Benchmark #3 Study Guide

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period:\_\_\_\_\_\_\_\_\_\_\_\_\_

Date:\_\_\_\_\_\_\_\_\_\_\_\_

1. Companies with strong safety cultures usually have lower \_\_\_\_\_.

a. turnover

b. productivity

c. wages

d. morale

1. Which of these is a true statement regarding safety?

a. Safety is a learned behavior and attitude.

b. Safety consciousness comes naturally to most individuals.

c. Safety primarily depends on workers in the field.

d. Safety does not normally require training.

1. If there is a hole in the floor of a structure, the preferred method of protecting workers from falls is to \_\_\_\_\_.
2. cover the opening and label the cover
3. place reflective tape around the opening
4. post a guard at the opening
5. place a warning sign near the opening

4. A measure of the probability, consequences, and exposure related to an event is referred to as \_\_\_\_\_.

 a. safety

  b. evaluation

 c. risk

 d. hazard

5.Poor lighting, excessive noise, and inadequate guards for moving parts are examples of \_\_\_\_\_.

a. acceptable risks

b. unsafe conditions

c. unavoidable hazards

d. unsafe acts

6. Lanyards that have no shock-absorbing features are used for \_\_\_\_\_.

1. workers under 150 pounds
2. positioning
3. working on scaffolds
4. climbing ladders

7. Benching systems are prohibited in \_\_\_\_\_.

 a. Type A soils

  b. Type B soils

 c. Type C soils

 d. solid rock

8. When placing a ladder against a platform or roof, the top of the ladder should extend above the point where the ladder touches the platform or roof by at least \_\_\_\_\_.

  a. 2 feet (61 cm)

 b. 3 feet (91 cm)

 c. 4 feet (1.2 m)

 d. 5 feet (1.5 m)

9. When performing overhead work on scaffolding, what protective measures must be taken to prevent objects from falling and striking a person below?

 a. Fall arrest systems are used.

  b. Alarm systems should be enabled.

 c. Toeboards, debris nets, or canopies must be applied.

 d. Warning tags are posted on the scaffold.

10. A personal fall arrest system should be inspected monthly by a \_\_\_\_\_.

 a. co-worker

 b. state safety inspector

 c. project manager

 d. competent person

11. 1/4 + 3/8 = \_\_\_\_\_. Reduce your answer to the lowest terms.

a. 4/8

b. 1/2

c. 5/8

d. 5/4

12. Your job as a carpenter pays $20/hour and you worked 40 hours last week. The taxes withheld from your wages were $83 federal tax and $19 state tax. Your total check is \_\_\_\_\_.

 a. $698

 b. $720

 c. $810

 d. $912

13. A package contains 12 electrical locks, each with a unique key. A package is delivered to 16 job site superintendents. How many unique keys will result from the distribution?

 a. 192

 b. 180

 c. 48

 d. 28

14. 7/8 ÷ 7/16 = \_\_\_\_\_. Reduce your answer to the lowest terms.

a. 7/32

b. 7/2

c.1

d. 2

15.To check level conditions over a significant distance, such as a building foundation or longer distance, the best level to use is a \_\_\_\_\_.

 a. torpedo level

 b. laser level

 c. digital level

 d. spirit level



16.The saw shown in the figure above is called a \_\_\_\_\_.

 a. keyhole saw

 b. drywall saw

 c. coping saw

 d. hacksaw

17. A heavy-duty tool used to drive posts or other large stakes is a \_\_\_\_\_.

a. mallet

b. sledgehammer

c. bell-faced hammer

d. ball-peen hammer



18.The type of screw shown in the figure above is a(n) \_\_\_\_\_.

a. Phillips head

b. Torx®

c. Allen®

d. Robertson®

19. Before replacing parts such as bits, blades, or discs on any tool, you must \_\_\_\_\_.

a. polish it with a fine steel wool

b. recharge the tool's battery

c. disconnect the power source

d. inspect them for cracks

20.When using a circular saw, be sure to cut on the waste side of the cut mark to allow for the blade's \_\_\_\_\_.

a. arbor

b. kerf

c. distortion

d. stroke

21.A power miter saw combines a miter box with a \_\_\_\_\_.

a. bandsaw

 b. circular saw

c. reciprocating saw

d. saber saw

22.A saw that has a thin, one-piece blade that runs around guides at either end of the saw is a \_\_\_\_\_.

a. miter saw

b. bandsaw

c. saber saw

d. circular saw

1. Another common name for lineman pliers is \_\_\_\_\_.

 a. locking pliers

 b. tongue-and-groove pliers

 c. needle-nose pliers

 d. side cutters

24 .How many sides does a hexagonal shape have?

