

National 4-H Curriculum
BU-08044

Name _____

County _____

Camping Adventures

LEVEL **2**

**OUTDOOR ADVENTURE
PROJECT ACTIVITY GUIDE**



REVIEWED & RECOMMENDED
National 4-H Curriculum

Chapter
1

**CAMPING
GEAR**

Outdoor Skill:
Planning an overnight
base-camping trip

Life Skill:
Planning and organizing

**Educational
Standard:**
NPH.K-12.7 Understanding
Challenge

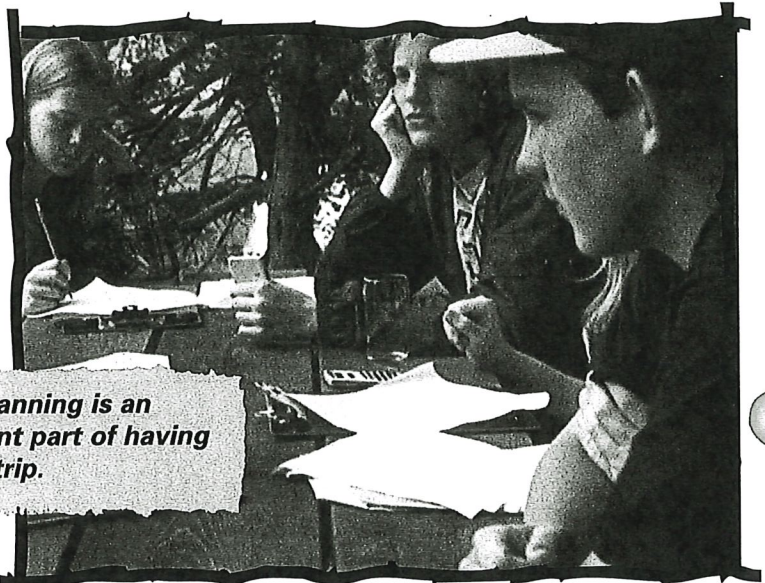
Success Indicator:
Organizes for a camping trip.

Let's Go Camping

Now that you have planned and gone on a day-hike you have many of the tools you will need for planning overnight base-camping trips. What were some of the things you considered when planning your day-hike? What do you imagine you will need to do before you leave for an overnight camping trip?

Get in Gear

In the space below write some of the important things you learned while planning your day-hike. Mark the things you think may be important in planning your overnight camping trip.



Good planning is an important part of having a great trip.

Write notes about what you have learned:



Talk it Over

Share the Experience

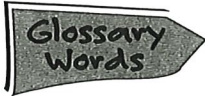
- What items did you include in your list of things to take on your overnight camping trip?

Reflections

- What do you need to consider when planning a trip?

Now What?

- How do you think you may be able to apply your planning skills in Level 2—*Camping Adventures*?



- **Layering/Layers**
- **Base camping**



Planning an Overnight Camping Trip

As you remember from Hiking Trails any trip away from home requires planning. An overnight camping trip is going to take quite a bit of planning and organization—and you will need to work with your camping buddies to make sure everyone has a role in the planning process. The activities in *Camping Adventures* will help you answer these questions and plan the perfect camping trip for you and your camping companions. Some of the things you will need to plan for include:

- When are you going?
- Where are you going?
- How are you getting there?
- Who is going?
- Will you need to make reservations?
- What will you use for shelter?
- What clothing will you bring?
- What will you eat?
- What are the costs involved with this camping trip?

Before you go—Planning and Campsite Reservations

- As you made a trip plan for your day-hike, be sure to leave campsite information with appropriate people before you leave for your camping trip.
- You may have to make a reservation at the national or state park camp site you choose. Other sites are available on a first come/first serve basis only. In fact, many sites are reserved months in advance...so don't wait until the last minute.
- Don't forget to send in the reservation fee with your application.
- Consider using the Internet to make your reservations as well as learn more about camping regulations and facilities. Many state and national parks post camping information on their websites.
- Ask about the resources and facilities the camp site offers—this will help you decide what you will need to bring with you and what you can leave at home.
- Find out the restrictions the campground has on fires or if they require permits.
- Twenty-four hours before you leave, call and confirm your reservation and ask about any changes in conditions that could affect your camping. This will allow you to make last minute changes in the food supplies you plan to bring.



At the campsite speak with the site caretaker or ranger about the camp site regulations. Ask about how the user fees benefit the camp site.



Gearing Up!

As you get into "high gear" with preparations for your upcoming camping trip, you'll want to decide what personal items to take. Consider climate, season and weight. Remember, you will be responsible for your own decisions. The gear you choose will affect your comfort and safety in the field.

Outdoor Skill:
Selecting personal gear for base camping

Life Skill:
Decision making

Educational Standard:
NPH.K-12.7 Understanding Challenge

Success Indicator:
Selects equipment for a camping trip.

Get in Gear

First check the gear you plan to take on your upcoming camping trip in the column marked Gear. Then for each piece of gear listed in the Gear column indicate under what

type(s) of conditions you would choose that gear. After you have made your choices discuss with your helper why you made those selections.

There are different advantages to each unique hat.



Gear	Equipment you will take	Spring in High Desert	Summer along Wooded Creeks	Winter in Snowy Mountains	Autumn in the Forest
Sleeping bag					
Down jacket					
Sandals					
Rain gear					
Wool hat, gloves, over mitts					
T-shirt					
Poly-pro tops and bottoms					
Wool or synthetic socks					
Hiking boots or shoes					
Light synthetic layers					
Extra layer for weather changes					
Wide brimmed hat					
Layering with synthetic or wool					
Synthetic fill sleeping bag that will stay warm when wet					
Stocking hat and gloves					
Fleece jacket					
Cotton socks					
Insulated boots					
Shorts					

Talk it Over

Share the Experience

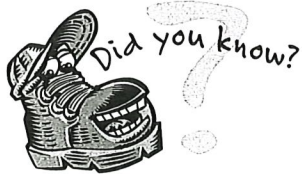
- What gear did you select?
- What personal gear is essential for every trip regardless of climate or season?

Reflections

- What attracted you to certain gear?
- How can a goose down sleeping bag represent a good or bad choice in relation to climate and weather conditions?

Now What?

- What did you learn about decision making through your gear selection?
- How are you responsible to others by what you choose to bring on a trip?



- Goose down comes primarily from Eider Geese.
- Some brands of fleece are actually made from recycled plastic milk jugs!

Acknowledgement: Activity written by Drew Pickle.



Personal Gear Check List

Gear for a 3-7 day Trip

- | | |
|--|---|
| <input type="checkbox"/> Ball cap/sun hat | <input type="checkbox"/> Under garments for 3 days |
| <input type="checkbox"/> Stocking hat (fleece, wool) | <input type="checkbox"/> Toiletries (keep to the basics; no makeup, hair gel, etc.) |
| <input type="checkbox"/> 3 short sleeve T-shirts (polypropylene or cotton) | <input type="checkbox"/> Personal cook gear—1 cup, bowl, spoon (plastic, aluminum) |
| <input type="checkbox"/> 1 long sleeve T-shirt (polypropylene or cotton) | <input type="checkbox"/> Small folding knife (2-3 inch blade) |
| <input type="checkbox"/> Sweater (fleece, wool) | <input type="checkbox"/> Small flashlight or headlamp |
| <input type="checkbox"/> Rain jacket (light weight, nylon) | <input type="checkbox"/> Water bottle (2 one-quart watertight plastic bottles) |
| <input type="checkbox"/> 3 shorts (nylon or cotton) | <input type="checkbox"/> Sunscreen |
| <input type="checkbox"/> Sweat pants/wind pants (nylon) | <input type="checkbox"/> Matches/lighter |
| <input type="checkbox"/> Running/hiking shoes or sandals—camp shoes | <input type="checkbox"/> Optional gear—lightweight gloves, sun glasses, sandals, camera, binoculars, book |
| <input type="checkbox"/> Hiking boots (well broken in) | <input type="checkbox"/> 1 set of clean clothes to wear home |
| <input type="checkbox"/> Socks—3 pair (wool or synthetic) | |
| <input type="checkbox"/> Liner socks—3 pair (polypropylene or thin cotton) | |

Most of the listed items are the preferred gear. Polypropylene, wool and fleece will keep you warm when wet while synthetic materials, like polypropylene and fleece will wick sweat and be warm when wet. Cotton has no insulating ability when wet. Remember that you will be carrying all of your own personal gear so keep it to a minimum. The desert and the mountains can change in temperature by more than 30 degrees in just minutes. If you do not already own most of the items on the list, get creative. Is your windbreaker water proof? Try to use what you have or can borrow. Many outfitters or outdoor sports stores will allow you to rent gear. It is always a good idea to try something before you decide to buy it!



