

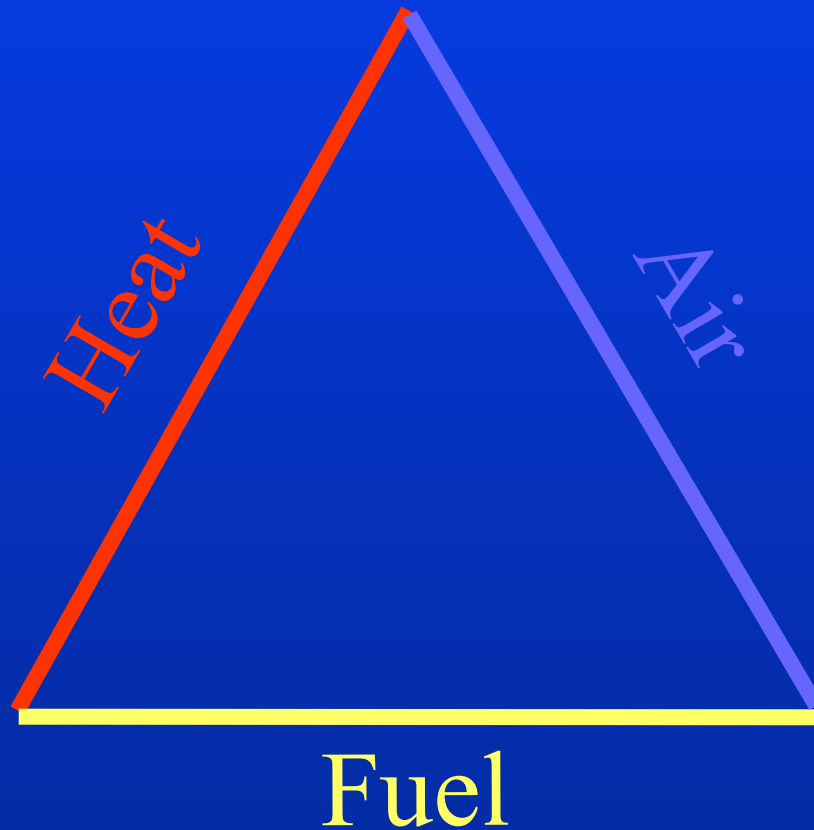
FIRE PREVENTION AND SAFETY IN THE HOME

Provided to You by
Lawrence Laviolette CD
Fire Safety Officer

COMMON SENSE !!

Prevents Fires

FIRE BASICS



- 🔥 HEAT
- 🔥 FUEL
- 🔥 OXYGEN

REMOVE THE FUEL, CUT OFF THE OXYGEN SUPPLY,
OR COOL THE TEMPERATURE OF THE FIRE.

HOW FIRE KILLS

🔥 SUFFOCATION

🔥 SMOKE AND POISONOUS GASES

- COMMON —Carbon Monoxide , Hydrogen Cyanide
Phosgene, Consuming O₂

🔥 HEAT

SMOKE DETECTORS

- THE FIRST LINE OF DEFENSE
- ON EVERY LEVEL OF YOUR HOME,
INCLUDING THE BASEMENT
- OUTSIDE OF EACH SLEEPING AREA
- MORE PREFERBLY IN EACH
BEDROOM



TYPES OF SMOKE DETECTORS

- 🔥 BATTERY POWERED-10 year Lithium
- 🔥 HOUSEHOLD ELECTRIC POWERED
- 🔥 IONIZATION SENSOR-PHOTO-
SENSOR

ULC & CSA APPROVED and TESTED



Smoke Alarm Installations

Single family, semi-detached and town homes, whether owner-occupied or rented.

■ Required (OFC-NFC)

- Between each sleeping area and the remainder of the dwelling unit
- If sleeping areas are served by hallways, the smoke alarm shall be installed in the hallway
- smoke alarms must also be installed on each storey of a dwelling unit that does not contain a sleeping area.



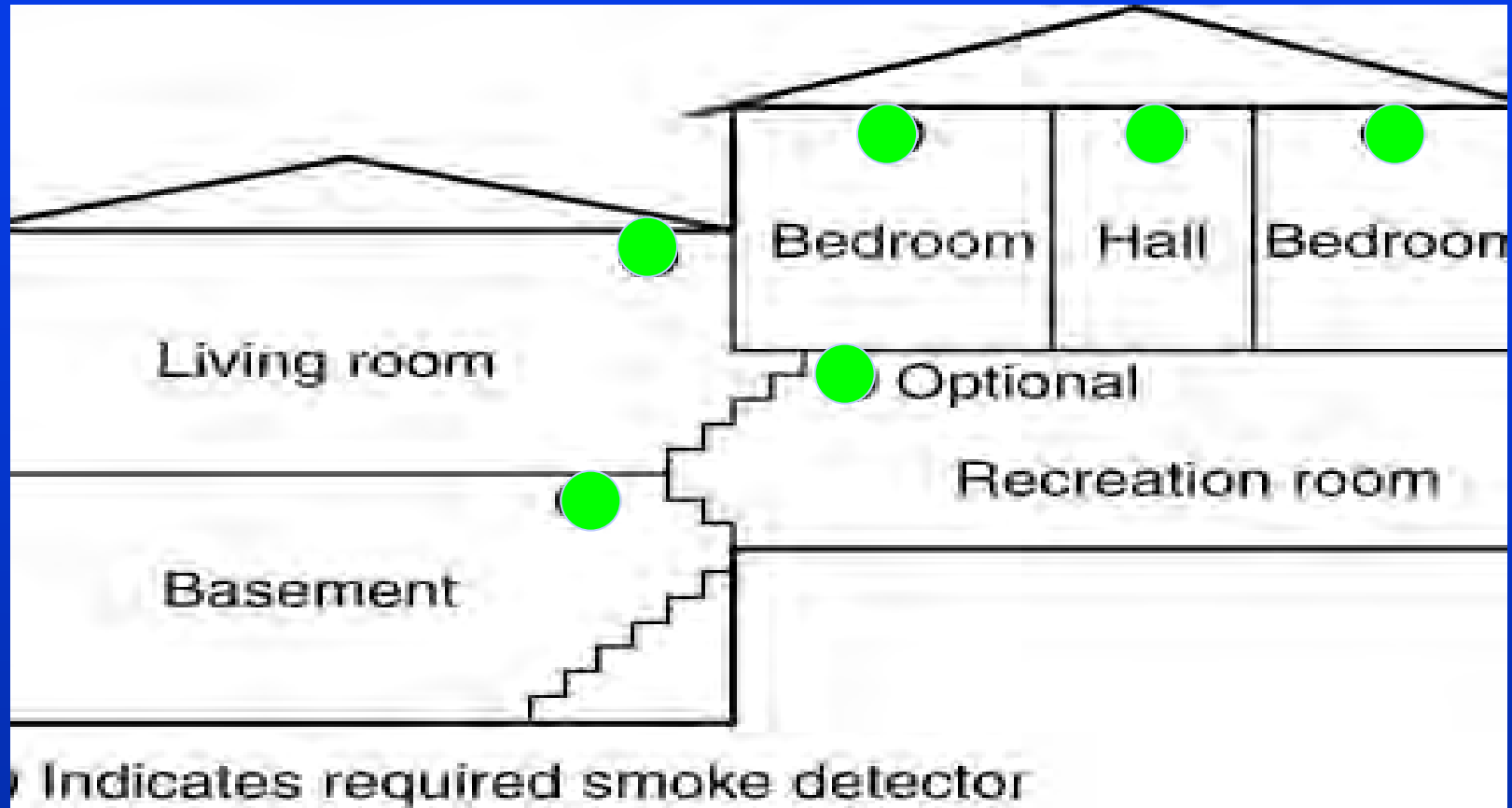
**In each bedroom
Areas separated by a
door from the required
locations**

