A decorative graphic on a black background. It features a vertical purple bar on the left, a blue horizontal bar below it, and a horizontal bar composed of purple, yellow, and red segments extending to the right. A yellow vertical bar is at the bottom right. The text 'Backpacking' is centered in orange, and 'Merit Badge' is centered below it in white.

Backpacking

Merit Badge

Hello

Are you interested in obtaining the Backpacking Merit Badge this year? We are going on a number of exciting hikes which will fulfil many of the requirements. Please print out these [handouts](#) and answer requirements #1-4, and 7 prior to our first meeting. If you have any questions please email me at beede63@aol.com

Requirement #1

Discuss the prevention of and treatment for the health concerns that could occur while backpacking, including hypothermia, heat reactions, frostbite, dehydration, insect stings, tick bites, snake bites, and blisters

hypothermia

1. Symptoms: feel cold or numb, fatigued, irritable, clumsy, slurred speech, shivering, poor judgement, and loss of consciousness
2. Treatment: move into shelter, warm clothes, dry sleeping bag, small amounts of warm liquid, water bottles filled with warm liquid in armpit or groin areas

heat reactions

Symptoms: (exhaustion) pale, clammy skin, nausea, headache, dizziness/fainting, muscle cramps, weakness/no energy (stroke) core temp over 105

Treatment: (exhaustion) shade, drink small amounts of fluid, cool wet cloth to skin, (stroke) shade, loosen clothing, fan, wet towels, ice packs in armpit or groin areas

frostbite

Symptoms: ear, nose, finger or feet numbness, grayish/white patch of skin (frostnip)

Treatment: shelter, slowly warm affected area

dehydration

Symptoms: dark urine, weariness

Treatment: drink water and continue to drink water on a trek

insect stings

Treatment: scrape away the stinger, and
apply ice pack

tick bites

Treatment: use tweezers to remove immediately, wash wound with soap and water

snakebite

Nonvenomous: clean wound with soap and water and antiseptic

Venomous: immediate medical attention

blisters

Treatment: cover 'hotspot' with a piece of moleskin or second skin, make sure to wear properly broken in and fitted boots, change socks frequently

Requirement #2

- a. list 10 items that are essential to be carried on any backpacking trek and explain why each item is necessary
- b. describe 10 ways you can limit the weight and bulk to be carried in your pack without jeopardizing your health or safety

10 Essentials

The Outdoor Essentials	
Pocketknife	
First Aid Kit	
Extra Clothing	
Rain Gear	
Water Bottle	
Flashlight	
Trail food	
Matches & Fire Starter	
Sun Protection	
Map & Compass	

10 ways to limit weight/bulk

1. Shakedown
2. Divide group gear
3. Lighter gear (replace older heavier gear)
4. Lightweight Boots
5. Prepare one pot meals
6. Match cookware to menus
7. Wear same outfit for 3-4 days
8. Share personal items
9. Consider nonessentials
10. Review what you brought after the hike & revise

Requirement #3

- a. Define limits on the number of backpackers appropriate for a trek crew
- b. describe how a trek crew should be organized
- c. tell how you would minimize risk on a backpacking trek.

Define limits

1. Patrol method governs
2. Does the area have any size restrictions?
3. Smaller group limits the environmental impact but not too small

How to organize

1. Trail Conditions
2. Travel Distances
3. Weather Conditions
4. Water Availability
5. Campsite Locations
6. Choose your destination
7. Pace Yourself
8. Getting there
9. Trip Plan
10. Emergency Response Plan

Minimizing risk

1. stay in good shape
2. know where you are going and what to expect
3. drink plenty of water
4. take care of gear

Requirement #4

- a. Describe the importance of using Leave No Trace principles while backpacking, and 5 ways you can limit the crews impact on the environment
- b. Describe proper methods of handling human and other wastes while on a trek. Describe the importance/means of personal cleanliness on a trek
- c. Tell important factors in picking a Campsite