1. Compile a list of economical camping equipment that you would recommend to your group or family.
2. Find information on how different materials insulate and share with your helper what you discover.
3. Show your group or family members how to pack light.

Rolling Up Group Gear!

Outdoor Skill:

Group gear selection for backpacking

Life Skill:

Teamwork and cooperation

Educational Standard:

NPH.K-12.7 Understanding Challenge

Success Indicator:

Selects backpacking gear as a team.

Look in your backpack or duffel bag to see what you plan to take on your camping expedition. You probably have all of your personal gear in there. But where is the stove going to fit? The cooler? The tents and tarps? Base camping allows you to take more group gear than you could take alone on a backpacking trip. With your

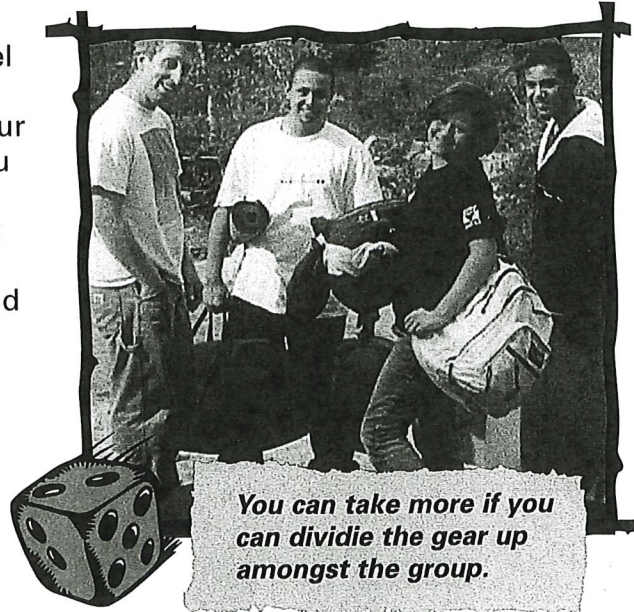
camping group or with your family, practice planning for a camping trip by doing this activity.

Get in Gear

Before you load the car to head "into the wilderness", you'll want to consider what group gear to take. Your safety, comfort and the weight of the gear will be factors in making your decisions.

1 Using a six sided die, roll to determine the number of participants in the group. Multiply the number by two to get the number in the group to plan for. (for example, if you roll a five on the die, then plan for a group of 10 people).

2 Next, roll the six-sided die to determine the number of days you will be camping. Follow the group gear check list for base camping. Then select the items you feel the group will need for the trip. Don't forget to discuss the number of each item that will be needed according to the size of the group and the length of your trip. Once you have selected gear for a base camping trip, then use the checklist to pack for your actual base camping trip!



Group Camping Gear List

Number in Group _____ Number of Days _____

Group Gear Needed for the Trip

Stationary Camping

Back Country Camping



Talk it Over

Share the Experience

- What gear did you select?
- How did the number of participants in the group affect your decisions in selecting group gear?
- Which factors were most important to consider in choosing camping gear?

Reflections

- How is the person selecting group gear responsible to the group?
- If you did this in a group, how did you decide what to select?

Now What?

- How can you apply the group gear selection activity to your day-to-day responsibilities?
- Why is working in a group to make decisions important?



Dutch oven



Group Gear Check List

Tent Group

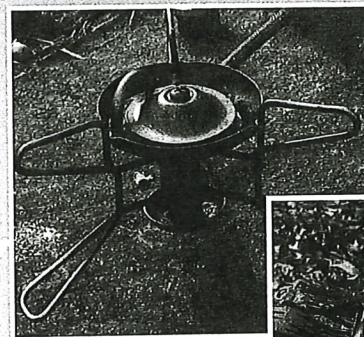
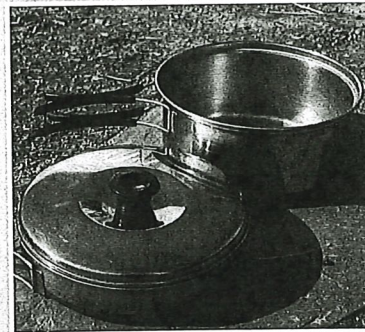
- 2-3 person tent
- Large tent, 3-6 person
- Sleeping bag
- Sleeping pad
- Lantern with extra mantles and fuel
- Trowel and toilet paper
- Wet wipes
- Tarp
- Rope
- Extra tent stakes
- First aid kit
- Any permits—fires, camping, etc.

Cooking Group

- 4 quart pot & lid
- 2 quart pot & lid
- 6-8 quart pot and lid
- Frying pan
- Pocket knives
- Cutting board
- Colander or strainer
- Serving spoon
- Spatula
- Scouring pad
- Biodegradable soap
- Trash bags
- Ice chest
- Water purification system
- Water jugs
- Wash basin
- Single burner stove/fuel
- Two burner stove/fuel

Other Items

- Dutch oven
- Griddle—cast iron
- Fire grill/grate
- 12-14 inch cast iron pan
- Mixing bowls
- Cheese grater



Describe to your helper alternatives to base camping gear.



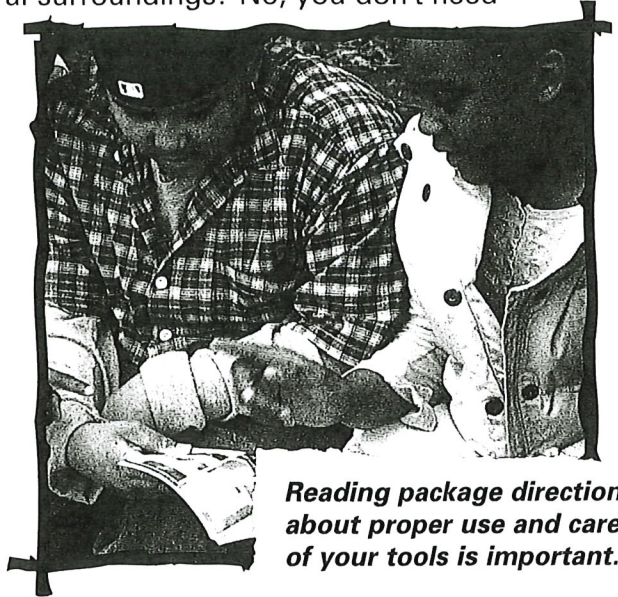
Tool Time

If you were going on an overnight camping adventure, what equipment do you think you would need to eat, sleep, construct a shelter and enjoy the natural surroundings? No, you don't need to take your tool box

complete with hammer, saw and screw driver on your next camping trip,

but you may want to take some specialized gear to make your experience run a little more smoothly.

Knowing how to use this equipment and keep it in good condition can mean the difference between an enjoyable experience and a frustrating one.



Reading package directions about proper use and care of your tools is important.