Smoke Alarms are also recommended:



**Not recommended to be installed in
kitchens, attics or garages**

FIRE PREVENTION AND SAFETY IN THE HOME

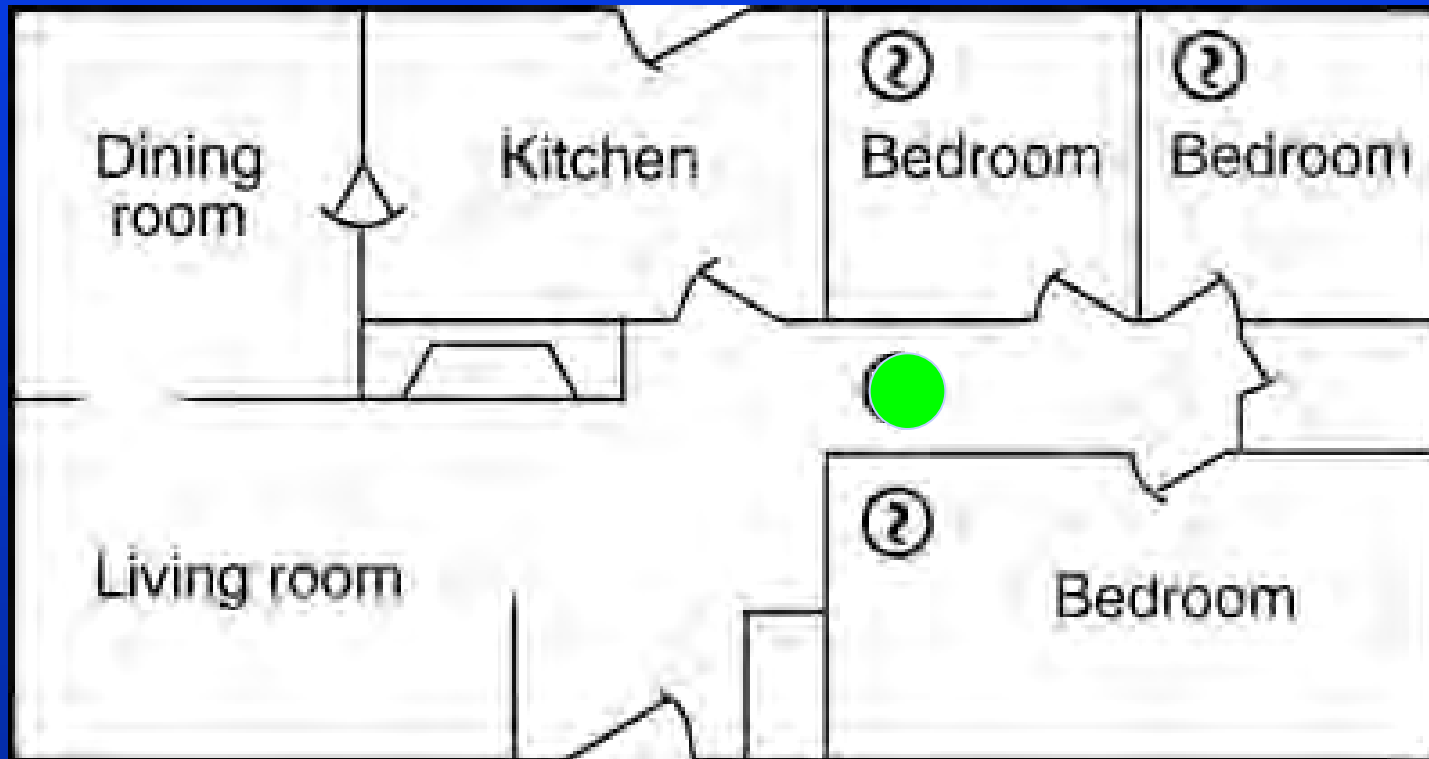