Leave No Trace & 5 ways

Know the regulations, prepare for emergencies, avoid high use times, and go in small groups

1. Travel & Camp on durable surfaces
2. Dispose of waste properly
3. Leave what you find
4. Minimize campfire impact
5. Respect wildlife
6. Be considerate of other visitors

Waste & Cleanliness

1. Cathole at least 200 feet from camp
 2. Pack out solid waste
-
1. Clean dishes thoroughly
 2. hand sanitizer

Campsite choice

1. small
2. no vegetation
3. slope of the land

Requirement #5

- a. Demonstrate two ways to treat water and tell why water treatment is essential
- b. explain to your counselor the importance of staying well-hydrated during a trek

Water Treatment

1. Chemical - iodine or chlorine tablets
2. Filtering - hand pumps that clean water by passing it through screens

Hydration

Essential for digestion, respiration, brain activity, producing heat and staying cool.

Requirement #6

- a. Demonstrate that you can read a topo map
- b. while on trek, use a map & compass or gps receiver to establish your position on the ground 3 times
- c. explain how to stay found and what to do if you get lost

Read a Topographic Map

Topo Maps - show the shape of the terrain

Color Key:

Blue = water features (rivers, lakes, streams)

Green = vegetation (forests)

White = meadows or boulders

Black = man made structures

Red = survey lines & highways

Brown = contour lines and elevation

reference pgs. 68-72 in merit badge book for the rest

Stay Found & What to do

1. don't panic
2. stop, sit down, and try to work out your location with the map
3. If you are lost then stay put and set up camp
4. use whistle to send out three blasts every so often to indicate distress

Requirement #7

Tell how to properly prepare for and deal with inclement weather

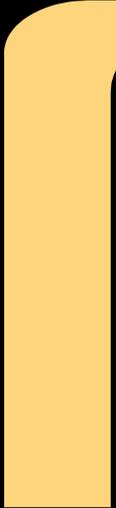
How to prepare for weather

1. Be aware of weather conditions
2. Utilize rain gear
3. lightning = get to lower elevations & groves of trees
4. shelter

Requirement #8

- a. explain the advantages and disadvantages of three different types of backpacking stoves using at least 3 types of fuel
- b. demonstrate that you know how to operate a backpacking stove safely and to handle liquid fuel safely
- c. Prepare at least three meals using a stove and fuel you can carry in a backpack
- d. Demonstrate that you know how to keep cooking gear clean & practice proper food storage

Backpacking Stoves



White-gas Stove

Canister Stove



Alcohol Stove

Demonstration



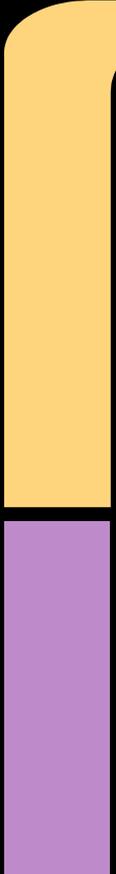
Requirement #9

- a. Write a plan for a patrol backpacking hike that includes a schedule
- b. Show that you know how to properly pack your personal gear and your share of the crew's gear and food.
- c. Show you can properly shoulder your pack
- d. Conduct a pre hike inspection of the patrol and its equipment
- e. While carrying your pack, complete a hike of at least 2 miles (Round Valley or Del Valle)

Patrol Plan



Pgs. 14-16



Show how to pack your pack

Pgs. 56-57

Requirement #10

Using Leave No Trace principles, participate in at least 3 backpacking treks (Sunol to DelValle & Lassen) of at least three days each and at least 15 miles each, and using at least two different campsites on each trek. Carry everything you will need throughout the trek.

Requirement #10

- a. Write a backpacking plan of at least 5 days, 3 different campsites, at least 30 miles. Describe route, schedule, food list, equipment needs, safety plan, and budget
- b. using Leave No Trace principles take trek you planned and complete one service project
- c. Keep a daily journal during the trek that includes a day by day description including notes about what worked and improvements for next time