Outdoor Skill:
Practice using camping tools for overnight camping

Life Skill:
Communication with others—demonstrating

Educational Standard:

NT.K-12.6 Technology Problem-Solving and Decision-Making Tools

Success Indicator:
Demonstrates safe tool use.

Get in Gear

The best way to learn about camping tools is to get out, use them and then help someone else learn to use them properly. First with your helper practice using several tools you discover in your outdoor gear store. Then select one and give a short demonstration on its use to your helper, family or group. Record the main demonstration in the Demonstration Outline.

Demonstration Outline

Title _____

Introduction _____

Body _____

Conclusion _____



Talk it Over

Share the Experience

- What did you include in your demonstration?
- What equipment did you successfully learn to use?
- What are some additional tools or equipment that might make your overnight camping adventure safer or more successful?

Reflections

- How could learning to use basic tools be helpful to you in your everyday life?
- How did giving a demonstration help you learn how to use the tools?

Now What?

- What are some other situations when you demonstrated to others how to do something?



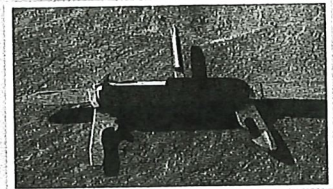
Using Basic Camping Tools

Can Openers

Can openers are often part of a multi-purpose tool or pocket knife. Place the curved part outside the rim on the top of a can and the sharp blade (top of the hook) inside the rim, running parallel to it. Using the hook, press against the outside of the can while lifting the knife handle. The blade inside the rim will move into the top of the can and will make a small cut in it. Move the hook forward and lift the handle again, keep repeating this movement until you have gone all the way around the can. Remember to keep the bottom part of the opener blade tight against the outside of the rim of the can and to lift slowly at first. Be aware of the sharp edge of the lid and the can.

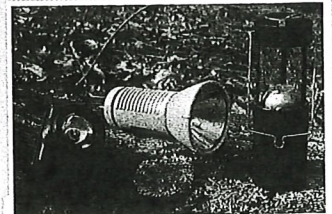
Pocket Knives

Pocket knives should be held in one hand, pinching the knife between the thumb and fingers or the base of thumb and tips of the fingers. Insert the thumbnail of your free hand into the slot in the knife blade. Don't move the hand you're holding the knife in until the blade is all the way open. When cutting with a knife, always lay the item on a stationary surface and cut away from you—never towards you. Never walk with an open knife. Hand a knife to someone by the handle—not the blade. Clean the knife before putting it away. To put away a pocket knife, hold the handle between the base of the thumb and the tips of the fingers so that no part of your hand is near the slot into which the blade will fit.



Other Tools

Other tools include a headlamp, flashlight or lantern. Camping trips can easily become more challenging and potentially more dangerous without a reliable source of lighting. Lanterns can be used while base camping. It is always a good idea to bring a flashlight or head lamp as well. Trips to the "privy" late at night are much easier when you can see where you are headed! Remember to bring extra batteries and bulbs for flashlights and head lamps and extra mantles and fuel for lanterns.



1. Teach someone how to use these tools and how they are helpful.
2. Go to an outdoor equipment store and look at the equipment available. Ask a sales person to demonstrate how to use a tool that you do not know about.



The Perfect Knot

Outdoor Skill:

Tying several knots useful for camping

Life Skill:

Teaching others

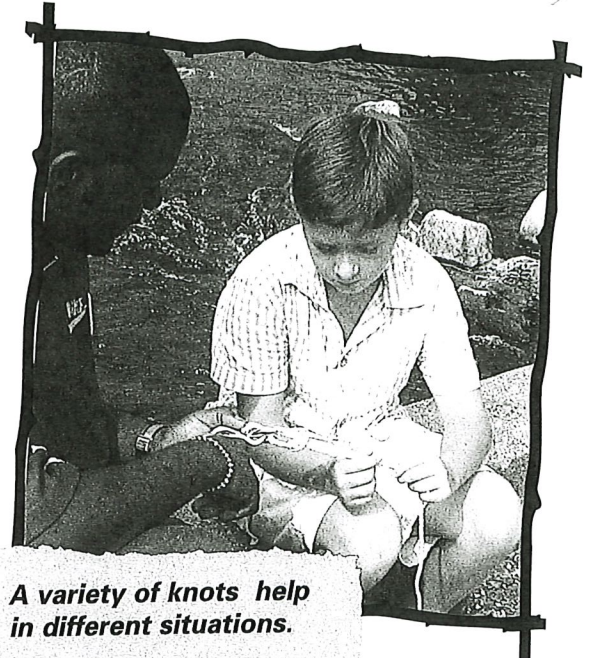
Educational Standard:

NT.K-12.6 Technology Problem-Solving and Decision-Making Tools

Success Indicator:

Helps others learn to tie six different knots.

If you had to tie two ropes together or tie a canoe to a dock what knot would you use? Knowing how to tie the right knot or hitch for each situation is a valuable skill when camping. In this activity you'll have an opportunity to learn at least six knots and then teach these knots to someone else.



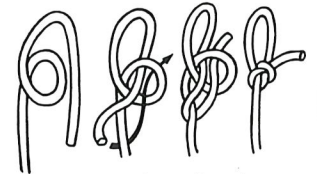
A variety of knots help in different situations.

Get in Gear

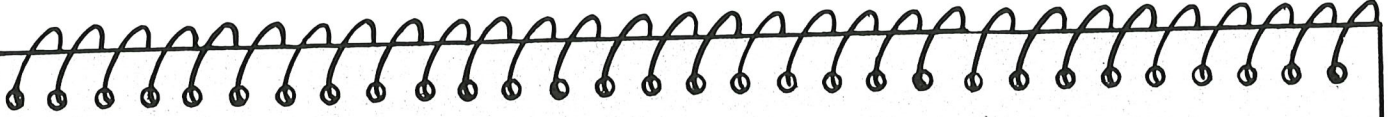
Practice tying each of the knots below until you know how to tie each one. Tying tips are included in Outdoor Tips and on the web site. Then help someone else tie these same knots.

See if you can help this person learn the same way you learned. Check the experiential learning model on the inside front cover to use an experiential

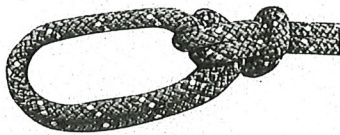
approach. Describe how you helped someone learn to tie knots under My Way of Teaching Knot Tying. Then write on the line below each knot one way that knot might be used in a camp setting.



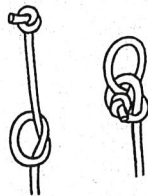
Bowline Knot



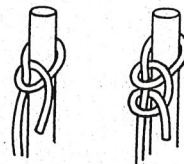
My Way of Teaching Knot Tying



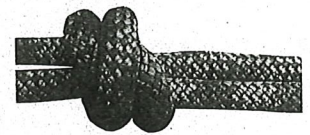
Bowline Knot



Honda Knot



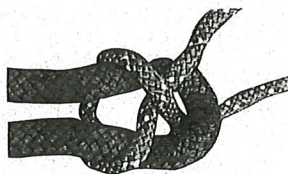
Double Half Hitch



Fisherman



Square Knot



Sheet Bend

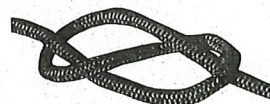
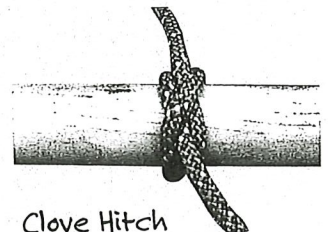


Figure Eight Knot



Clove Hitch



Talk it Over

Share the Experience

- Which knots did you learn and then help someone else learn to tie?
- What situations would you use each of the knots or hitches while camping?

Reflections

- How is helping someone learn experientially different from showing or telling them?

Now What?

- What emergency situation would you use knots or hitches?