Locations

 Indicates Required Smoke Alarm



Locations

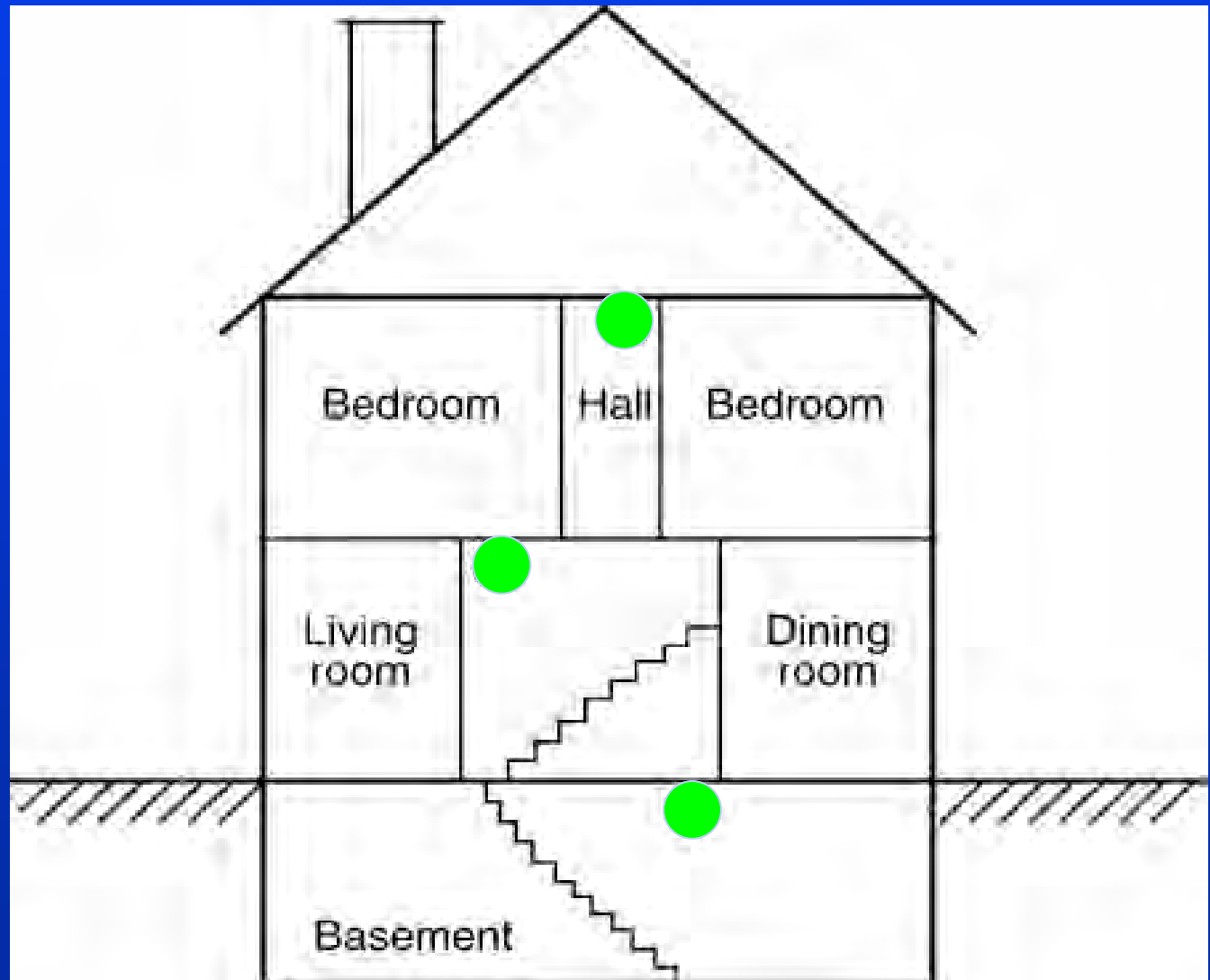


Indicates Required Smoke Alarm

