Fire Safety and Utility Controls

CERT Basic Training

Unit 2

FEMA

citizen corps

Unit Objectives

- Explain role of CERTs in fire safety
- Identify and reduce potential fire and utility risks
- Describe CERT sizeup process
- Conduct basic sizeup for a fire emergency
- Explain basic safety precautions
- Identify hazardous materials
- Extinguish small fires using a fire extinguisher

Unit Topics

- Fire chemistry
- Fire and utility hazards in the home, workplace, and neighborhood
- CERT sizeup
- Fire sizeup considerations
- Firefighting resources
- Fire suppression safety
- Hazardous materials

Role of CERTs

- CERTs play very important role in fire safety by:
  - Extinguishing small fires
  - Preventing additional fires by removing fuel sources
  - Shutting off utilities
  - Assisting with evacuations, when necessary

CERT Priorities

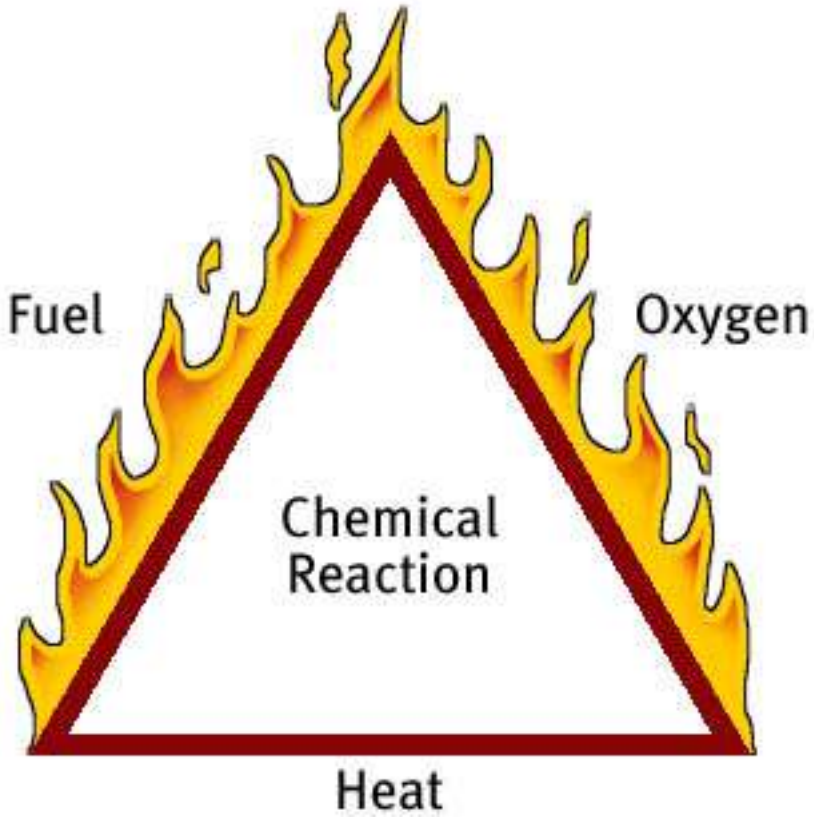
- Help in emergencies before professional responders arrive
- Rescuer safety is number one priority
  - Always work with a buddy
  - Always wear safety equipment

CERT Goal:

Do the greatest good for the greatest number

The Fire Triangle

- Heat
- Fuel
- Oxygen

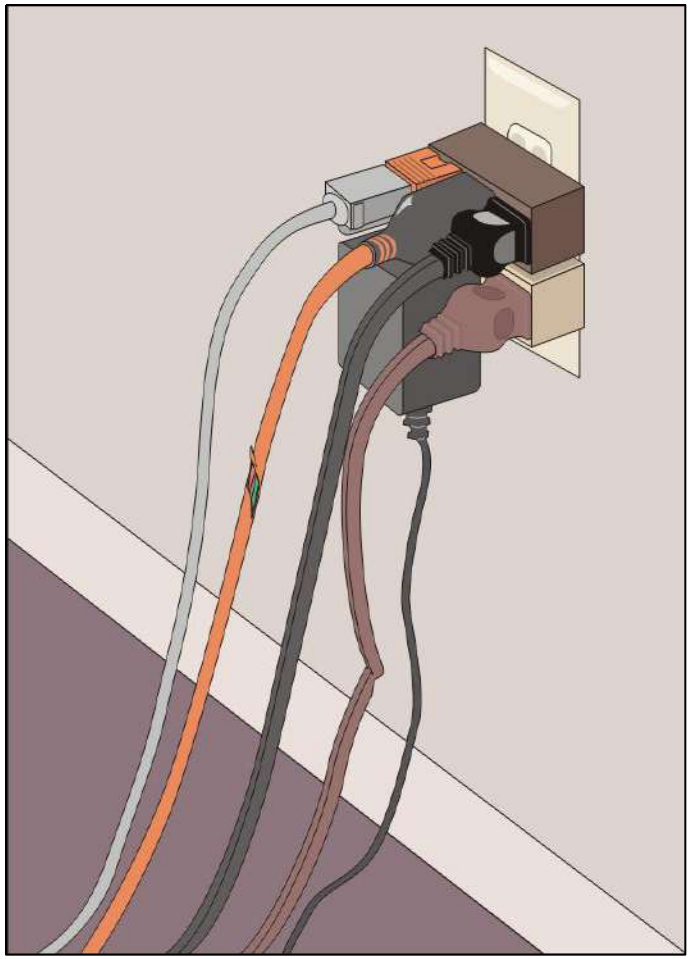


5 Classes of Fire

- A: Ordinary combustibles
- B: Flammable and combustible liquids
- C: Energized electrical equipment
- D: Combustible metals
- K: Cooking oils

Reducing Electrical Hazards

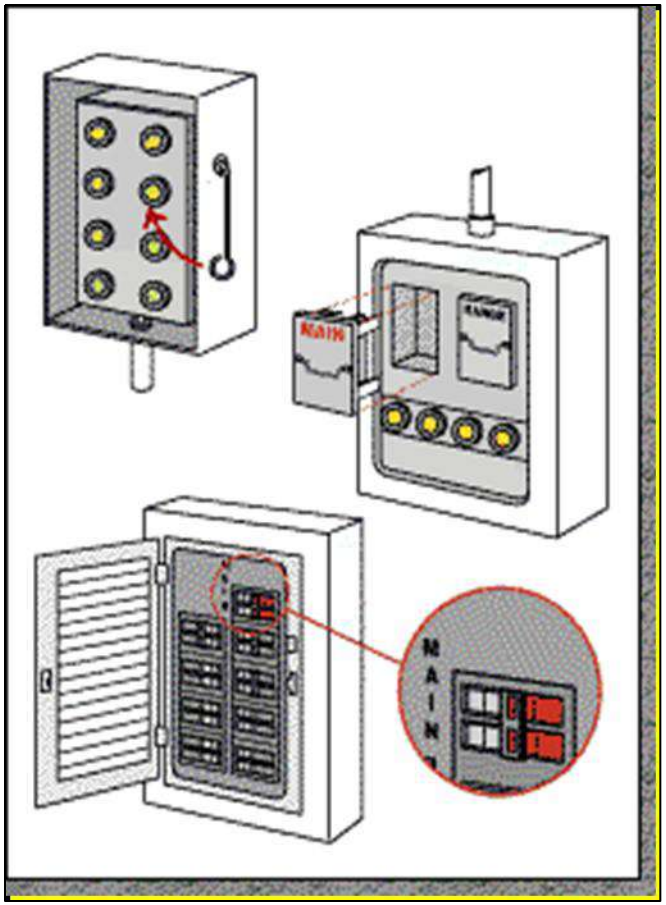
- Avoid the “electrical octopus”
- Don’t run cords under carpets
- Check for and replace broken or frayed cords
- Maintain appliances



Electrical Emergencies

- Know where power shutoffs are for:
  - Appliances
  - Circuit breakers
  - Fuses
- Post shutoff directions next to all utilities
- Know procedures for turning power back on

Shutoff Procedures



- Fuse box with shutoff
- Circuit box with shutoff

Natural Gas Hazards

- Asphyxiant
  - Robs body of oxygen
- Explosive
  - Can easily ignite

Natural Gas Hazard Awareness

- Install natural gas detector
- Install carbon monoxide detector in home
- Test batteries for natural gas and carbon monoxide detectors every month
  - Change batteries every 6 months
- Locate and label gas shutoffs
  - Have proper non-sparking tool

