

Electrical Safety Inspection

Outlets

Check for outlets that have loose fitting plugs, which can overheat and lead to fire. Have an adult replace any missing or broken wall plates. Make sure there are safety covers over unused outlets that are accessible to children.

	Any problems?	Was it Fixed?
Loose fitting plugs?		
Missing or broken wall plates?		
Safety covers?		

Cords

Make sure cords are in good condition and not frayed or cracked. Make sure they are placed out of traffic areas where people can trip over them or small children can reach them. Cords should never be nailed or stapled to the wall, baseboard, or other object. Do not place cords under carpets or rugs or put furniture on top of them.

	Any problems?	Was it Fixed?
Cords in good condition?		
Cords out of traffic areas?		
Cords stapled to wall, baseboard,...		
Cords under carpets, rugs, or furniture?		

Extension Cords

Check to see that cords are not overloaded. Extension cords should be used on a temporary basis; they are not intended as permanent household wiring. Make sure extension cords have safety closures to help prevent small children from electrical burns on their mouths and other injuries.

	Any problems?	Was it Fixed?
Overloaded extension cords?		
Safety Enclosures?		

Plugs

Make sure your plugs fit your outlets. Never remove the ground pin (the third prong) or try to make a three-prong plug fit into a two-conductor outlet. This could lead to an electrical fire. Never force a plug into an outlet if it does not fit. Plugs should fit securely into outlets. Avoid overloading outlets with too many appliances.

	Any problems?	Was it Fixed?
Removed ground plugs?		
Overloaded outlets?		

Ground Fault Circuit Interrupters (GFCIs)

GFCIs can help prevent electrocution. They should be used in any area where water and electricity may come into contact. When a GFCI senses current leakage, it assumes a ground fault has occurred. It then interrupts power fast enough to reduce the chance of serious injury from electrical shock. Test GFCIs frequently according to the manufacturer's instructions and after major electrical storms to make sure they work properly.

	Any problems?	Was it Fixed?
GFCIs in areas where there is water?		
Test GFCIs. Are they working?		

Light bulbs

Check the wattage of all light bulbs in light fixtures to make sure they are the correct wattage for the rating of the fixture and any interconnecting wires. Replace bulbs that have a higher wattage than recommended. If you do not know the correct size, check with the manufacturer of the device. Make sure bulbs are screwed in securely; loose bulbs can overheat.

	Any problems?	Was it Fixed?
Bulb wattage acceptable for fixtures.		
Bulbs screwed in securely?		

Circuit Breakers/Fuses

Circuit breakers and fuses should have the correct size current rating for the circuit wiring and intended purpose. If you do not know the correct rating, have an electrician identify and label the rating to be used. Always replace a fuse with one of the same rating. Make sure everyone in your family knows where the main breaker is located and how to shut off power to your entire house in case of emergency.

	Any problems?	Was it Fixed?
Everyone knows where breakers are?		
Everyone knows how to shut off power?		

Plug-In Appliances

Check to make sure plug-in appliances such as hair dryers are not left plugged in where they can come into contact with water. If a plug-in appliance falls into water, NEVER reach in to pull it out, even if it is turned off. First, turn off the power source at the fuse box or breaker panel, and then unplug the appliance. If you have an appliance that has gotten wet, do not use it until it has been checked by a qualified repair person.

	Any problems?	Was it Fixed?
Plug-in appliances left near water?		
Everyone knows what to do if an appliance falls into water?		

Appliances

If any appliance repeatedly blows a fuse or trips a circuit breaker, or if it has given you an electric shock, unplug it and have it repaired or replaced.

	Any problems?	Was it Fixed?
Any appliance repeatedly blows a fuse or trips a circuit breaker?		

Entertainment/Computer Equipment

Check to see that the equipment is in good condition and working properly. Look for cracks or damage in wiring, plugs, and connectors. Always use a surge protector bearing the seal of a nationally recognized certification agency to protect your electronic devices from unexpected bursts of voltage that could otherwise cause damage.

	Any problems?	Was it Fixed?
Equipment in good condition?		
Cracks or damage in wiring, plugs, or connectors?		
Do you have a surge protector?		

Outdoor Safety

Electric lawn mowers and electric power tools should not be used in rain, on wet grass, or in wet conditions. Inspect power tools and electric lawn mowers before each use for frayed power cords, broken plugs, and cracked or broken housings. If a tool is damaged, stop using it immediately. Repair or replace it. Always use an extension cord marked for outdoor use and rated for the power needs of your tools. Unplug all portable power tools when not in use. When using ladders, stay away from overhead wires and power lines. Making contact with power lines can cause serious injury or death.

	Any problems?	Was it Fixed?
Power tools have frayed cords, broken plugs, or cracked or broken housings?		
Extension cords marked for outdoor use?		

Lightning

During electrical storms, do not use appliances such as hair dryers, toasters, radios, or bath or shower. Keep batteries on hand for flashlights in case of power outages. Use surge protectors on electronic devices, appliances, telephones, faxes, and equipment during an electrical storm.

	Any problems?	Was it Fixed?
Everyone knows not to use appliances during lightning?		
Batteries and flashlights available?		
Surge protectors on electric devices?		