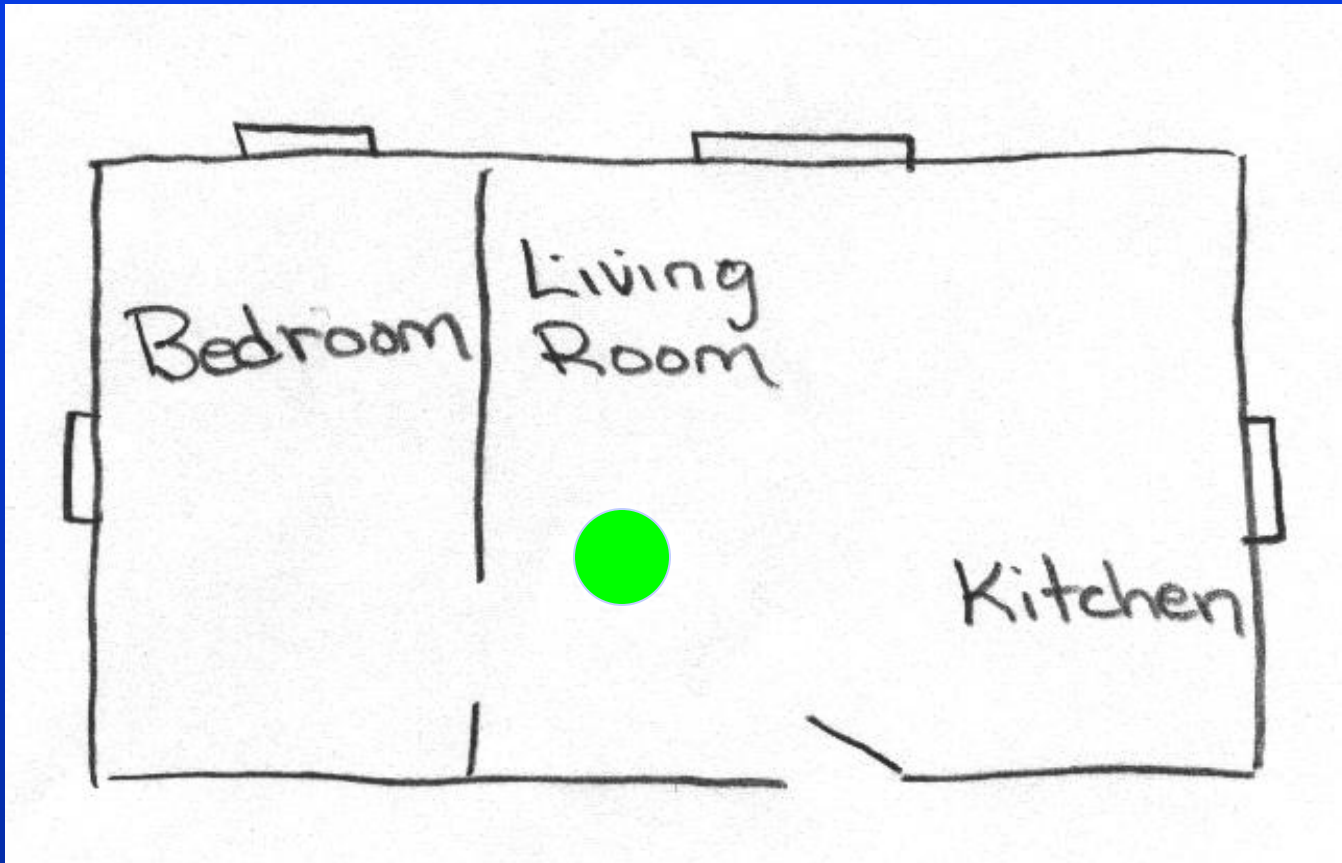


Locations

●
Indicates
Required
Smoke
Alarm



Locations ?

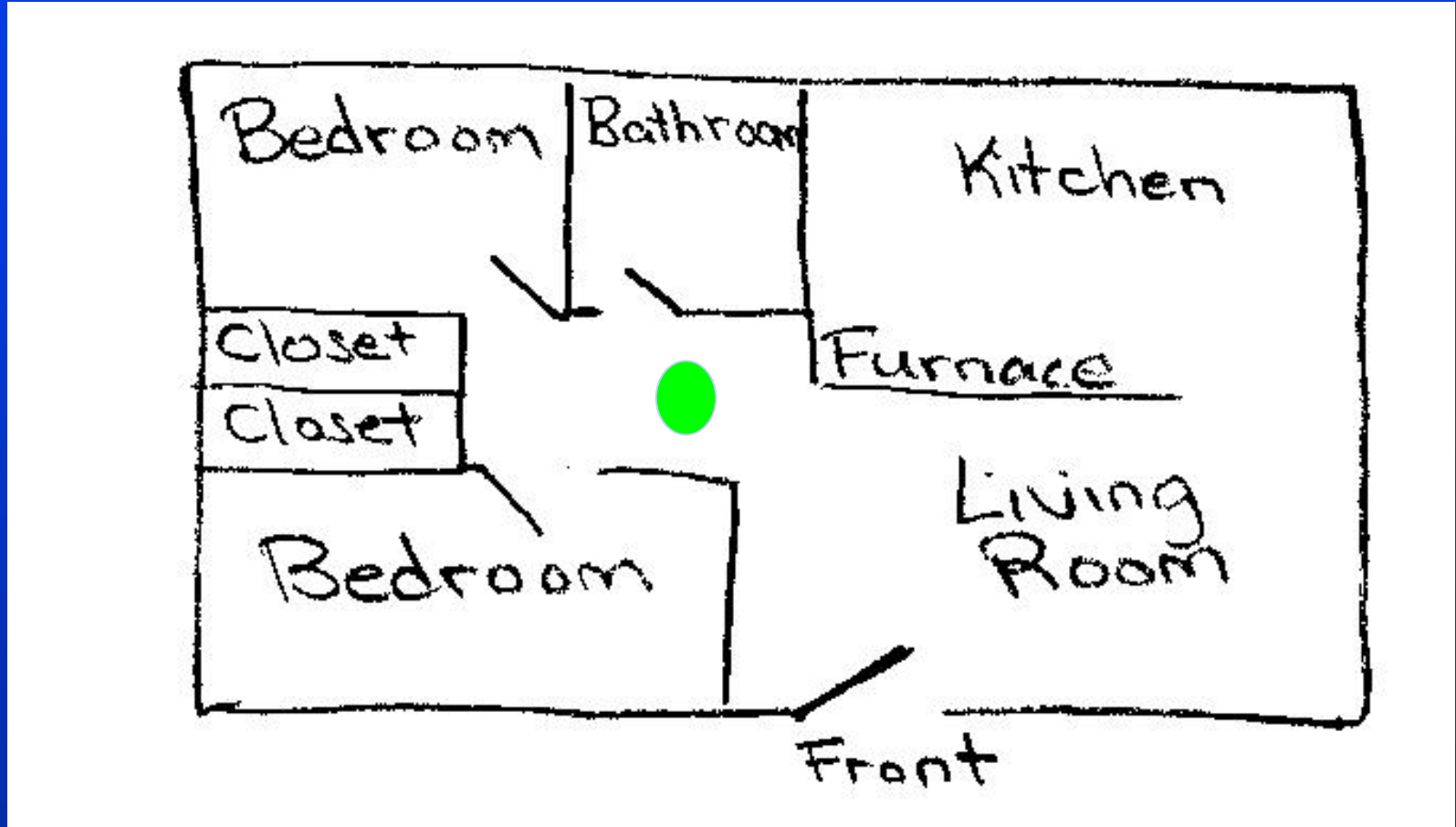


Where should the smoke alarm be installed?