Tying Knots

Stopper Knots

- *Overhand knots* are often used to prevent ropes from fraying but tangle easily and are hard to undo. To make an overhand loop, pass the end under and up through the loop.
- *Figure-eight knots* are used to prevent ropes from slipping through pulleys or holes. Make a loop in the rope by passing the end over the standing part. Then pass the end beneath the standing part and bring it back through the loop. Draw it taut by pulling on the standing part.

Joiner Knots join two ropes together and generally serve as permanent fastenings until they're untied.

- *Square knots* are used to join two pieces of same-sized rope together. Hold one rope end in each hand. Tie the right-hand form of the overhand, then cross the strands and tie the left-hand overhand knot. Pull both ends tight into a square knot
- *Sheet bend knots* are used to join two ropes of unequal diameters. Make a square knot but do not pull it tight. Cross the working end of the thinner rope over its standing end and tuck it down through the loop of the thick rope. Pull the rope tight. This holds the thinner rope in place.

Hitches are temporary fastenings that can be undone easily and quickly.

- *Clove hitches* are used to fasten a rope to a tree, post or similar object when there will be a steady pull on the object. Pass the free end of the rope behind the post. Bring the free end around to the front of the post and cross the standing end, making an X. Pass the free end behind the post again, below the X. As you bring the free end around to the front of the post again, pass it under the X so that it comes out between the previous two turns around the post. Pull both ends tight. Be sure to pull the free end directly opposite the standing end.
- *Half hitches* are tied at the ends of ropes holding boats or horses to rings or poles. Pass the free end of the rope behind a pole or through a ring and around to the front again, then under the standing end. Bring the free end up and in front of the standing end, then tuck it into the bend. Make another half hitch on the standing end of the rope away from the ring or post.
- *Bowline hitches* will not slip or draw tight and may be easily untied. They can be helpful in rescue and transport situations. Pass the end of the rope through a ring or around a post. Then make a loop or half hitch in the standing part of the rope about two feet from the end. Bring the end through the loop from the upper side. Next, pass the end over the standing part of the rope and then pass it back through the loop.



Did you know?

The ends of nylon rope can be melted to stop fraying.

Glossary Words

- Working end or free end
- Bight
- Loop
- Overhand loop
- Underhand loop
- Standing end



1. Prepare and present a demonstration on tying and using knots.
2. Show your helper that you can tie six knots in addition to the ones you already know.
3. Develop a six station knot tying

skillathon where participants will need to keep a rope from unraveling; secure a flagpole pulley; join two pieces of rope of equal and/or unequal diameters together; make a clothesline, move a heavy log or rock; and secure a tent line.

Home Away from Home

What experience have you had selecting **campsites**? Do you take the first one available or do you carefully consider the benefits of each campsite before making your choice? In this activity you will test your critical thinking skills as you analyze a potential camping site.

Outdoor Skill:
Practicing Leave No Trace (LNT) principles to evaluate and select camp sites

Life Skill:
Critical thinking

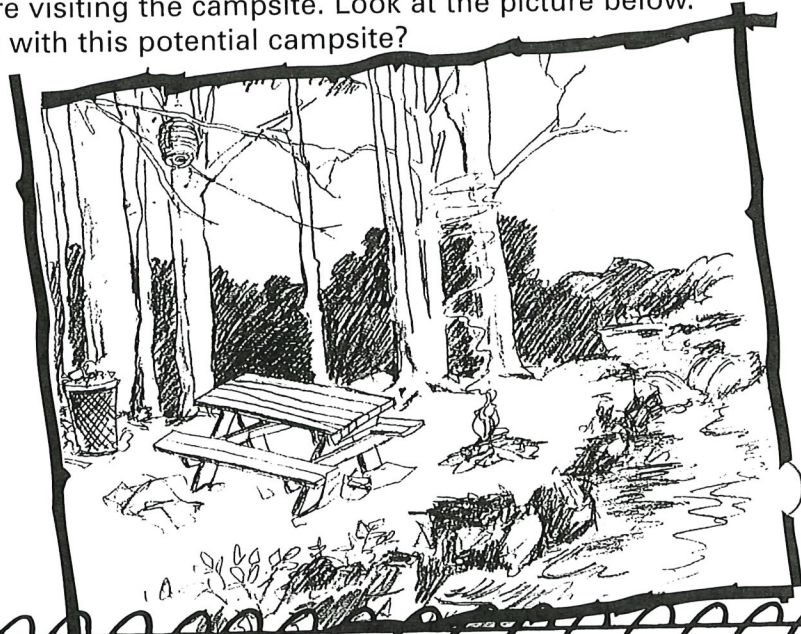
Educational Standard:
NPH.K-12.7 Understanding Challenge

Success Indicator:
Select appropriate camping sites.

Get in Gear

At an established campsite, it is important to consider the safety of the site and how you can use the Leave No Trace principles while you are visiting the campsite. Look at the picture below. What's wrong with this potential campsite?

Circle what you think is wrong with the picture or what you feel might be camping hazards. Then describe an ideal campsite for you and your family.



Our Ideal Campsite

- Campground(s)
- Pristine
- Riparian
- Campsite
- Leave No Trace

Glossary Words



Talk it Over

Share the Experience

- What hazards did you find?
- How would this affect your camp experience?
- What LNT principles did you think would apply to this campsite?

Reflections

- When is camping in a **pristine** (non-established area) acceptable?
- How does following or not following the LNT principles affect future campers?

Now What?

- What will you consider in your next campsite selection?
- How do the LNT principles apply to other things you do like riding in automobiles, using mass transportation or enjoying public spaces like parks, state and national monuments?



It can take up to five months for paper to decompose and 80 to 100 years for aluminum cans to decompose.



Checking for rocks before staking can help in a good night's sleep.

Acknowledgement: Activity written by Jill Martz, Bob Peterson and J. Drew Pickle.



Campsite Selection

Establishing Campsites

Established campsites offer many benefits. These campsites allow you to enjoy the outdoors with limited impact on the land. Established campsites impact the land in only small concentrated areas rather than many areas. This allows people to use and enjoy the land, while following the Leave No Trace (LNT) principle of minimizing impacts. Knowing and applying the LNT principles is the key to responsible camping now and in future decades.



Site it Right—Things to look for in camp site selection

- Relatively high, flat ground
- Close to water source
- Ample space for cooking, eating and clean-up
- A site with trees or facilities for garbage and food to be hung or placed away from camp.
- Shaded for various times of the day.
- Space for your tent or sleeping bag that is not rocky.



Did you know?

- Yellowstone, in 1872, was the first national park created.



1. Organize a cleanup of a park or hiking trail.

Nifty Niches

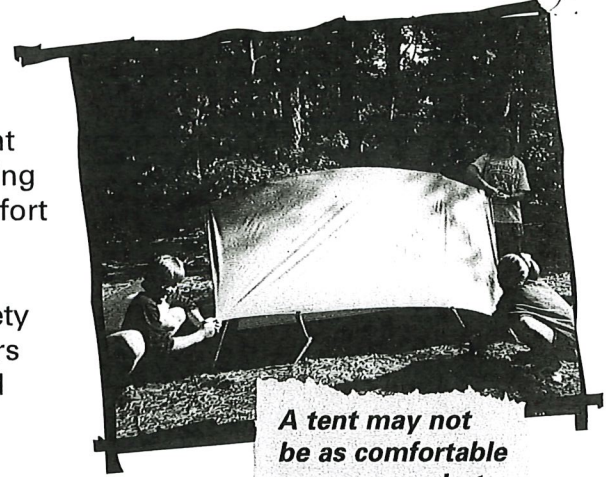
Outdoor Skill:
Selecting the right shelter

Life Skill:
Critical thinking

Educational Standard:
NS.5-8.6 Personal and Social Perspectives

Success Indicator:
Selects an appropriate camping shelter.

