

Chapter 16 Quiz

Name: _____ **Date:** _____

Directions: Write the correct letter on the blank before each question.

- _____ 1. Which building material is the most common in North America and is the main component of many structural assemblies? (783)
- A. Vinyl
 - B. Glass
 - C. Metal
 - D. Wood
- _____ 2. When masonry components like brick and stone are exposed to fire and high temperatures, (784)
- A. there is little effect on the masonry.
 - B. there is a high risk of structural collapse.
 - C. the masonry will give off toxic gases and vapors.
 - D. the masonry will stay intact but lose its strength.
- _____ 3. The effect of heat and fire on metal depends on the: (785)
- A. age of the structure.
 - B. type of fire suppression tactics used.
 - C. type of metal and whether or not it is covered.
 - D. types of other building materials used in the structure.
- _____ 4. What is the primary material used for structural support in the construction of large buildings? (786)
- A. Steel
 - B. Wood
 - C. Cast iron
 - D. Aluminum

- _____ 5. Due to its high water content, _____ has excellent heat-resistant and fire-retardant properties. (790)
- A. plaster
 - B. gypsum
 - C. fiberglass
 - D. synthetic wood
- _____ 6. Which building material is not typically used for structural support? (790)
- A. Glass
 - B. Steel
 - C. Wood
 - D. Masonry
- _____ 7. Which type of building material can be highly combustible and produce toxic gases when exposed to fire? (793)
- A. Plaster
 - B. Gypsum
 - C. Cinder blocks
 - D. Engineered wood products
- _____ 8. In a _____ building, structural collapse is unlikely but will usually be localized instead of structure-wide if it does occur. (795)
- A. Type I
 - B. Type II
 - C. Type IV
 - D. Type V
- _____ 9. Fires in the _____ stage do not generate sufficient heat or flame to cause unprotected steel or wood frame buildings to collapse. (797)
- A. decay
 - B. growth
 - C. incipient
 - D. fully developed

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- _____ 10. Contents of a building: (798)
- A. have no effect on structural stability.
 - B. can cause collapse more rapidly due to added dead weight.
 - C. can balance the weight distribution and add structural stability.
 - D. must be removed before firefighters check for collapse potential.
- _____ 11. Which is an indicator of structural instability or impending structural collapse? (798)
- A. Sagging, spongy roof
 - B. Charring on the floor or walls
 - C. Fires in concealed spaces or compartments
 - D. Water runoff from the interior of the structure
- _____ 12. When should collapse zones be established? (799)
- A. Any time a Type I or Type II building is involved in fire
 - B. As soon as a fire in the structure reaches the incipient stage
 - C. When there is a rapid intervention team available to monitor the collapse zone and perform rescue
 - D. When there is an indication that the structure has been weakened by prolonged exposure to fire or heat
- _____ 13. What should interior crews do first when structural collapse is likely or imminent? (799)
- A. Complete a primary search
 - B. Complete a secondary search
 - C. Exit the building and inform Command
 - D. Establish a collapse zone around the building
- _____ 14. Which is a true statement about factors that affect fire spread? (800)
- A. Type V buildings are the most protected from rapid fire spread.
 - B. Open floor plans and less compartmentation may contribute to fire spread.
 - C. Abandoned buildings or buildings under construction are less at risk of fire spread than occupied structures.
 - D. Lightweight engineered building materials are less likely to allow for rapid fire spread than heavy timber materials.

- _____ 15. Other than fire suppression, which fireground activity can greatly affect a structure's chance of collapse? (801)
- A. Size-up
 - B. Rescue
 - C. Overhaul
 - D. Primary searches