FIRE PREVENTION AND SAFETY IN THE HOME

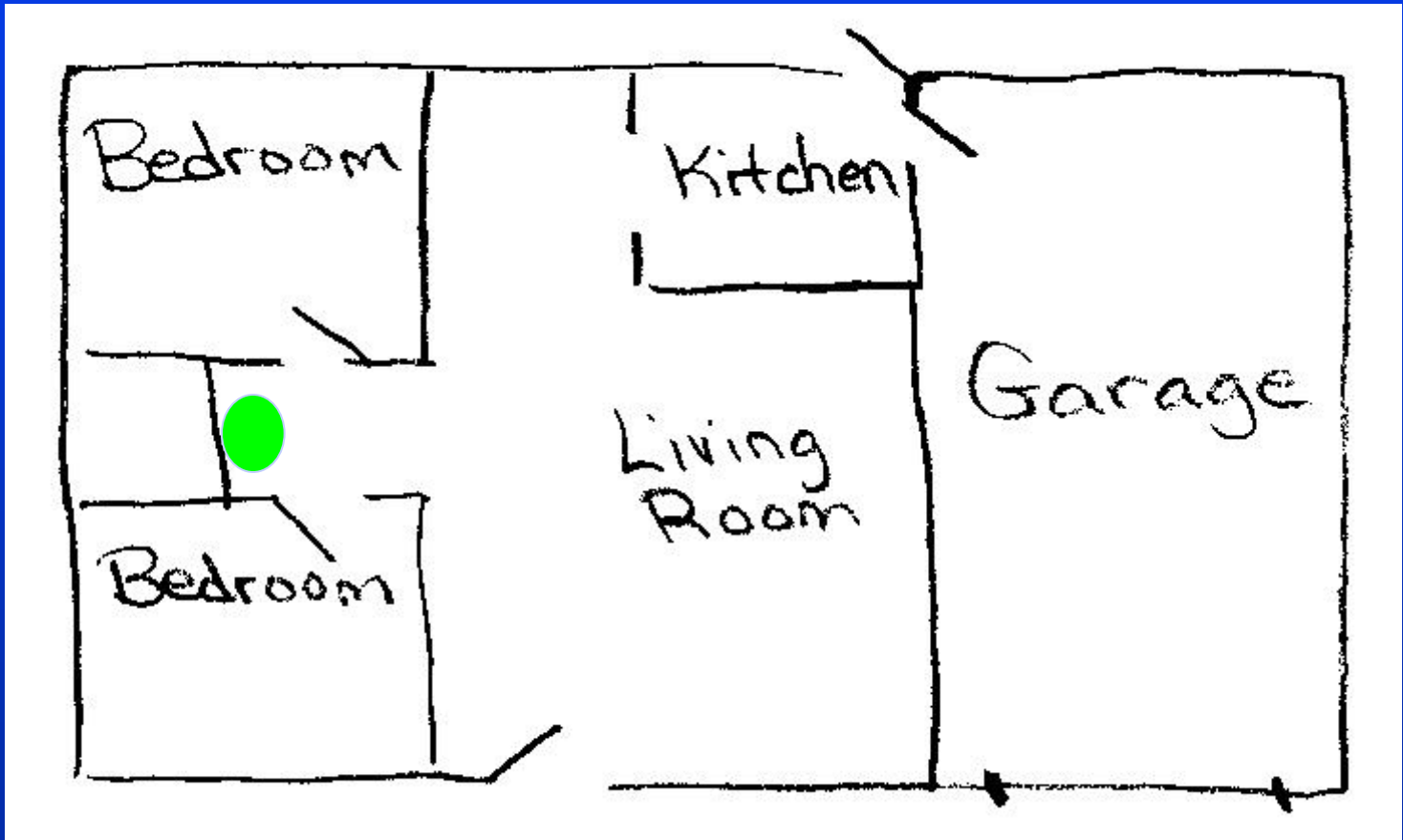
Locations ?



Where should the smoke alarm be installed?



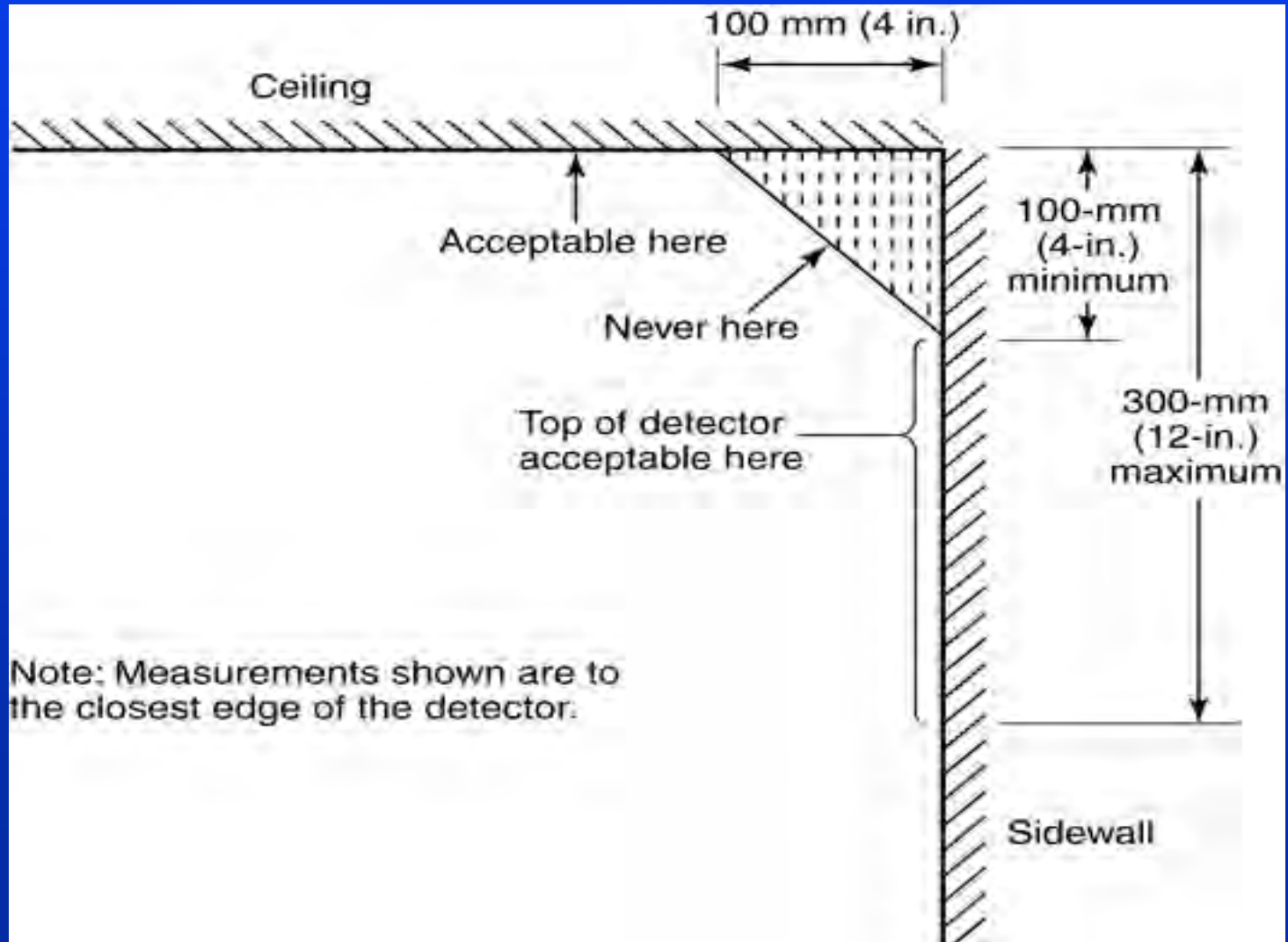
Locations ?