Gas Shutoff

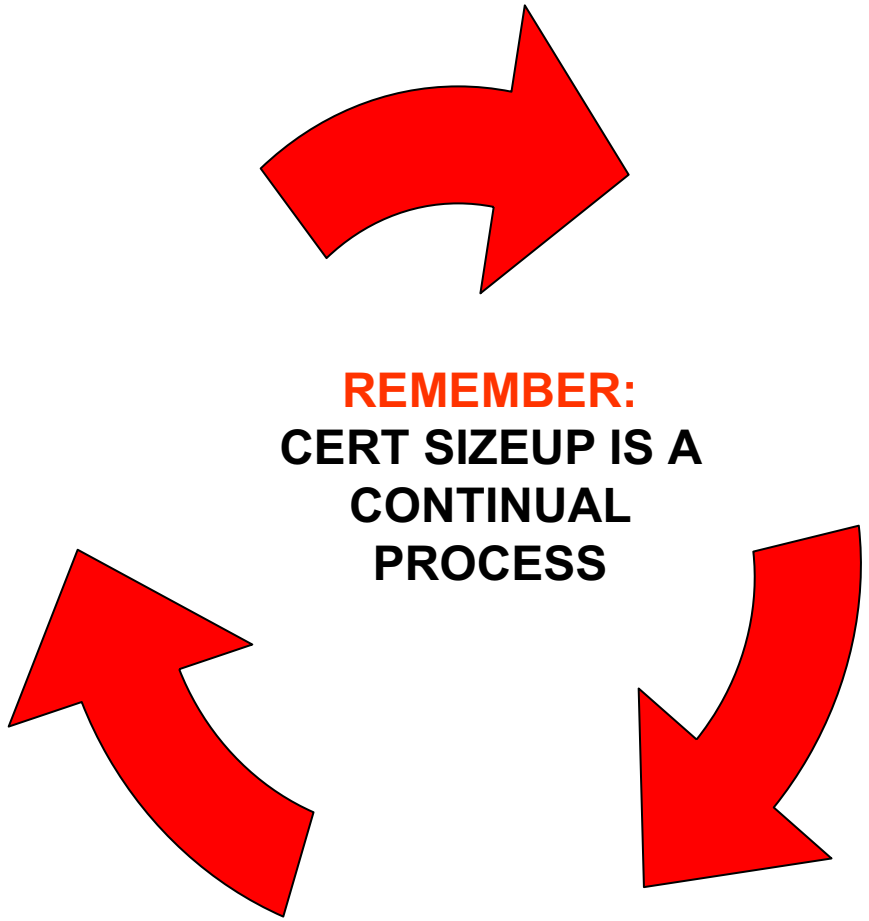
- Locate and label gas shutoff valves
- If not automatic, know procedures for shutting off gas

L.I.E.S.

- Always read labels
- Use L.I.E.S. storage procedures (Limit, Isolate, Eliminate, Separate)

CERT Sizeup

1. Gather Facts
2. Assess Damage
3. Consider Probabilities
4. Assess Your Situation
5. Establish Priorities
6. Make Decisions
7. Develop Plan of Action
8. Take Action
9. Evaluate Progress



REMEMBER:
CERT SIZEUP IS A CONTINUAL PROCESS

CERT Fire Sizeup

- Helps responders decide:
  - Whether to attempt to suppress a fire
  - A plan of action
- Answers these questions:
  - Do my buddy and I have the right equipment?
  - Are there other hazards?
  - Is the building structurally damaged?
  - Can my buddy and I escape?
  - Can my buddy and I fight the fire safely?

