



- b. Show that you know first aid for and how to prevent injuries or illnesses that could occur during climbing activities, including heat and cold reactions, dehydration, stopped breathing, sprains, abrasions, fractures, rope burns, blisters, snakebite, and insect bites or stings.

Heat and cold reactions:


Dehydration:


Stopped breathing:


Sprains:


Abrasions:


Fractures:


Rope burns


Blisters:




Class 4


Class 5


Classifications:


b. Explain the following: top-rope climbing, lead climbing, and bouldering.

Top-rope climbing:


Lead climbing


Bouldering:


c. Evaluate the safety of a particular climbing area. Consider weather, visibility, the condition of the climbing surface and any environmental hazards.

Weather:


Visibility:


Condition of the climbing surface:


Environmental hazards:


d. Determine how to summon aid to the climbing area in case of an emergency.


5. **Verbal signals.** Explain the importance of using verbal signals during every climb and rappel, and while bouldering.


With the help of the merit badge counselor or another Scout, demonstrate the verbal signals used by each of the following:

a. Climbers


b. Rappellers


c. Belayers


d. Boulders and their spotters


6. **Rope.** Do the following:

a. Describe the kind of rope acceptable for use in climbing and rappelling.


b.  Show how to examine a rope for signs of wear or damage.

c. Discuss ways to prevent a rope from being damaged.


d. Explain when and how a rope should be retired.


e.  Properly coil a rope.

7. **Knots.** Demonstrate the ability to tie each of the following knots.

Give at least one example of how each knot is used in belaying, climbing or rappelling.

Knot	Use in Belaying	Use in Climbing	Use in Rappelling
a. Figure eight on a bight			
b. Figure eight follow-through			
c. Water knot			
d. Double fisherman's knot (Grapevine knot)			
e. Safety Knot			

8. **Harnesses.** Correctly put on a commercially made climbing harness



<input type="checkbox"/>	2.				

12.  Demonstrate ways to store rope, hardware, and other gear used for climbing, rappelling and belaying.

When working on merit badges, Scouts and Scouters should be aware of some vital information in the current edition of the *Guide to Advancement* (BSA publication 33088). Important excerpts from that publication can be downloaded from <http://usscouts.org/advance/docs/GTA-Excerpts-meritbadges.pdf>.  
 You can download a complete copy of the *Guide to Advancement* from <http://www.scouting.org/filestore/pdf/33088.pdf>.

***The Principles of Leave No Trace***

1. Plan Ahead and Prepare
2. Travel and Camp on Durable Surfaces
3. Dispose of Waste Properly (Pack It In, Pack It Out)
4. Leave What You Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Other Visitors

***Outdoor Code***

As an American, I will do my best to—

***Be clean in my outdoor manners.*** I will treat the outdoors as a heritage. I will take care of it for myself and others. I will keep my trash and garbage out of lakes, streams, fields, woods, and roadways.

***Be careful with fire.*** I will prevent wildfire. I will build my fires only when and where they are appropriate. When I have finished using a fire, I will make sure it is cold out. I will leave a clean fire ring, or remove all evidence of my fire.

***Be considerate in the outdoors.*** I will treat public and private property with respect. I will follow the principles of Leave No Trace for all outdoor activities.

***Be conservation-minded.*** I will learn about and practice good conservation of soil, waters, forests, minerals, grasslands, wildlife, and energy. I will urge others to do the same.