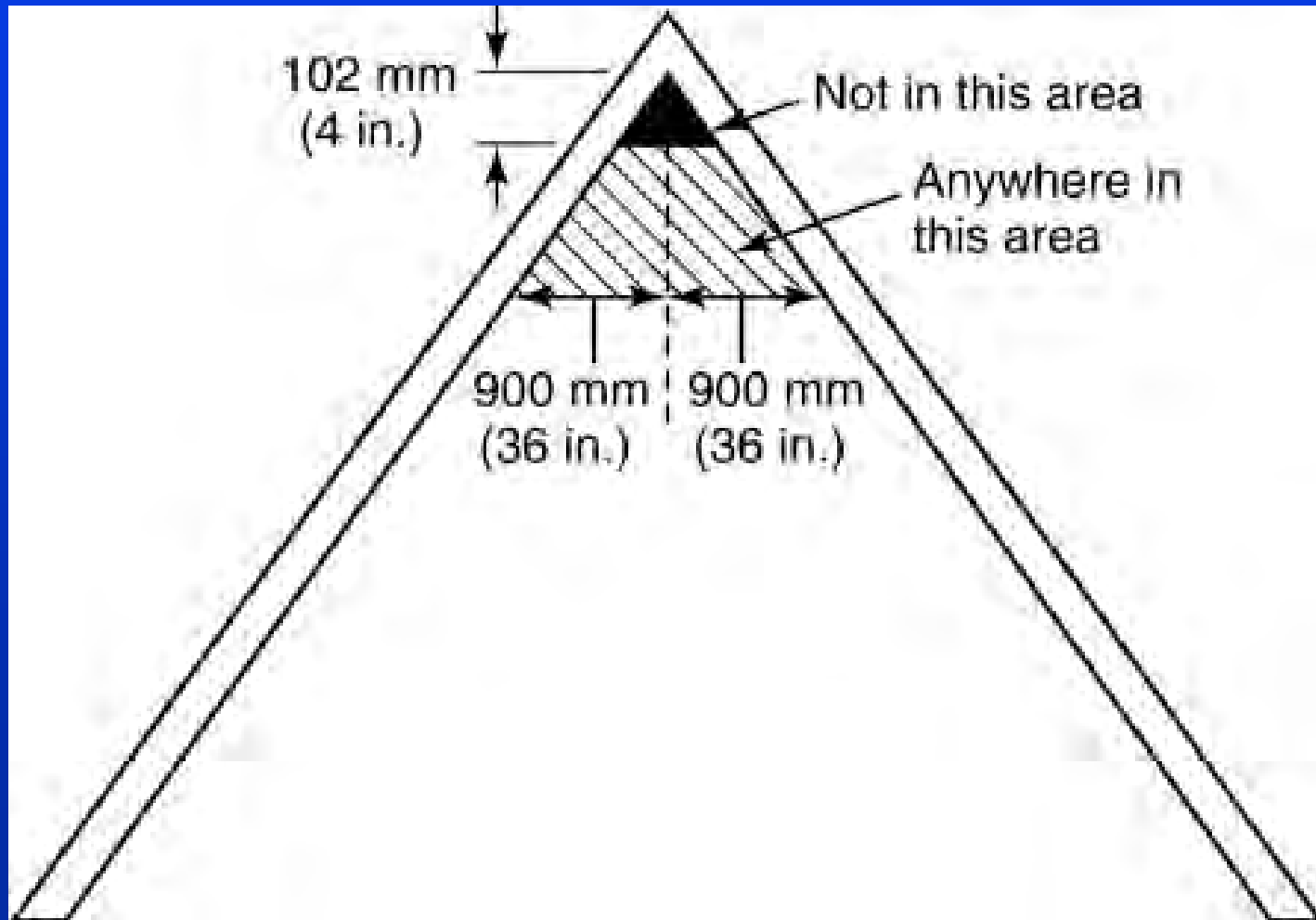
Where should the smoke alarm be installed?

FIRE PREVENTION AND SAFETY IN THE HOME

Installation



Installation



Installation Dos and Don'ts

- Not within 1 metre (*100cm*) of the tips of ceiling fans
- For stairways leading to other occupied levels, not where the smoke would be blocked from reaching the smoke alarm
- For stairways leading up from basements, locate the smoke alarm on the basement ceiling near the entry to the stairs



INSTALLATION DON'TS

Not in areas where temperature or humidity are outside manufacturer's limits (*not below 5 ° C / 40°F or above 38 ° C / 100°F*)

Not where mounting surface could become too cold or too hot

Not within 1 metre (*100cm*) of a bathroom or kitchen door

Not within 1 metre (*100cm*) of a supply air register and not in direct flow path



FIRE PREVENTION AND SAFETY IN THE HOME

MAINTENANCE

- 🔥 BATTERIES- 9 volts
 - 🔥 TESTING- Monthly
 - 🔥 CLEANING
 - 🔥 REPLACEMENT-
 - 🔥 Every 10 years
- Test smoke alarms at least monthly – more often if recommended by the manufacturer
 - **Save** the smoke alarm **instructions** and follow the testing and maintenance recommendations



Questions

CARBON MONOXIDE

This Presentation Was Designed to Give
General Information About Carbon
Monoxide:

CO Basics- the Hidden Danger

At Risk Populations

Accidental Poisoning Prevention

What to do when you encounter CO

- ▣ Both the Public and Emergency Responders

Symptoms of CO Poisoning



TO SAY THAT CARBON MONOXIDE IS DANGEROUS WOULD BE AN UNDERSTATEMENT.

