



# Fire Safety

## Virtual Merit Badge Workbook

This workbook can help Scouts to explain certain requirements but they still need participate in the virtual class and read the merit badge book.

Scout's Name: \_\_\_\_\_ Unit: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Phone No.: \_\_\_\_\_ Email: \_\_\_\_\_

**NOTE** The numbering of the requirements in this workbook matches the numbering used in the 2017 edition of *Boy Scout Requirements*. In the 2016 edition of the *Fire Safety* merit badge pamphlet, a few requirements are numbered differently. Requirement 3 is shown as requirement 3a, requirement 12 is shown as requirement 3b, and requirement 13 is shown as requirement 12. Other than the numbering, the requirements are identical.

1. Do the following:

- a. Demonstrate the technique of stop, drop, cover, roll, cover your face, and cool.

Explain how burn injuries can be prevented.


- b. List the most frequent causes of burn injuries.


c. Explain how to safely discard and store flammable liquids.


2. Explain the chemistry and physics of fire.


Name the parts of the fire tetrahedron.

1)	
2)	
3)	
4)	

Explain why vapors are important to the burning process.


Name the products of combustion.




4. Explain the role of human behavior in the arson problem in this country.


5. List the actions and common circumstances that cause seasonal and holiday related fires.


Explain how these fires can be prevented.

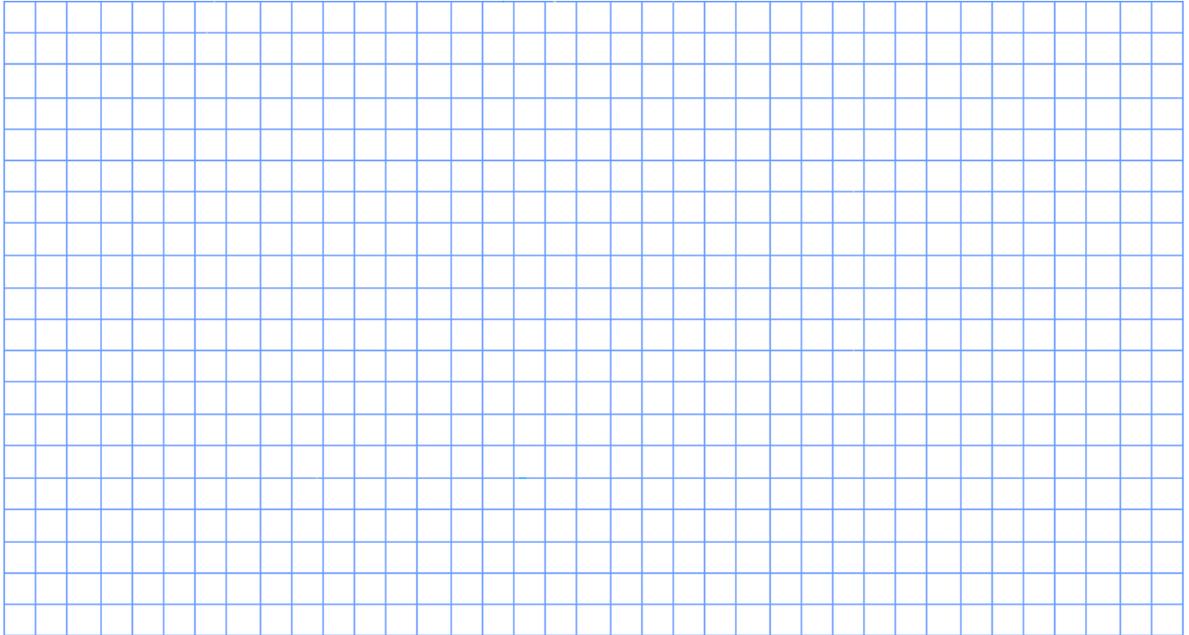

Fire Safety

- 6. Conduct a home safety survey with the help of an adult.  
(See the Sample Home Safety Checklist at the end of this workbook.)

Then do the following:

- a. Draw a home fire escape plan, create a home fire-drill schedule, and conduct a home fire drill.

- Home fire escape plan.



Home fire-drill schedule


- Conduct a home fire drill.
- b. Test a smoke alarm and demonstrate regular maintenance of a smoke alarm.
- c. Explain what to do when you smell gas and when you smell smoke.

Gas:


Smoke


d. Explain how you would report a fire alarm.


e. Explain what fire safety equipment can be found in public buildings.


f. Explain who should use fire extinguishers and when these devices can be used.


g. Explain how to extinguish a grease pan fire.


h. Explain what fire safety precautions you should take when you are in a public building.






- 11. Visit a fire station.

Identify the types of fire trucks.


Find out about the fire prevention activities in your community:


- 12. Determine if smoke detectors are required in all dwellings within your municipality. If so, explain which specific types are required. Tell your counselor what type of smoke detectors your house has or needs.


