

Lesson 1. Overview: Protecting Against Disasters

1. The most common type of disaster in the United States is **flooding**.
2. This course will cover the following types of hazards that threaten your home or place of business. (Mark all that apply.)

Flooding

Landslide

Earthquake

Tornado

Hurricane

Tsunami

Wildfire

3. Write below two sources of local government information you can consult to learn about hazards that affect your area. (Any two of the following:)
 - Building and zoning officials
 - Planning department
 - Floodplain manager
 - Emergency manager
4. An example of a structural measure to protect against damage is to elevate a building in a flood-prone area.

True

Lesson 2. Protecting Against Water Damage

1. A **flood map** of your community may show a projected flood level for your neighborhood or place of business.
2. Retrofitting measures to protect a structure against water damage include: (Mark all that apply.)

Elevating utilities and service equipment.

Dry floodproofing.

Obtaining adequate flood insurance.

Elevating the structure above the projected flood level.

3. Write below two utilities that could be moved or elevated above the projected flood level. (Any two of the following.)

- Main electric switch box
- Electric outlet and switches
- Washer and dryer
- Furnace and water heater

4. Select the protective measure on the right that would be used to protect the item on the left, and write the appropriate letter on each blank space.

d Floor drains

a. Install backflow valves

a Sewer system

b. Anchor

b Fuel tanks

c. Elevate

c Washer and dryer

d. install float plugs

5. You can buy flood insurance even if you don't live or own a business in a flood hazard area.

True

Lesson 3. Protecting Against Wind Damage

1. Hurricanes can be predicted, so you have 2 to 3 days to prepare, but **tornadoes** strike with little warning.

2. Mark any of the following structures that are especially susceptible to wind damage.

Brick houses

One- and two-story wood-frame houses

Manufactured homes

Steel-frame commercial buildings

3. Write below three protective, **nonstructural** measures you can take in the 24 hours before a hurricane is predicted to hit your area. (Any three of the following☺)

- Move breakable items away from doors and windows.
- Board up doors and windows.
- Bring in outdoor furniture and other personal property kept outdoors.
- Secure manufactured home anchors.
- Secure outbuildings.
- Secure or move boats.
- Turn off propane tanks.

4. Select the protective measure on the right that would be used to strengthen or protect the structure on the left, and write the appropriate letter on each blank space.

c Roof

a. Secure with sliding bolts

a Double-entry doors

b. Install horizontal bracing

b Garage door

c. Install hurricane straps

d Window

d. Buy or make storm shutters

5. Safe rooms built below ground level provide the greatest protection.

True

Lesson 4. Protecting Against Wildfires

1. The most common type of wildfire is a surface fire, which generally is started by **people**.

2. Fire-resistant roofing materials include: (Mark all that apply.)

Tile roofing

Asphalt shingles

Metal roofing

Wood shakes

3. Identify three measures that can be used to create a safety zone around a home or place of business. (Any three of the following:)

- Remove leaves and rubbish from under structures.
- Thin a 15-foot space between tree crowns, and remove limbs within 15 feet of the ground.
- Remove dead branches that extend over the roof.
- Prune tree branches and shrubs within 15 feet of a stovepipe or chimney outlet.
- Ask the power company to clear branches from powerlines.
- Remove vines from the walls of the home.
- Mow grass regularly.
- Do not connect wooden fencing directly to your home.
- Clear a 10-foot area around propane tanks and the barbecue and place a screen over the grill.
- Regularly dispose of newspapers and rubbish.
- Place stove, fireplace, and grill ashes in a metal bucket, soak in water for 2 days, then bury the cold ashes in mineral soil.
- Store gasoline, oily rags, and other flammable materials in approved safety cans. Place cans in a safe location away from the base of buildings.
- Stack firewood at least 100 feet away and uphill from the building. Clear combustible material within 20 feet.

4. Select the protective measure on the right that would be used to protect the structure on the left, and write the appropriate letter on each blank space.

a Openings

a. Cover with mesh screening

b Chimneys

b. Clean regularly

b Gutters

a Barbeque grill

5. States located east of the Mississippi River do not experience wildfires.

False

Lesson 5. Protecting Against Earthquake Damage

1. Earthquakes occur most frequently **west** of the Rocky Mountains.
2. Nonstructural measures to avoid earthquake damage include: (Mark all that apply.)
 - Securing heavy furniture.**
 - Fastening water heaters.**
 - Elevating the structure.
 - Securing propane and fuel tanks.**
3. Identify three examples of kitchen or laundry equipment that should be securely anchored to the floor, wall, or countertop. (Any three of the following:)
 - Stoves and ovens.
 - Built-in and countertop microwave ovens.
 - Garbage compactors.
 - Dishwashers.
 - Refrigerators and freezers.
 - Clothes washers and dryers.
 - Ironing equipment.
4. Select the protective measure on the right that would be used to protect the structure on the left, and write the appropriate letter on each blank space.

a Sill plate	Bolt secured to the foundation
c Cripple wall	Secure with sheet metal straps and angle bracing
b Chimney	Brace with horizontal blocking
5. All 50 States and all U.S. territories are vulnerable to earthquakes.

True