

# Basic Vertical Training Written Test

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Knots cause a main rope to lose approximately \_\_\_\_\_ of its strength.  
a. 100%      b. 50%      c. 33%      d. 20%
2. Two common types of construction of climbing rope are:  
a. EZ bend and Max wear  
b. Spiral weave and Shuttle loom  
c. Twisted and Static  
d. Dynamic Kernmantle and Static kernmantle
3. The smallest width of webbing you should use for a harness is:  
a. .25"                      b. .5"                      c. 1"                      d. 2"
4. What is an Etrier?  
a. A French climbing system  
b. A foot-loop ladder made of Webbing  
c. A ribbed ascending knot.  
d. A sling made from hemp rope.
5. Circle the danger(s) or things that may weaken Nylon rope. (must circle all that apply for full credit)  
a. Water      b. Acid      c. UV      d. abrasion
6. Rope pads should be made from:  
a. Natural fiber                      b. Cordura  
c. Nylon                      d. Soft pile of carpet
7. Why do you wash a climbing rope?  
a. To keep dirt out of the fibers.  
b. To make it look nice.  
c. So it doesn't wear out your rack.  
d. To make smooth rappels and a, b, and c above.
8. Smoothly controlling a descent on rope is called.  
a. repelling      b. rappelling      c. rappelling      d. rapelling

9. Why should you tie a knot at the running end of a climbing rope?
- So you won't descend off the end.
  - So others in pit know the rope's in use.
  - So you know which rope is yours.
  - So the bottom belayer can get a better grip.
10. Why keep tensioned rope or webbing angles at 120 degrees or less?
- To keep the rope or webbing from high tension.
  - To keep the knot from untying.
  - To insure a compact, professional looking rigging.
  - Makes it easier to de-rig.
11. Which will give the strongest anchor?
- Figure eight knot
  - Wrap 3- Pull 2
  - Bowline with a Yosemite back-up
  - Tensionless wrap
12. A labeled harness is:
- Commercially sewn
  - Studebaker wrap
  - Class II and III only
  - Belt
13. Helmets should be able to:
- Hold water.
  - Protect against a tumbling rolling fall.
  - Secure with a 3 or 4 point elastic chin strap.
  - Withstand high tension (over 900 lbs) in the chin strap area under load.
14. Where should straps/ropes be situated inside a carabiner?
- Against the gate.
  - Inline and against the major axis.
  - Across the spine
  - 1" or more from the spine.
15. Which would provide the greatest stopping power with a rack with a hyperbar?
- Add a bar
  - Convert to Stainless bars
  - Use clean rope
  - Use the hyperbar
16. Prusik cord size should be about \_\_\_\_\_ of the main line size.
- 30%
  - 50%
  - 70%
  - 90%

17. In knot terms, what is a bight?
  - a. The loop around the main rope .
  - b. A loop that doesn't cross itself.
  - c. A constricting knot.
  - d. The running end that goes through the middle of the knot.
  
18. From this list, a QAS is best used for:
  - a. Rappelling
  - b. A safety chicken loop
  - c. Belaying
  - d. Texas rig component
  
19. The whistle command for "Take up slack" is:
  - a. 1 blast
  - b. 2 blasts
  - c. 3 blasts
  - d. 4 blasts
  - e. One long blast
  
20. Which climbing system is the most efficient when down climbing?
  - a. Texas
  - b. Frog
  - c. Double Bungie
  - d. Mitchell
  
21. Which system is best suited for someone who has a large barrel chest?
  - a. Texas
  - b. Frog
  - c. Double Bungie
  - d. Mitchell
  
22. What safety rigging is required on all foot stirrups used in or away from barnyards?
  - a. Chicken loops
  - b. Cow's tails
  - c. Frog loops
  - d. Sheep bends
  
23. What vertical activity is the most dangerous based on accident statistics?
  - a. Prusiking
  - b. Rappelling
  - c. Changeovers
  - d. Crossing Rebelays
  
24. What is an example of moving nylon on stationary nylon?
  - a. Bowline
  - b. Chest harness with crossed webbing
  - c. Munter hitch
  - d. Prusik Hitch
  
25. During a rappel it is important to:
  - a. Keep your feet at least shoulder width apart.
  - b. Keep your feet below your waist.
  - c. Wear gloves as well as a, b and d.
  - d. Maintain a controlled speed.
  
26. When changing over from a rappel to an ascent, what's the first thing you do after locking off your rack?
  - a. Attach your QAS
  - b. Set your PCD
  - c. Remove your gloves
  - d. Ask the instructor what to do next.

27. A safe rappel speed in this course is defined as:  
a. 1 foot per second      b. 1 meter per second  
c. Comfortable speed      d. 6 feet per second
28. Observing someone hanging motionless in a seat harness should:  
a. Be an indication they are dead.  
b. Be normal while someone is resting.  
c. Be a concern of great urgency.  
d. Remain that way until help arrives.
29. Harnesses have the potential of:  
a. Causing great trauma to the circulatory system.  
b. Causing suffocation.  
c. Causing pain and a, b, and d.  
d. Causing permanent nerve damage.
30. Bottom belays are best managed:  
a. In the fall zone with rope around the waist.  
b. In the fall zone with rope around the butt.  
c. Out of the fall zone with rope around the waist.  
d. Out of the fall zone with rope around the butt.
31. A double heel hang as a result of a chest roller blow-out:  
a. Is nearly impossible to get out of.  
b. Must be turned into a single heel hang to recover.  
c. After ten minutes will cause severe circulatory trauma.  
d. Will cause incredible ankle pain immediately and a, b and c above.
32. The ability to safely descend and climb depends on:  
a. Proper intake of fluids and body fuel.  
b. Conservative practices based on a thorough briefing of the situation.  
c. Constant safe practice and review of the skills.  
d. Common sense as well a, b and c above.
33. Who is the most important person in a party?  
a. You  
b. Your team mates  
c. Your instructor  
d. The leader