Remember: The safety of individual CERT members is always the top priority

Firefighting Resources

- Portable fire extinguishers
- Wet standpipes
- Confinement
- “Creative” resources

Fire Extinguishers

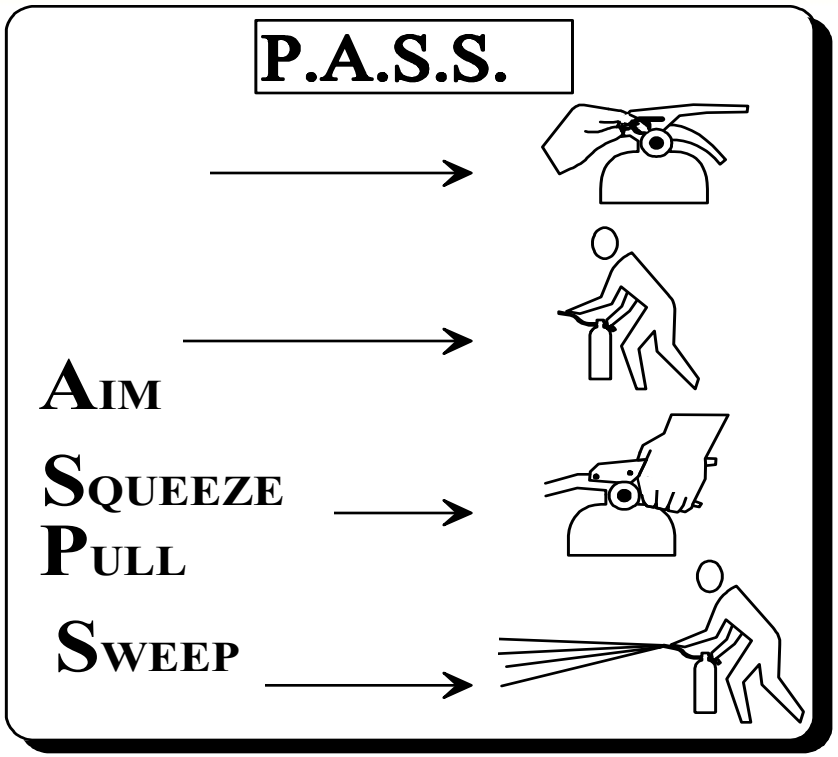
- Water
- Dry chemical
- Carbon dioxide
- Specialized fire extinguisher

Extinguisher Rating/Labeling

- Labels show types of fires that extinguisher is used for:
  - Class A fire ratings: 1A to 40A
  - Class B fire ratings: 1B to 640B
- Higher number on label = greater amount of extinguishing agent

Examples of Labels

P.A.S.S.



Test the extinguisher after pulling the pin

Interior Wet Standpipes

- Usually in commercial buildings or apartments
- Work in two-person teams when using wet standpipes