Space Heaters

Space heaters are meant to supply supplemental heat. Keep space heaters at least 3 feet away from combustible materials such as bedding, clothing, draperies, furniture, or rugs. Do not use them in rooms where children are unsupervised. Turn off and unplug space heaters when they are not in use. Do not use space heaters with extension cords. Plug the heater directly into an outlet of a relatively unburdened circuit.

	Any problems?	Was it Fixed?
Space heaters 3ft from combustibles?		
Space heaters in children rooms?		
Space heaters with extension cords?		
Space heaters in a burdened circuit?		

Halogen Floor Lamps

Halogen floor lamps operate at much higher temperatures than standard incandescent light bulbs. Never place a halogen floor lamp where it can come into contact with drapes, clothing, or other combustible materials. Be sure to turn the lamp off when you leave the room and never use these types of lamps in children's rooms or playrooms. Consider cooler fluorescent floor lamps.

	Any problems?	Was it Fixed?
Halogen lamps near combustibles?		
Halogen lamps in children rooms?		

Electricity Meritbadge Worksheet

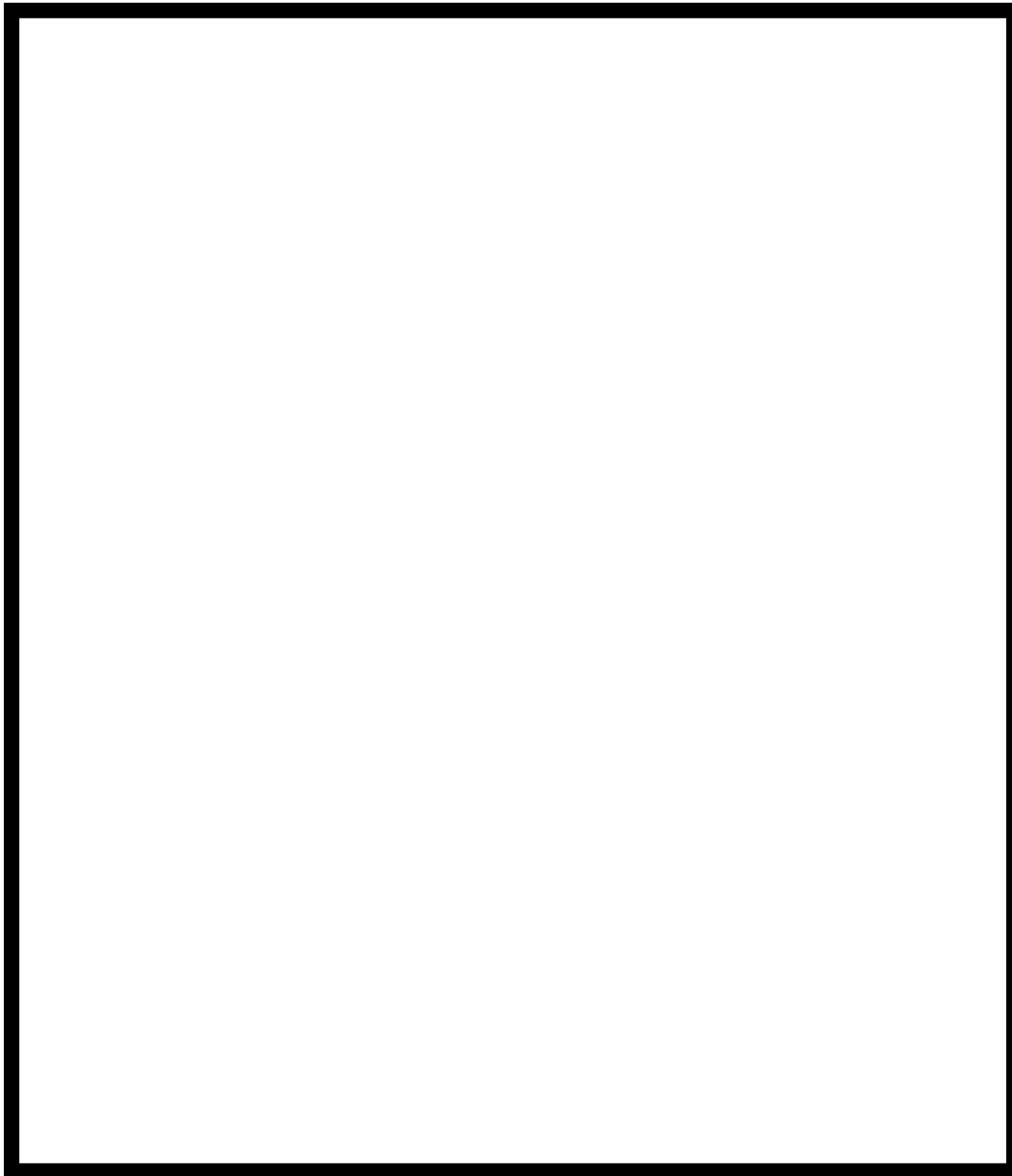
Name: _____

Mark on the drawing below the following information for one room:

- Lights
- Switches
- Outlets

Identify a circuit breaker for each of these items.

Room Description: _____



Do #9a and write down your family costs over past couple of months.

9a. Read an electric meter and, using your family's electric bill, determine the energy cost from the meter readings.