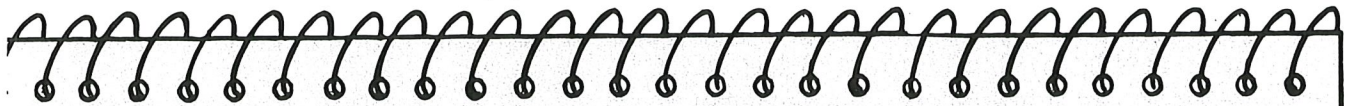
Your comfort and enjoyment on a camping trip often depends on selecting the right type of shelter. Weather, camping experience and the level of comfort you want can determine which shelter to select. Base camping also provides access to a wide variety of shelters. Identifying these shelters and discovering the advantages and disadvantages of each can help you decide which shelter best fits your needs.



A tent may not be as comfortable as a camper but it has other advantages.

Get in Gear

Match each of the 15 different types of shelter shown. Then circle one shelter that best fits your camping situation and tell why you chose it.



Shelter Name

Shelter

1. Tarp
2. Cabin
3. Camper
4. Lean-to
5. Dome Tent
6. Hoop Tent
7. A Frame Tent
8. Umbrella Tent
9. Cabin Tent
10. Vehicle
11. Screen/mesh Tent
12. Hammock
13. Teepee
14. Bivouac Sack
15. Wing/parafly

- a. 
- b. 
- c. 
- d. 
- e. 
- f. 
- g. 
- h. 
- i. 
- j. 
- k. 
- l. 
- m. 
- n. 
- o. 

My Favorite Shelter is

Reason I like it



Share the Experience

- What features are important in a camping shelter?
- How did you decide which base camp shelter is best for you?

Reflections

- What similarities and differences did you find among the camping shelters?
- What similarities do you find between camping shelters and your own home? What differences?

Now What?

- What happens if you select an inappropriate camping shelter?



Did you know?

- Dark colored tents absorb sun and heat up quickly. Light colored tents will reflect the sun and remain cooler.

Glossary Words

Criteria • Niche • Ventilation

Acknowledgement: Activity written by Nancy Franz.



Base Camping Shelters

- Tent
- Cabin
- Camper
- Lean to
- Tarp

Criteria for Selecting

- Cost
- Ease of set up
- Size
- Weather
- Campsite location
- Ventilation
- Ease of care
- Color
- Insect protection
- Style

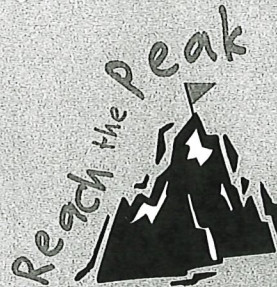
Additional Resources

Camping stores

The Essential Family Camper: A Handbook for the Great Outdoors by Zora Aiken and David Aiken, McGraw-Hill, NY, 2001.

American Camping Association

Basic Essentials: Camping by Cliff Jacobson, Globe Pequot Publishing, 1999.



1. Visit a camping store to learn more about how to set up tents and more about the various styles available.

2. Create a poster or display about the types of shelters.

3. Create a display on the care of camping shelters (storage, cleaning, sun, staking, poles).

4. Discover the easiest and best ways to set up a variety of camping shelters and write the directions down for others.

Chapter
3

Camp Cuisine

Outdoor Skill:
Planning food supplies for a base camping trip

Life Skill:
Planning and organizing

Educational Standard:
NPH.K-12.5 Responsible Behavior

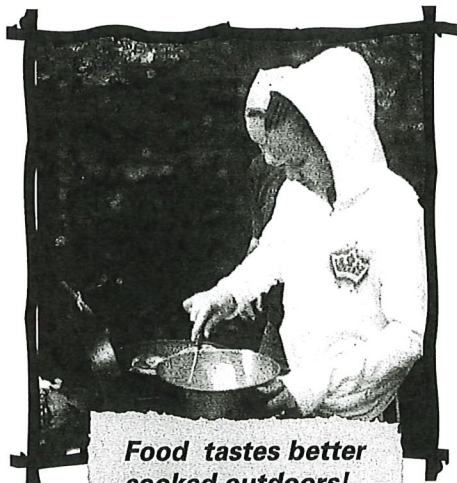
Success Indicator:
Plans a camping cuisine menu.

What's Cookin'?

What are some of your favorite foods to eat and prepare? After you have been outside exercising, do you crave certain foods? You've already learned how to create well-balanced, nutritional meals for day hikes. Now you will have the opportunity to apply what you've learned to plan a menu for your over-night camping trip.

Get in Gear

As you get ready to go on your camping trip, you'll need to spend some time thinking about what food to take. Remember that you want your meals to be healthy, easy to prepare, inexpensive and delicious. Get together with your hiking group or family and plan the food you would need for a three-day camping trip.



Food tastes better cooked outdoors!

Food for the Camping Trip

	Day One	Day Two	Day Three
Breakfast			
Lunch			
Dinner			
Snacks			



Talk it Over

Share the Experience

- How did you decide what kind of food to take?
- What are some of the things you considered while creating your menu plan?

Reflections

- What did you do when your group or family members didn't agree on a certain food item or meal?
- What are some ways you help out at home?
- What are some ways you may help out on your next camping trip?

Now What?

- How will you transfer your camp menu planning knowledge to your home life?
- How will this type of planning help you in the future?

Additional Resources
NOLS Cookery, by Claudia Pearson. Stackpole Books, 1997
Allen and Mike's Really Cool Back Packin' Book: Traveling and Camping Skills for a Wilderness Environment by Allen O'Bannon. Falcon Publishing, 2001.

Acknowledgement: Activity written by Elizabeth Sparks and Josina Fluehr-Lobban.



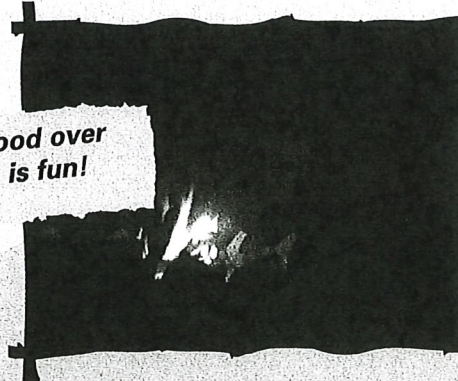
Menu Planning

Menu Sample

The following is an example of a menu plan for a three day trip. Keep in mind, there are some foods that are easy to prepare at a camp site, while others may be more challenging. Pancakes taste great while camping (and at home!) but require a lot of cleanup. Be sure to plan meals based on what you will be doing during your camping trip. If you are going out for a day hike on day two, you'll want to plan a packable lunch for that day.

	Day One	Day Two	Day Three
Breakfast	Cold cereal, oatmeal, powdered milk or fresh milk from cooler, fruit, tea	Grilled bagels and eggs	Pancakes with maple syrup and fresh fruits
Lunch	Pita bread sandwiches—peanut butter and jelly, lunch meats and cheeses, granola bars	Sandwiches, trail mix and fresh fruit	Sandwiches, chips and carrot sticks
Dinner	Burrito bar: tortillas, beans and rice, veggies, salsa and cheese	One pot lasagna: Ziti, tomato sauce, mozzarella cheese, ricotta cheese	Chili and quesadillas: Chili mix, beans, tortillas and cheese
Snacks/ Desserts	Cookies	Pudding pie	Fruit

Roasting food over a campfire is fun!



1. Prepare dinner for a group of 4–6 people outside and away from your house. Plan the menu, pack your ingredients, cook your meal and clean up all leftovers with as little impact as possible.

2. Visit a camping store to see the products available and duplicate these foods using foods from the grocery store or foods you have at home. Compare prices between the camping store and the grocery store.

Everything...but the kitchen sink!

