs yet this month?
- 5. Have you ever received even a slight shock from one of your large appliances?
- 6. Do your washing machine and/or dryer move or vibrate excessively when operating?
- **7**. Is the area around your dryer clean and free of clutter?
- 8. Do you clean your dryer lint filter after each load?
- 9. Did you have your furnace cleaned and inspected by a licensed, qualified professional yet this year?
- 10. Is your furnace properly vented to the outside?
- 11. Do you have a working carbon monoxide alarm on each level of your home and outside each sleeping area?
- □ □ 12. Is the temperature on your water heater set to 120° Fahrenheit or below?





Home Electrical Safety Challenge – Answer Key

Is there more you should do to ensure the electrical safety of your home and family? Check your answers against the ESFI-recommended answers below. Add up the total correct answers at the bottom to find out if your home was up to the Challenge!

Kitchen

1-Yes; 2-Yes; 3-Yes; 4-Yes; 5-No; 6-Yes; 7-Yes; 8-Yes; 9-No; 10-No; 11-No

Family Room

1-Yes; 2-Yes; 3-No; 4-Yes; 5-No; 6-Yes; 7-No; 8-Yes; 9-Yes; 10-Yes; 11-Yes; 12-Yes; 13-Yes; 14-No

Bedroom

1-Yes; 2-Yes; 3-No; 4-Yes; 5-Yes; 6-Yes; 7-Yes; 8-Yes; 9-No; 10-Yes

Basement

1-Yes; 2-Yes; 3-Yes; 4-Yes; 5-No; 6-No; 7-Yes; 8-Yes; 9-Yes; 10-Yes; 11-Yes; 12-Yes

Kitchen Correct Answers:	
Family Room Correct Answers:	
Bedroom Correct Answers:	
Basement Correct Answers:	
Total Correct Answers:	

Home Electrical Safety Challenge Scoring

44 or more correct answers: Keep up the good work! Continue to make electrical safety a priority in your home.

37 to 43 correct answers: You're off to a good start. Focus on the areas where you didn't score as well. A few simple changes can make a big difference in safety.

36 or fewer correct answers: You've got some work to do. Consider having a licensed, qualified electrician help you improve the electrical safety of your home.

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