- 13. Choose a fire safety related career that interests you and describe the level of education required and responsibilities of a person in that position.

Career:

Education:

Responsibilities:


Tell why this position interests you.


When working on merit badges, Scouts and Scouters should be aware of some vital information in the current edition of the *Guide to Advancement* (BSA publication 33088). Important excerpts from that publication can be downloaded from <http://usscouts.org/advance/docs/GTA-Excerpts-meritbadges.pdf>. You can download a complete copy of the *Guide to Advancement* from <http://www.scouting.org/filestore/pdf/33088.pdf>.

## Sample Home Safety Checklist

Check safety steps that are being taken in your home. Write N/A if the item is not applicable. Items left blank may present a safety hazard. This list provides some sample safety steps you might take. See your Safety Merit Badge pamphlet and counselor for more information. Ask your parent or guardian before making any changes.

### **Stairways, Halls, and Outdoor Steps**

- Stairways with three or more steps have a strong handrail and slip resistant finish.
- Stairways & halls are kept free from boxes, toys, shoes, brooms, tools, and other tripping hazards.
- Gates at top and bottom of stairs prevent children from falling.
- The head and foot of stairs have no small or loose rugs.
- Stair carpeting or covering is fastened securely.
- Stairways & halls have good lighting, controllable at each end.

### **Kitchen**

- Matches are kept where children cannot get them.
- Emergency numbers are posted next to the telephone, including 911 and poison control.
- Knives & sharp instruments are kept in knife drawers or holder.
- Can openers don't leave sharp edges on cans.
- Disinfectants & cleaning products are out of reach of children.
- Pan handles are turned away from stove edges.
- Spilled grease, water, or bits of food are wiped up immediately.
- Pot holders are located near the stove, within easy reach.
- A dry chemical fire extinguisher is mounted near the stove.

### **Attic and Basement**

- Ladder is strong, solid, and sturdily constructed.
- Stairway is sturdy and well lighted.
- Children keep skates and play gear in a specific place.
- Walls and beams are free from protruding nails.
- Fuses or circuit breakers are the proper size.
- Rubbish & flammable materials are in covered metal cans.
- Wastepaper is kept away from furnace and stairs.

### **Living Room and Dining Room**

- Furniture is placed to allow easy passage in an emergency.
- Before bedtime, furniture placement is checked for orderliness.
- Furniture and woodwork solid, in good repair, and free from splinters and rough spots.
- Fireplace screen fits snugly.
- Rugs are fastened or laid on non-slip pads.
- Rugs are kept from curling at their edges.
- Wax on floors is thoroughly buffed.
- Fire in fireplace is extinguished at bedtime.
- Candles are in stable holders and fully extinguished after use, before bedtime, or before leaving home.

### **Bathroom**

- Tub and shower are equipped with strong handholds.
- Tub floor has non-slip surface.
- Poisons and dangerous chemicals are marked, sealed shut in original containers, and out of reach of children.
- Medicines are out of reach of children in childproof containers.
- No one takes medicine in the dark.

### **Bedroom**

- Smoke alarm has fresh battery or secure electrical connection & is tested regularly.
- Carbon monoxide detector has fresh battery or secure electrical connection and is tested regularly.
- Furniture placement for clear passage between bed and door.
- Light switch or lamp is within easy reach from bed.
- A night-light illuminates bedroom or hall.
- Bureau and dresser drawers are closed when not in use.
- Bar across upper bunk beds helps prevent falls.
- Children are taught not to lean against windows or screens.
- Low sill windows have sturdy screens to prevent children from falling out.
- Smoking in bed is prohibited.
- Gas and electric heating devices are turned off at bedtime.

### **Nursery**

- Bars on cribs are closely spaced – no more than 2 3/8" apart so baby's head cannot slip between them.
- Crib is approved by Consumer Products or similar.
- Crib is free from sharp edges or corners.
- Crib does not have a "drop" side.
- Sleeping garments and covers keep baby warm without danger of smothering.
- Pillows are kept out of bassinet or crib.
- No thin, plastic material is in or near the crib.
- No toys or objects in or near the crib or within reach of any child under 3 are less than 1 inch in diameter and 2 inches long.
- No toys or objects have small parts that can be removed.
- Children are taught not to give marbles, etc. to younger children.
- Toys are sturdy, do not come apart easily, & have no sharp edges or points.
- Nontoxic paint is used on baby furniture and toys.
- All houseplants are nonpoisonous.