Outdoor Skill:
Food planning and preparation for camping

Life Skill:
Decision making

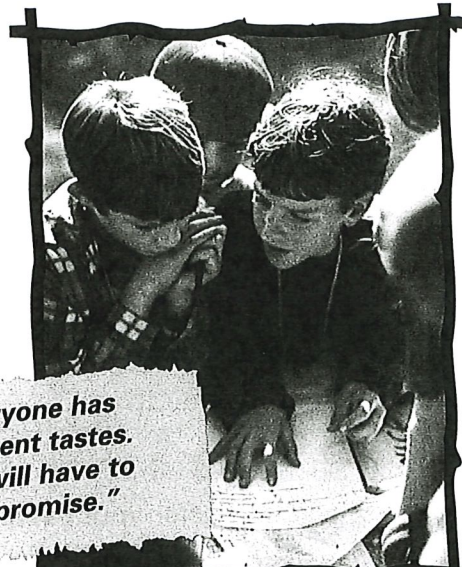
Educational Standard:
NPH.K-12.7 Understanding Challenge

Success Indicator:
Selects food preparation supplies.

On a camping adventure, planning can make the difference between a happy camping experience and a hassled camping experience. If you are hoping for a happy experience, you'll want to think carefully about all the supplies you will need to prepare your meals.

Get in Gear

Review your menu plan from the previous activity. Imagine all the various tools and kitchen utensils you would use if you were to prepare these meals at home. You may want to bring "everything...but the kitchen sink", but you'll need to try to use only the cooking resources you can fit in a bag or box to put in the car. Use the list of questions in Outdoor Tips to help you draft a list of the things you will need to take on your camping trip. Fill in the lines with your responses. Then make your own list.



"Everyone has different tastes. We will have to compromise."

Food Preparation Supplies List

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



Talk it Over

Share the Experience

- What food preparation supplies did you decide to take?

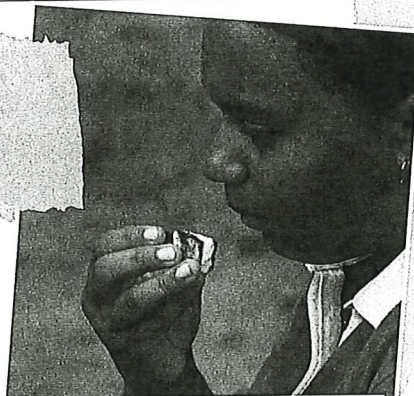
Reflections

- What decisions did you have to make to prepare your list?

Now What?

- How will this type of planning help you in the future?

Planning what to eat and how to cook it is important!



Food Preparation Supply Questions

Here are some questions to consider as you prepare your list of supplies.

- ✓ What condiments will you need? Does any of your food require ketchup, mustard or salad dressing?

- ✓ What's needed to prepare dessert?

- ✓ What big pots or pans will be needed?

- ✓ Will you need tinfoil?

- ✓ How about plastic bags and/or garbage bags?

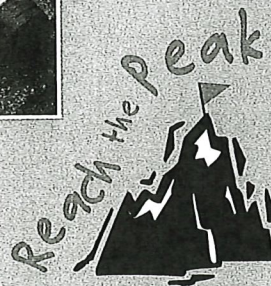
- ✓ How do you plan to clean pots, pans and plates?

- ✓ Where will you get water?

- ✓ Where will the hand-washing and dish washing take place?

- ✓ How will you handle leftovers?

This is only a partial list of all the questions you may need to ask yourself and your family or camping group prior to leaving. Feel free to add questions that are appropriate to your camping experience. Just before you go, double check your list to make sure you've thought of everything!



1. Visit an outdoor store to see what the latest food preparation supplies are on the market. Share what you discover with your helper.

Home, Home on the Range

Outdoor Skill:

Cook stove selection

Life Skill:

Decision making

Educational Standard:

NT.K-12.1 Basic Operations and Concepts

Success Indicator:

Selects an appropriate camping stove.

Think about your menu plan... what things will you need to cook? How will you cook these meals when you are far away from your kitchen at home? Although, you may imagine a campfire, remember those Leave No Trace principles you learned earlier? One tells you to "minimize campfire impacts". You can minimize those impacts by cooking on a camp stove. You'll find a wide range of stoves available for camping and backpacking.

Get in Gear

The best way to learn about some of the different types of camp stoves is see them. You can look over catalogs of camping gear, visit a local camping store or even look on-line to select the stove that will work best for your base-camp needs. Review all of the information you discover. Outline the pros and cons of each stove you found. Then select one that you would use. Keep in mind five key points when making your decision:



- weight and packability of the stove



- the type of fuel the stove requires



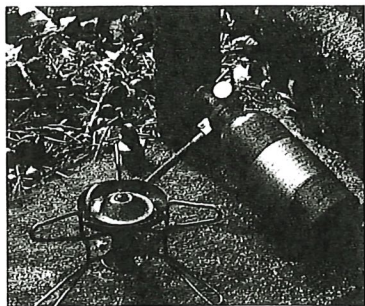
- the burn time of the fuel types (see chart)



- the number of people in the group



- the number of days you will need to use the stove and fuel



British Thermal Unit (BTU)

Glossary Words

Type of stove	Pros	Cons
Ex. Coleman 2 burner	Good size for base camping Easy to light Nice to have two burners on one stove!	A little heavy Uses a good deal of fuel

My Stove Choice: _____



Talk it over

Share the Experience

- What stove did you select? Why?
- How can your stove selection affect the success of a trip?
- How many stoves do you need for your given group size? How many fuel bottles?

Reflections

- How did you research the various types of stoves?

Now What?

- What are some safety considerations to be aware of when you use your camp stove?



Did you know?

- It takes more fuel to heat water to the same temperature at higher altitudes.
- In cold weather, liquid fuel spilled on your skin can cause frost nip.

Acknowledgement: Activity written by J. Drew Pickle.



Selecting and Lighting a Camping Stove

Selecting a Camping Stove

There are many types of camping stoves. Standard two burner stoves are great for large groups whereas backpacking stoves with either liquid gas or a gas canister with small single burners work well for backpacking experiences.

Stove Lighting and Use Tips

- Using a camp stove can be dangerous if you are not careful. Follow these tips to help prevent possible injuries to you or your cook group.
- Make sure the "kitchen area" is clear of anything flammable before the stove is lit.



- A 3-5 foot "safety zone" can be used around the stove and kitchen area. Your cook group members will know they need to be extra careful in this space and your other camping buddies will know to simply stay out of the safety zone while the cooks are in the kitchen.
- Make sure to set up the stove in a stable place. Before you light the stove, clear away any leaf litter or other materials that could catch fire.
- Check the fuel bottle to make sure it has no leaks.
- Use pot holders or pot grippers when stirring the pot, adding food to a pot on the stove, or removing the pot from the stove.



1. **Demonstrate or discuss safety procedures when lighting stoves.**

What's in Your Water?

Outdoor Skill:
Purifying water

Life Skill:
Healthy lifestyle choices

Educational Standard:
NS.5-8.6 Personal and Social Perspectives

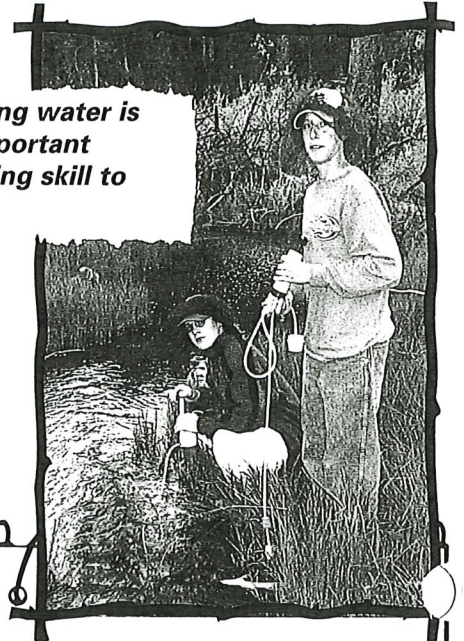
Success Indicator:
Examines and purifies water.