What Is Carbon Monoxide?

- CO is a compound of Carbon and Oxygen

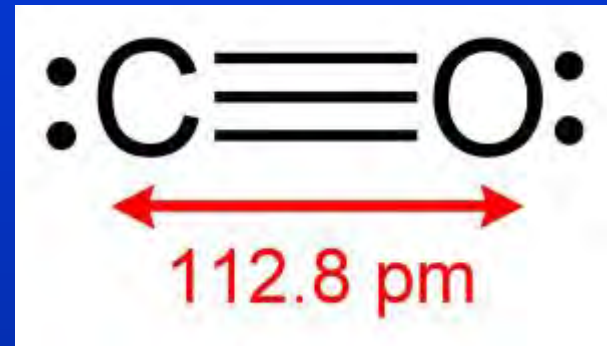
- One atom carbon to one atom oxygen

- Colorless

- Odorless

- Tasteless

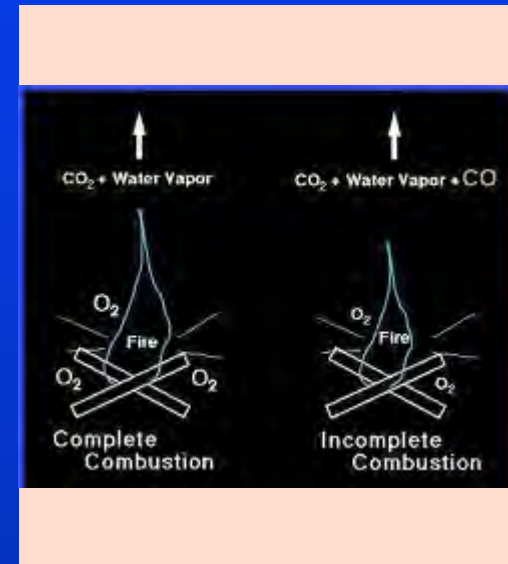
- POISONOUS Gas



Where Does It Come From?

- CO is Produced by the Incomplete Combustion of Various Fuels (Hydrocarbons) , Including:

- ▣ Coal
- ▣ Wood
- ▣ Charcoal
- ▣ Oil
- ▣ Kerosene
- ▣ Propane
- ▣ Natural Gas



Note production of CO from the fire on right

Common Causes of Incomplete Combustion

- Smoldering Fires
- Burning Wet Wood
- Burning Green Wood
- Lack of O₂ During Combustion
- Malfunctioning Appliances
- Malfunctioning Exhaust Systems



Common Sources of Carbon Monoxide Pollution

Wood Stoves and Fire Places

Water Heater and Furnaces



Sources (Cont.)

Vehicle Exhaust



Smoking



FIRE PREVENTION AND SAFETY IN THE HOME

More Sources- Common in Power Outages

Portable Heaters



Fuel Operated Motors



The Hidden Dangers of CO

- Carbon Monoxide Poisoning is the Most Common Exposure Poisoning in the United States
- Carbon Monoxide is Not Easily Recognized Because the Signs and Symptoms Are Similar to Those of Other Illness
- This Odorless, Colorless Gas Can Cause Sudden Illness and Death



Prevention DO

- **DO- Seek Prompt Medical Attention If You *Suspect* CO Poisoning**
- **You and/or Family Feeling:**
 - Dizzy
 - Light-headed
 - Nauseous
 - Especially if CO Alarm is Sounding



FIRE PREVENTION AND SAFETY IN THE HOME

Unlike a smoke detector, which will continue to function as long as 10 Years, A carbon monoxide detector only functions for about five to 6 years.

- Approximately 2,500 people are killed each year in residential fires, and another 500 die from carbon monoxide (CO), a colorless, odorless gas that's known as the "silent killer." Installing smoke and CO alarms throughout your home is the first step toward staying safe.



Note the bright blue & uniform flames- indication of Complete Combustion

Complete Combustion

- When a Hydrocarbon Burns Completely
- Usually in Environment Abundant in Oxygen
- Emitting Carbon Dioxide & Water
- Zero Emissions of CO
- Makes Indoor Gas Cook Stoves Safe (right)



FIRE PREVENTION AND SAFETY IN THE HOME

<http://www.cdc.gov/co/>

http://emergency.cdc.gov/disasters/co_guidance.asp

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5650a1.htm>

<http://www.osha.gov/SLTC/healthguidelines/carbonmonoxide/recognition.html>

<http://www.carolinafirejournal.com/Articles/ArticleDetail/tabid/191/ArticleId/107/Carbon-monoxide-poisoning.aspx>

http://www.carbonmonoxidekills.com/32/carbon_monoxide_facts

<http://www.osha.gov/Publications/3282-10N-05-English-07-18-2007.html>

REFERENCE



Question's

Video

at the End of the Presentation

Carbon Monoxide Poisoning
True Story

Approximately 10 Minutes

E.D.I.T.H.

EXIT DRILLS IN THE HOME

DRAW A FLOOR PLAN OF YOUR HOME

- BE THOROUGH
- 2 ROUTES, PRIMARY AND ALTERNATE
- SECOND STORY ROUTES
- REVISE THE PLAN

EDITH

EXIT DRILLS IN THE HOME

KEEP ESCAPE ROUTES CLEAR

- WINDOWS OPEN EASILY
- OBSTACLES
- ROOFS, BALCONIES, ESCAPE LADDERS
- SECURITY BARS

FIRE PREVENTION AND SAFETY IN THE HOME

EDITH

EXIT DRILLS IN THE HOME

MEETING PLACE

- ONE LOCATION
- IN FRONT OF THE HOUSE

GET OUT AND STAY OUT!!!

