1. Using kilns to bake clay bricks was discovered in the late 1,600's.
   a. F
   b. T

2. Anticipating the severity of weather conditions at a certain geographic location is an exact science.
   a. T
   b. F

3. ________ is the term given to each vertical section of wall, one masonry unit in thickness – a wall one course of brick wide:
   a. Cull
   b. Bull header
   c. Shiner
   d. Wythe

4. The type of clay used in manufacturing clay masonry products is:
   a. Surface clays
   b. Fire clays
   c. Shale
   d. All of the above

5. Two of the three methods of forming clay bricks are ________ .
   a. stiff mud and dry mud
   b. soft mud and wet press
   c. dry press and soft mud
   d. wet press and wet mud

6. The tunnel kiln temperature during the firing portion of the manufacture of clay bricks can reach temperatures higher than 1,500 °F.
   a. T
   b. F

7. If a concrete block forming machine could produce 3 blocks per cycle and each cycle took exactly 10 seconds, how many blocks could be formed if the machine ran continuously for exactly 7 hours?
   a. 1,400
   b. 1,542
   c. 7,560
   d. 12,600

8. The kiln temperature during the curing portion of the manufacture of concrete blocks is:
   a. -10°F to 32°F (kept below freezing)
   b. 90°F to 120°F (similar to a wet sauna or a steam sauna)
c. 220°F to 300°F (higher than boiling water)
d. 1,600°F to 2,400°F (high enough to vitrify materials)

9. Mortar allows the pieces of masonry construction to act as a single element.
   a. T
   b. F

10. Today, when mixing mortar, which of the following is NOT a basic ingredient?
    a. Lime
    b. Burnt gypsum
    c. Sand
    d. Water

11. Today, the types of mortar are remembered using the acronym "mason work". What are the types of mortar today?
    a. Type M, Type N, Type K
    b. Type A, Type O, Type R
    c. Type M, Type S, Type N, Type O
    d. Type A, Type O, Type W, Type K

12. In the field, a good rule of thumb is "Good mortar is what the mason says in good mortar".
    a. T
    b. F

13. Which of the following is a main purpose of mortar joints?
    a. Bond the units together
    b. Make up for slight variations in size of the masonry unit
    c. Bond the masonry units to any reinforcement that may be placed in the joints
    d. All of the above

14. The normal thickness of a mortar joint is 3/8".
    a. T
    b. F

15. The mortar joint shown

   a. is a concave joint
   b. is a tooled joint
   c. resists the penetration of water
   d. all of the above

16. The horizontal joint between bricks in adjacent courses is called the head joint.
17. The bond in the photo is:

- a. Running bond
- b. Flemish bond
- c. Stack bond
- d. None of the above

18. Aside from structural design errors, 90% of all masonry building problems are directly related to water.

- a. T
- b. F

19. In masonry walls, wind driven rain is the primary source of water penetrations.

- a. T
- b. F

20. Today, probably the two most common types of masonry walls are the single wythe concrete block wall and the brick veneer cavity wall.

- a. T
- b. F

21. The back-up wall for a brick veneer cavity wall can be:

- a. Wood framing
- b. Steel framing
- c. Masonry
- d. All of the above

22. In a brick veneer cavity wall, moisture that passes through the brick veneer, drains down the back side of the veneer, and exits the cavity

- a. through the air/moisture barrier
- b. by soaking through the bottom course of the bricks
- c. through weep holes
- d. through the soffit

23. Through wall flashing goes completely through the brick veneer.

- a. T
- b. F
24. Wall ties are used to
   - a. form corners in masonry walls
   - b. hold the veneer in a vertical plane
   - c. drain moisture from a cavity wall
   - d. attach the soffit to the back-up wall

25. A weep hole can be
   - a. an open head joint
   - b. a piece of rope
   - c. a plastic tube
   - d. all of the above