Water may look clear, but under a microscope you can see lots of debris and organisms that might make you sick. To stay healthy while camping and backpacking, you need to drink a lot of water, but you'd find it impossible to carry all the drinking and cooking water you'll need for your entire trip! In this activity you'll learn about water-related illness, how to identify water you may want to drink and how to purify water using different purification systems.

Get in Gear

Collect water samples from various locations—your tap, a puddle outside, a nearby creek or river, your neighbor's tap, etc. Use a microscope or magnifying lens to look closely at each sample and discuss the differences in appearance. Boil part of each sample to see the effect of boiling the water. Record what you discover.

Filtering water is an important camping skill to learn.



Sample Source	What I Saw Before Boiling	What I Saw After Boiling
1. Tap water—my house		
2.		
3.		
4.		
5.		



Not all bacteria are bad for you. Some live inside your digestive system and help digest your food, others serve as decomposers and play a major role in recycling organic materials essential to plants and animals.

- **Giardia**
- **Microorganisms**
- **Rolling boil**

Glossary Words

Talk it Over



Purifying Water

Share the Experience

- What did you observe in the water samples?
- What was the most fun about this activity?

Reflections

- Why is it important to think about where your water comes from?
- How will you decide whether or not you should drink water from a given water source?

Now What?

- How will seeing what's hidden in water help you make healthy choices?
- What criteria did you use to help you decide which water purification system to buy? How does this help you in buying other items?
- When else might you think about what goes into your body?

When you camp or backpack, you will often times rely on untreated natural water sources for drinking and cooking. If you do, you will need to purify the water to prevent getting sick from any of the invisible harmful organisms living in the water. You have many options for purifying water, from lightweight iodine tablets and solutions to filtration systems that weigh more. For cooking, most often it's enough to simply boil water to do away with harmful microorganisms. How you choose to purify drinking water depends on factors such as weight and taste. Do your research, try out a few different systems and pick the one that best suits you. Just remember, drinking unfiltered water may turn your time outside into a time you wish you were inside!

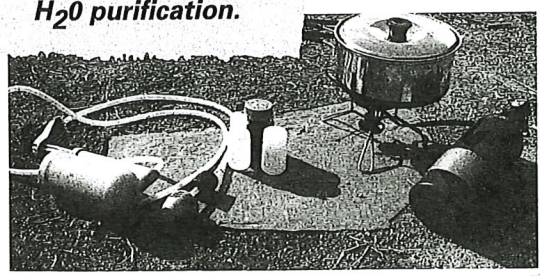
Three Keys to Purifying Water

Heat – Boil your water to purify it! The heat will kill microorganisms that could harm you. You must bring the water to a rolling boil in order for this method to be effective. Boil for 15 minutes. Remember, if plan to boil your water to purify it, you will need to bring extra fuel.

Chemical treatments – Add iodine or bleach solutions to your water to treat it.

Filtration – Use a water filter system. The filter will remove, most, if not all, of the bacteria and other microorganisms that could make you sick.

The three keys to H₂O purification.



1. Put together an information brochure identifying possible water-related illnesses. Discuss how to treat and prevent these illnesses with your group.
2. Contact the Cooperative Extension in your state to see if it has a Project Wild or water quality program where you can take water samples, use microscopes and learn what's actually in your local water sources.
3. Take a trip to an outdoor gear/supply store. Talk to a sales associate about the different types of water purification systems and determine the pros and cons of each filtration device. Take into account cost, durability, weight and protection.
4. Research what you can do to keep waterways clean and free of harmful chemicals and bacteria.

Acknowledgement:
Activity written by Sarah Kleinman.

Dish Duty

Outdoor Skill:
Washing dishes while camping

Life Skill:
Environmental responsibility and group responsibility

Educational Standard:
NS.5-8.6 Personal and Social Perspectives

Success Indicator:
Washes camp dishes using Leave No Trace techniques.

Washing dishes at your campsite can be a whole new experience. In the last activity, "What's in Your Water?" you considered what a river or pond might look like if everyone washed their bodies and dirty dishes in it. In this activity you'll practice washing dishes using minimum impact techniques.

Get in Gear

Volunteer to wash dishes while camping. List below each step including all supplies you used from the end of the meal to disposing of the "gray water".

You'll find good information on washing dishes in Outdoor Tips.



Youth washing dishes by flashlight.

Dishwashing Routine

Supplies	Steps



Did you know?

- Dishes can be easily sterilized at camp by simply boiling water in a pot. Bowls, mugs and silverware can be dipped in boiling water to sterilize them.



Talk it Over

Share the Experience

- How is washing dishes at home different from washing dishes at camp?
- What did you find challenging about washing dishes at camp? What did you enjoy?
- How do you help with the dishes at home?

Reflections

- Why do you think it is important to do your share at camp?
- What did you learn from this activity?

Now What?

- How will you wash dishes next time you are camping?
- Why is it important to minimize our impacts while camping?



Washing Dishes

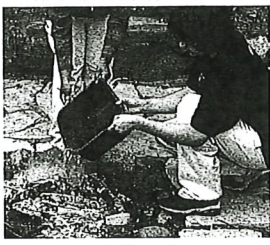
After you cook a meal, gather together your dirty dishes. Use a small amount (a few inches in a large pot and only a few centimeters in a small bowl) of drinking water in each item to be cleaned. Add one drop of biodegradable soap to a small sponge or dish scrubby. Scrub each of the pots, pans and dishes you have used.

There are several ways to dispose of your "gray water", or dirty dish water. Which method you use will depend on your campsite and the resources available. Some campsites have sinks and trash cans where you can wash your dishes and dispose of litter. But at the ones that don't sites you'll need to filter your gray water before you dispose of it to remove any food particles that remain in your cooking water. You can use strainers, bandanas or even a carefully held pot lid to strain the gray water. Dispose of the strained water in one of these ways.



- **Broadcasting.** Take your pan with dishwater in it and, using a large swinging motion scatter the water about in an area away from your campsite.

- **Using Established Fire Rings.** It is appropriate to pour your gray water into the established fire ring to dispose of it.



- **Digging a Cathole.** Digging a six-inch deep cathole can be an effective way to dispose of your gray water. When you leave the site, be sure to replace the soil and leaf litter you removed when you dug your cathole.



1. What natural alternatives to sponges and scrubbies could you use while camping?
2. Try brushing your teeth using minimum impact techniques. You practiced distributing the gray water from your dishes using the broadcasting method; you can also minimize your used toothpaste impact by broadcasting. Brush your teeth well to form a nice foamy glob of toothpaste-y spit. Drink a sip of water before you broadcast. Now, imagine a sprinkler. Your goal is to spray a fine shower of toothpaste spit, much like a sprinkler would showe your garden. You'll want to be sure that you are spraying in an area that will not shower your tent or your neighbor's tent. This will leave a fine mist of toothpaste spray as opposed to an unsightly white glob; your spray will be washed away in the next rainstorm.

Chapter
4

Earth Care

Outdoor Skill:
Respecting wildlife and the environment

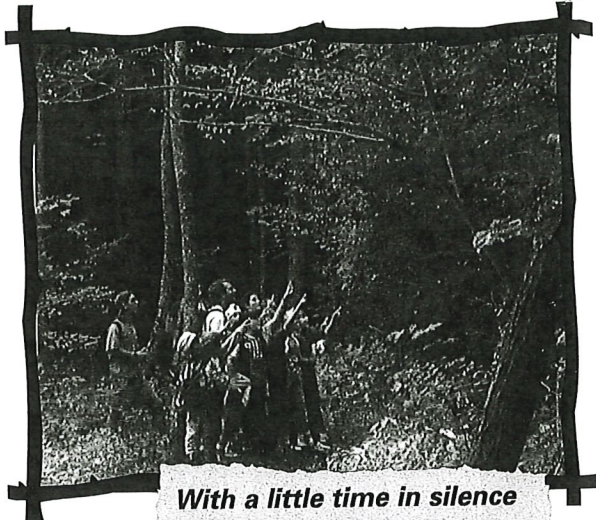
Life Skill:
Making positive decisions

Educational Standard:
NL-ENG.K-12.12 Applying Language Skills

Success Indicator:
Describes relationships between animals and plants.