FIRE PREVENTION AND SAFETY IN THE HOME

EDITH

EXIT DRILLS IN THE HOME

CONTACT THE FIRE DEPARTMENT

- 911 OR 7 DIGIT NUMBER?
- IDENTIFY YOUR HOME

SEND ONE PERSON TO CALL AFTER
YOU GATHER AT THE MEETING PLACE

FIRE PREVENTION AND SAFETY IN THE HOME

EDITH

EXIT DRILLS IN THE HOME

CHILDREN

- 🔥 NO WHERE TO HIDE
- 🔥 DON'T WAIT

EDITH

EXIT DRILLS IN THE HOME

EXIT DRILLS EVERY 6 MONTHS

- 🔴 PRACTICE
- 🔴 UNANNOUNCED
- 🔴 REALISTIC
 - 🔴 AT NIGHT
 - 🔴 NO LIGHTS

SURVIVAL TIPS

- 🔥 THE SOUND OF THE SMOKE ALARM
- 🔥 BEDROOM DOORS CLOSED
- 🔥 TEST DOORS
- 🔥 USE WINDOWS
- 🔥 CRAWL UNDER SMOKE
- 🔥 STOP, DROP, AND ROLL
- 🔥 SPECIAL CONSIDERATIONS

MAJOR HOME FIRE HAZARDS

- 🔥 COOKING
- 🔥 SMOKING
- 🔥 HEATING APPLIANCES
- 🔥 ARSON
- 🔥 ELECTRICAL SYSTEMS AND EQUIPMENT
- 🔥 OPEN FLAMES
- 🔥 FLAMMABLE AND COMBUSTIBLE LIQUIDS
- 🔥 PLAYING WITH FIRE

COOKING

- 🔥 LEADING CAUSE OF HOME FIRES
- 🔥 STOVE BURNERS, OVENS, MICROWAVES
- 🔥 COUNTERTOP APPLIANCES
 - ⚡ TOASTERS, COFFEE MAKERS, HOT PLATES
 - ⚡ DON'T OVER LOAD OUTLETS
- 🔥 40% OF FATAL COOKING FIRES OCCUR WHEN THE VICTIMS ARE ASLEEP

COOKING

🔥 GREASE FIRES

- 🔥 COVER PAN WITH A LID

- 🔥 TURN OFF THE BURNER

- 🔥 NEVER POUR WATER ON A GREASE FIRE

COOKING

🔥 OVEN FIRES

- 🔥 CLOSE THE DOOR
- 🔥 TURN OFF THE OVEN

🔥 MICROWAVES

- 🔥 CLOSE THE DOOR
- 🔥 TURN IT OFF

COOKING

TURN POT HANDLES IN !!!!!!!

**POTS CAN'T BE KNOCKED OVER OR PULLED
DOWN BY SMALL CHILDREN**

COOKING

- 🔥 DON'T LEAVE COOKING UNATTENDED
- 🔥 KEEP APPLIANCES CLEAN
- 🔥 WEAR CLOSE FITTING SLEEVES
- 🔥 KEEP FLAMMABLE OBJECTS AWAY
- 🔥 HEAT OIL SLOWLY
- 🔥 KEEP CHILDREN AWAY FROM STOVE

COOKING

- 🔥 FIRE EXTINGUISHERS
- 🔥 EFFECTIVE FOR SMALL, CONTAINED FIRES
- 🔥 KNOW HOW TO USE IT
- 🔥 KEEP IN AN ACCESSIBLE PLACE
- 🔥 HAVE THE RIGHT TYPE (B-C)

COOKING

+ FIRST AID FOR BURNS

- RUN COOL WATER FOR 10 TO 15 MINUTES
- DON'T APPLY BUTTER OR OTHER GREASES

SMOKING

- ITS BAD FOR YOU, ASK THE SURGEON GENERAL
- LEADING CAUSE OF FIRES THAT RESULT IN DEATH
- USE AND EMPTY ASHTRAYS
- CHECK FOR SMOLDERING BUTTS (AFTER PARTIES)
- DON'T SMOKE IN BED

HEATING APPLIANCES

- 🔥 SPACE HEATERS
- 🔥 ULC LABEL
- 🔥 USE PROPER FUEL
- 🔥 GIVE SPACE HEATERS SPACE
 - 3 FEET FROM COMBUSTIBLE MATERIALS AND WALLS
- 🔥 CARBON MONOXIDE DETECTORS

HEATING APPLIANCES

- 🔥 FIRE PLACES
- 🔥 CREOSOTE
- 🔥 CHIMNEY CLEANED AND INSPECTED AT LEAST ONCE A YEAR
- 🔥 MAKE SMALL FIRES
- 🔥 USE A FIREPLACE SCREEN
- 🔥 DON'T BURN TRASH OR PAPER
- 🔥 DON'T USE THE "BOYSCOUT" FIRE STARTER (GAS)

ELECTRICAL SYSTEMS AND EQUIP

- ◆ GOOD WORKING ORDER
- ◆ ONLY FOR DESIGNED USE
- ◆ ONLY ONE HEAT PRODUCING DEVICE PER OUTLET
- ◆ EXTENSION CORDS-POWER BAR
- ◆ PLASTIC CHILD PROTECTORS
- ◆ CRACKS, FRAYS BROKEN PLUGS, LOOSE CONNECTIONS
- ◆ LAMP SHADES, LIGHT BULBS SIZES

OPEN FLAMES

- STABLE HOLDERS
- DON'T LEAVE UNATTENDED
- FLASH LIGHTS INSTEAD OF CANDLES

HOT WAX BURNS

LIQUIDS

- 🔥 DON'T STORE GAS IN YOUR HOME
- 🔥 OILY RAGS IN METAL CONTAINER
- 🔥 NO SMOKING OR OPEN FLAMES
- 🔥 APPROVED CONTAINERS

HOLIDAY SAFETY

- * CANDLES
- * CHRISTMAS TREE
- * LIGHTS (ULC and CSA)

FIRE PREVENTION AND SAFETY IN THE HOME

Questions On Home Safety