Fire Suppression Safety

Safety of individual CERT members is top priority

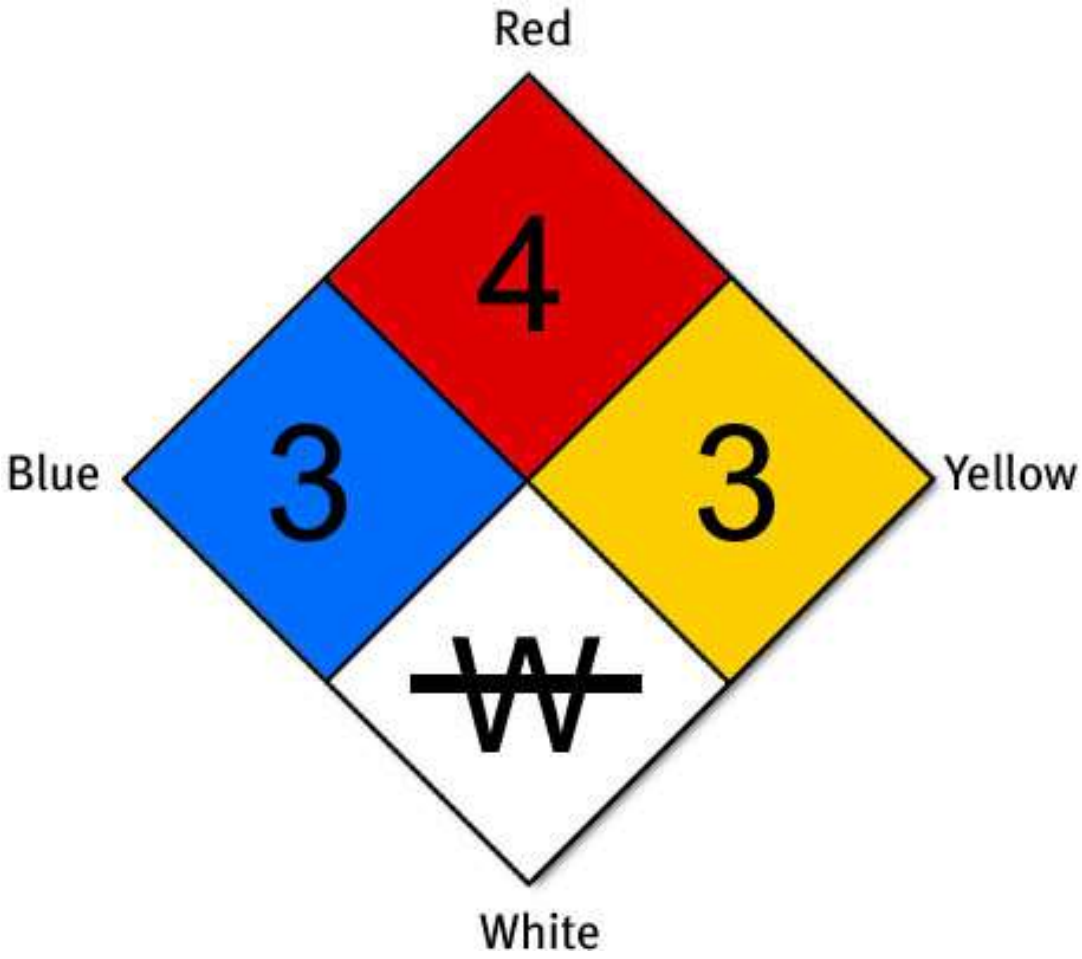
Fire Suppression Don’ts

- Don’t get too close
- Don’t try to fight a fire alone
- Don’t try to suppress large fires
- Don’t enter smoke-filled areas

Hazardous Materials

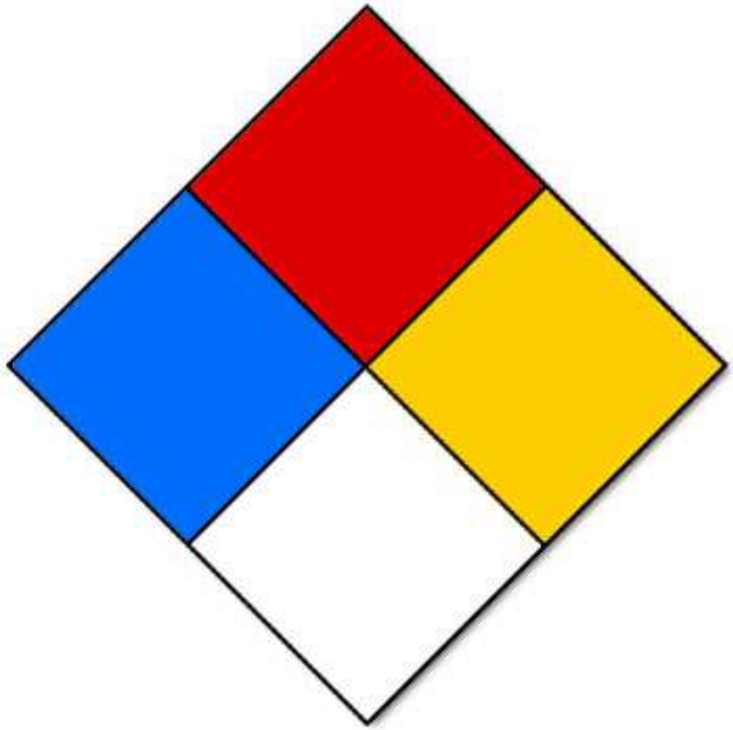
- Corrode other materials
- Explode or are easily ignited
- React strongly with water
- Are unstable when exposed to heat or shock
- Are otherwise toxic to humans, animals, or the environment through absorption, inhalation, injection, or ingestion