 a. Four

 b. Five

 c. Six

 d. Seven

1. When an object is plumb, it is \_\_\_\_\_.

 a. perfectly vertical

 b. angular

 c. side-by-side

 d. perfectly horizontal

1. One ounce is equal to 28.35 grams. Convert 16 ounces to grams. Round your answer to the nearest tenth.
2. 1.8 grams
3. b. 12.4 grams
4. c. 44.4 grams
5. d. 453.6 grams
6. Using the formula *1 kg* = *2.205 pounds*, 165 pounds converts to a weight of \_\_\_\_\_.

 a. 10.3 centimeters

 b. 74.8 kilograms

 c. 149.6 milligrams

 d. 363.8 kilometers

1. Convert 70°F to Celsius using the following formula: °C = 5/9 (°F-32). Round your answer to the nearest degree.

 a. 21°C

 b. 53°C

 c. 126°C

 d. 158°C



29. The type of clamp shown in the figure above is a \_\_\_\_\_.

a. bar clamp

b. C-clamp

c. pipe clamp

d. spring clamp

30. The safest kind of utility knife is one with a \_\_\_\_\_.

a. retractable blade

b. replaceable blade

c. folding blade

d. self-retracting blade

31. Because of the shape of its jaws, which clamp can spread clamping pressure over a wider area than the others?

a. A C-clamp

b. A bar clamp

c. A hand-screw clamp

d. A spring clamp

1. A Porta-Power® is an example of a(n) \_\_\_\_\_.

 a. electric tool

 b. pneumatic tool

 c. hydraulic tool

 d. battery-powered tool

1. A low-velocity fastening system that is used to drive steel pins or threaded studs into masonry and steel is a(n) \_\_\_\_\_.

 a. pneumatic screw nailer

 b. powder-actuated tool

 c. air impact wrench

 d. mini hammer drill

 34.  Before you plug any saw into a power source, make sure the \_\_\_\_\_.

a. speed is set to Low

b. power switch is in the Off position

c. work has been clamped down

d. lower blade guard is pulled back

1. Given the equation 1/2(b × h), the area of a triangular roof section with a base of 7 feet and a height of 3.5 feet is \_\_\_\_\_.

  a. 7 cu ft

 b. 12 sq ft

 c. 12.25 sq ft

 d. 24.5 sq ft

1. What does a square have in common with a rectangle?
2. All four sides are equal in length.
3. All four corners are 90 degree angles.
4. The sum of all four angles is always 180 degrees.
5. The area can be found by multiplying pi times the length of any side.
6. The circumference of a circle represents \_\_\_\_\_.

 a. the distance around the outside

b. the length of a straight line passing across the center to both sides

 c. the length of a line from the center to any point on the circle

 d. another name for the mathematical constant pi

38. Cable come-alongs are used to move loads \_\_\_\_\_.

a. vertically for long overhead distances

b. horizontally for long overhead distances

c. horizontally for short ground distances

d. vertically for short ground distances

39. Shovels typically have handles made of wood or \_\_\_\_\_.

a. aluminum

b. steel

c. fiberglass

d. plastic

1. The best designed saw for cutting miter joints is a \_\_\_\_\_.

 a. handsaw

 b. backsaw

 c. coping saw

 d. hacksaw

1. If there is a hole in the floor of a structure, the preferred method of protecting workers from falls is to \_\_\_\_\_.

 a. cover the opening and label the cover

  b. place reflective tape around the opening

 c. post a guard at the opening

 d. place a warning sign near the opening

1. A system that protects workers from the release of hazardous energy while they work with machines and equipment is referred to as \_\_\_\_\_.

  a. a disconnect

 b. a barricade system

 c. lockout/tagout

 d. an energy-neutral system

1. Hard hats should be made of fiberglass or \_\_\_\_\_.

 a. metal

 b. reinforced plastic

 c. styrofoam

 d. rubber

1. One source of lead on some job sites is \_\_\_\_\_.

 a. water

 b. food

 c. blood

 d. paint

1. Which of the following conditions is considered life threatening?

 a. Heat stroke

 b. Heat cramps

 c. Frostbite

 d. Heavy sweating

1. One of the symptoms of heat stroke is \_\_\_\_\_.

 a. the body temperature drops by several degrees

  b. cool, pale, and moist skin

  c. extremely high body temperature

 d. heavy sweating

1. The respirator that would be used where dust or solid particles might be inhaled is a \_\_\_\_\_.

 a. supplied air mask

 b. full facepiece mask with chemical canisters

  c. half mask or mouthpiece with a mechanical filter

 d. self-contained breathing apparatus

1. Daily inspection of an excavation must be performed by a(n) \_\_\_\_\_.

 a. qualified person

  b. competent person

 c. foreman

 d. engineer

1. A polarized electrical receptacle is used for \_\_\_\_\_.

 a. all power tools

  b. three-wire power cords

 c. double-insulated tools

  d. plugs with the ground pin cut off

 50. The volume of a 9-inch cube is \_\_\_\_\_.

a. 243 cu yd

b. 729 cu in

c. 818 sq in

d. 1,243 cu in