## Sample Home Safety Checklist

### **Stoves, Furnaces, and Heaters**

- Stoves are away from curtains.
- Stoves & furnace pipes and flues are inspected & cleaned annually.
- Gas burners are properly adjusted and free from leaks.
- Gas water and space heaters are equipped with vents or flues.
- Water heater or boiler has a safety valve & is checked yearly.
- Water heater temperature is set below 120 degrees Fahrenheit to reduce the risk of serious burns.
- Flames of gas burners are protected from drafts.
- Insulating shield protects woodwork within 18" of furnace, etc.
- Keep flammable materials away from stoves, furnaces, etc.
- A wrench is stored near the shut-off valve of outside gas line.
- The flue is opened before using the fireplace.

### **Porch, Yard, and Garage**

- Railings and banisters are sound and inspected periodically.
- Steps and walks are kept free from ice and snow.
- Yard/play space are free from holes, stones, glass, etc.
- Tools and dangerous articles are out of reach of children.
- Dangerous products & chemicals are kept in original containers in locked storage areas.
- Wires and low fences are brightly painted or clearly marked.
- Wells, cisterns, and pits are kept securely covered.
- Disposable materials are not burned outside.
- An area is marked off in the garage for bicycles, wagons, etc.
- Lawn mower is equipped with proper safeguards.

### **Workshop**

- Good ventilation exists, especially when sanding or painting.
- Safety goggles or face mask, and hearing protection are worn when working with or around power tools, and an appropriate eyewash is available.
- Baking soda is kept handy to neutralize acid burns.
- All electrical tools are either grounded with three-wire plugs or are double-insulated.
- Work area is well lit & free of clutter, scraps, rags.
- All tools have a place & are in their place.
- Guards are in place on all power tools.
- A push stick is available for use with power saws.
- Tools are unplugged when not in use and before changing blades, servicing or repairing.

### **Electrical Devices and Fixtures**

- Electrical fixtures and appliances are located & used beyond arm's length of the sink, stove, tub, shower, or other grounded metal unless outlet is protected by a ground-fault interrupter.
- Do not touch electrical fixtures or appliances with wet hands.

- Disconnect seldom-used appliances when not in use.
- Household appliances are disconnected before repairs.
- Light bulbs are installed in all lamp sockets.
- All pull-type sockets have an insulating link.
- Frayed or worn electric cords are promptly replaced.
- Long trailing cords are not in evidence.
- Cords are kept out from under rugs, doors, and furniture.
- UA-approved extension cords are the proper size.
- Children are taught never to touch electric sockets or fixtures.
- Fuses are adequate for the load and are not bypassed.
- Circuit breakers are labeled and not overloaded.

### **General**

- Home has smoke and Carbon Monoxide detectors, with at least one smoke detector in each bedroom, near the kitchen, and in the basement & garage.
- Everything has a place and is in its place.
- Stepladders are in good repair and stored out of the way.
- Window screens and storm windows are securely fastened.
- Guns are stored unloaded and in locked cases.
- Guns and ammunition are stored separately.
- Children are permitted to use only blunt-end scissors.
- Housework clothing has no drooping sleeves, sashes, or frills.
- Shoes worn for housework have low heels.
- All shoes are in good repair.
- Kerosene, gasoline, paint thinners, and other volatile materials are stored outside in special, clearly marked metal containers.
- Oil mops, dust rags, painting equipment, and other oily materials are stored outside in open metal containers.
- Everyone turns on a light before entering a dark room.
- Matches are extinguished before they're thrown away.
- Children are never permitted to play with matches.
- Fire extinguishers are readily available and in good working order.

### **For Emergency**

- Know how to get emergency help (911, poison control, etc.).
- Be able to find water, gas, & electric shutoffs. Check annually.
- First aid kit approved by your doctor/American Red Cross.
- Know basic first aid procedures.
- Have a fire escape plan from your home.
- Emergency water supply.
- Handheld flashlights readily available.
- In earthquake-prone areas, make sure that the water heater and bookcases are bolted to the walls.

The use of this merit badge workbook is convenient and thorough, however it is not mandatory. Any Scout who wishes to communicate their work on this merit badge in an alternative manner should inform the Camp CIEC Staff at the time of registration. Otherwise we will assume that you will be using this workbook to assist you in your work towards this merit badge. All participants will be held to a high standard. To earn this merit badge participation is required. Completing this workbook alone does not guarantee getting the merit badge. Scouts will have 10 days from the first scheduled day of class to submit all work towards requirements for this merit badge to Camp CIEC Staff. After reviewing all of the Scouts work we will mail out blue cards informing Scouts of all the completed requirements. If the Scout completes all the requirements to the satisfaction of the merit badge counselor the blue card will also include the merit badge counselor's signature. While Camp CIEC Virtual Camp is on-going we will not be able to go back and review or sign off work from previous sessions. Scouts are expected to speak with their Scoutmaster who will assist them in finding a merit badge counselor to complete an unfinished merit badge. There is NO REFUNDS for online merit badge classes