Identifying Stored Hazmats



The White Quadrant

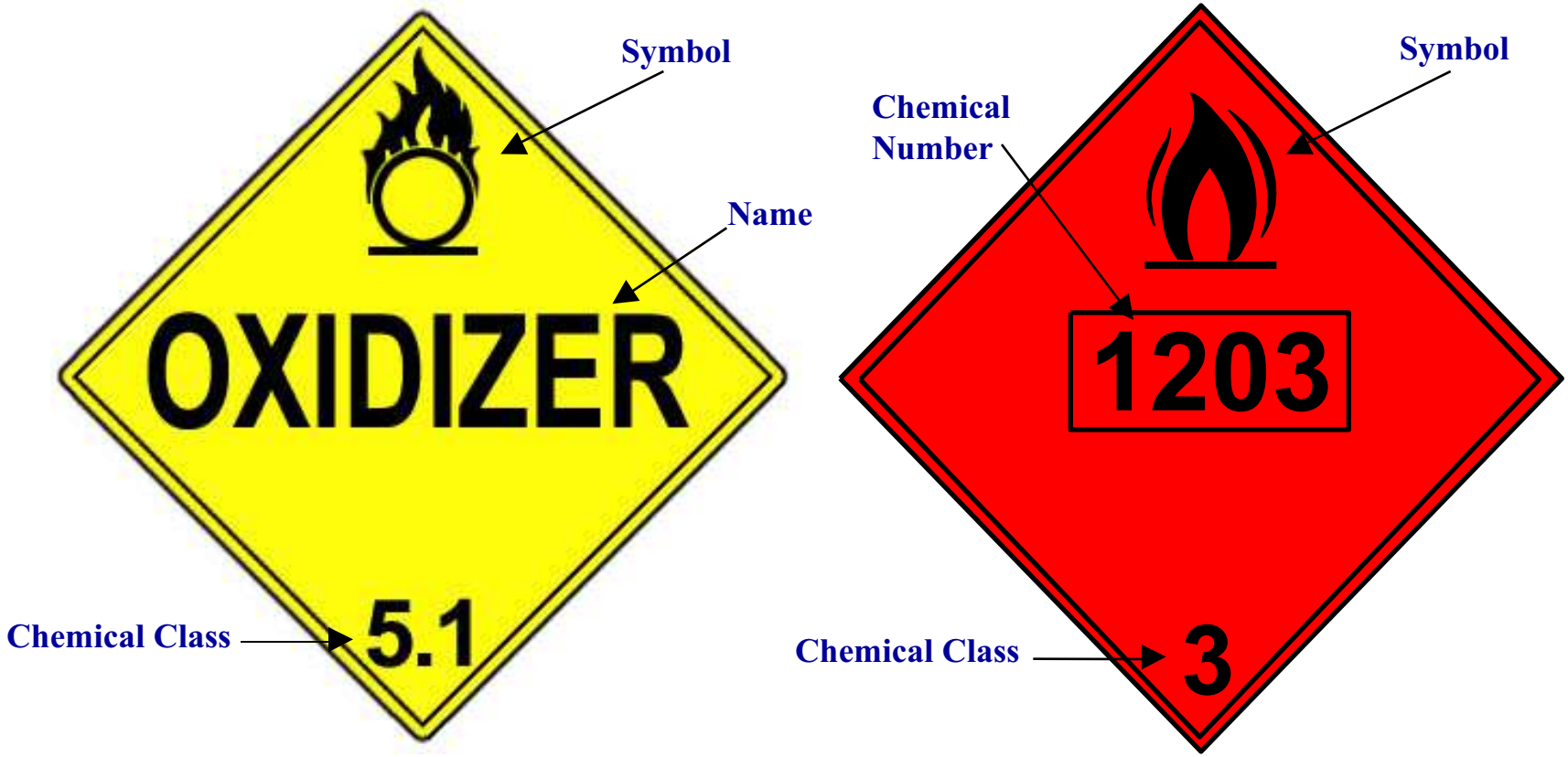
- NFPA 704 Diamond White Quadrant:
  - ~~W~~: Shows unusual reactivity with water
  - OX: Possesses oxidizing properties



STOP!

Hazmats in Transit

UN and NA Placards



Greater Than 1?

Remember!

All hazardous material placards are a stop sign for CERTs

Unit Summary

- You should know:
  - Keys to effective fire suppression
  - CERT sizeup and fire sizeup considerations
  - Classes of fire and types of fire extinguishers
  - P.A.S.S.
  - How to identify hazardous materials

Always follow the safety rules established for CERTs – personal safety comes first!

Homework Assignment

1. Read unit to be covered in next session
2. Bring necessary supplies to next session
3. Wear appropriate clothes to next session