Natural Wonders

Do you have a special place where you like to hike or camp? Is the place developed or undeveloped land? Undeveloped land, whether it's an acre of undeveloped land or a large state or national park, provides habitat for animals and plants.



With a little time in silence observing nature you can see and hear many things.

Get in Gear

Take a trip to a park or forest with your family, friends or group. Find a special spot outside, not too far away, but not too close to other people. Spend at least 15 minutes in total silence, observing the environment surrounding you. Record your observations. The questions here might expand your observations and thoughts.

Afterwards, share what you observed with people who accompanied you and record your observations.

Questions

to ask yourself.

- ✓ Do you see any animals?
- ✓ What are they doing?
- ✓ Do you see them interacting with other animals?
- ✓ What animals tend to use specific types of plants or trees?
- ✓ What animals seem to be scared of other animals?
- ✓ What animals feed off of other animals or plants?
- ✓ Where do the animals live? Where do they hide? How do they protect themselves?
- ✓ What would happen if some of the plants didn't exist? What if some of the animals didn't exist?
- ✓ How did the animals react if they noticed you nearby?
- ✓ How important is it to preserve our environment for these animals?
- ✓ What is your relationship to these plants and animals?
- ✓ What other natural resources do humans use on a daily basis?

Thoughts, Reflections and Observations



Share the Experience

- What did you like about this activity? What did you observe?
- What does "respect our natural environment" mean to you?
- Why is it important to respect our natural environment?

Reflections

- What did you learn about wildlife and the environment?

Now What?

- How can you help to preserve the environment?



Conservation

Acknowledgement: Activity written by Sarah Kleinman.



Appreciating the Natural Environment

Natural Responses

What are natural resources? What would you imagine a "natural resource" to be? Humans use natural resources such as, water, trees, oil and minerals from rocks for a variety of things. In fact, just about everything that you use is from a natural resource. Can you think of the natural resources that you might have used just today?

From Trees to Paper

The paper that created the pages of this activity guide you are using had a long journey before it came into your hands. The paper started out as trees, growing in the soil with lots of rainwater and sunlight to help them grow. The trees were harvested using mechanized equipment fueled by processed natural resources, such as oil and gasoline. The paper was transported in trucks to the printer—with each step using more processed natural resources. Clearly we can see that humans depend on our natural resources. What are simple things that you can do to offer back to the natural world?

Minimize the Impact

The natural world is full of wonder and excitement. Being in a wilderness area can teach you the skills of living simply. Each wilderness area represents a delicate and intricate balance among the systems of plants, animals and the land that supports them. In many places, humans have intervened and caused an imbalance in these lands, leading to the extinction of many animals and plant species over the years. As a result, some of our important natural resources are being depleted at an alarming rate. It is important to respect these places and the creatures that live there; to work to keep these places alive and wild; and to minimize the impacts that humans have on the land.



1. Choose an environmental issue that you feel passionate about, write a letter to your representative or senator, urging them to protect the environment and vote to keep lands wild.

2. Design posters or flyers to advertise the need to protect a local resource like a stream, a bird habitat, or a tract of land that might be developed.

3. Plant a tree.

4. Recycle paper, aluminum and plastics at home and in your community. Where there is not a recycling system in place, try and start one.

Down to Basics

Outdoor Skill:

Practicing Leave No Trace techniques

Life Skill:

Decision making

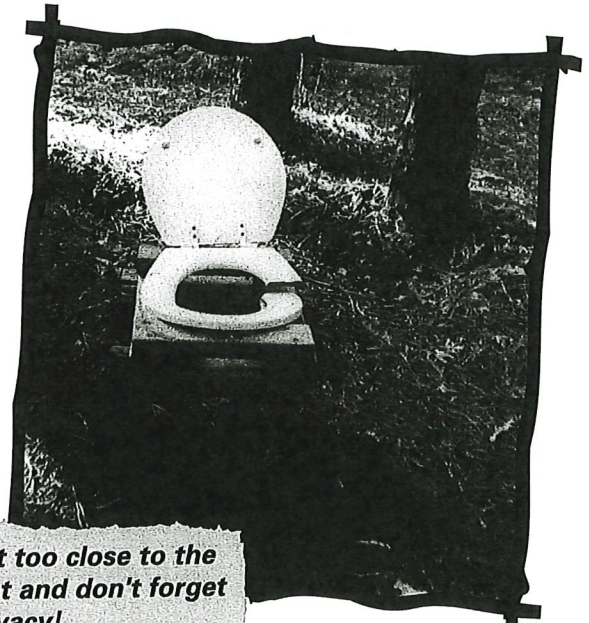
Educational Standard:

NPH.H.5-8.3 Reducing Health Risks

Success Indicator:

Disposes of waste using Leave No Trace techniques.

Imagine one of the most beautiful places you have ever visited. Now imagine all of the other people who have visited or will visit the same spot. What would happen if each person left a little trash? Or even worse, what would this beautiful spot smell like if everyone relieved themselves and left their used toilet paper in this area? Suddenly the place you once treasured would look like a dump and smell terrible!



Not too close to the tent and don't forget privacy!



Get in Gear

"Where's the bathroom?" is a question you hear all the time. In the outdoors, the answer becomes tricky. While base camping, you may be close to man-made latrines. If not, you'll have to use the Leave No Trace method of disposal. For each of the situations, describe how you would advise someone who asks "Where's the bathroom?" Include in your advice any special supplies, equipment or instructions the person might want.

Camping at a State Park	Backpacking in the Wilderness
Hiking on a Public Trail	Camping in the Backyard

Glossary Words

- Cathole
- Latrine



Talk it Over

Share the Experience

- How was the toilet that you used in the State Park or National Forest different from the toilet that you use at home?
- How do you feel about going to the bathroom outdoors?

Reflections

- What decisions did you have to make before choosing where to relieve yourself outdoors?
- Why is it important to learn the proper way of "going to the bathroom" outdoors?

Now What?

- How will this activity help you understand the natural world?

Additional Resources

Soft Paths by NOLS

The Backcountry Classroom by Jack Drury and Bruce Bonney. Wilderness Education Association. ICS Books. 1992



Did you know?

- It takes human waste up to three years to bio-degrade in many natural areas in the U.S.
- Wet wipes and hand sanitizer can be used to wash your hands.
- If you don't relieve yourself when you feel the need, you could get VERY sick!

Acknowledgement: Activity written by Sarah Kleinman, Mike Klumpp and Michelle Parish.



Outdoor Outhouse

Relieving yourself in the outdoors requires an understanding of your environment. In established campgrounds, use the toilets provided. In remote locations, find alternatives. Where you go will depend on your group size and the use of the area that you are hiking or camping in. You should urinate 200 feet from any trail, body of water and/or camp. If you have a hard time imagining how far 200 feet is, simply think about it as "two see-fars". Go far enough away from your camping group or the trail so that you cannot see your camping buddies or the trail; then go just a bit farther! Use a sunny spot for quicker evaporation. Give your camping friends their privacy! Remember to tell someone that you are going for a quick bathroom break—if you get lost someone will know to look for you.

Pack Out What You Pack In

One final note on going to the bathroom in the outdoors... The Leave No Trace principles remind you to "pack out what you pack in" and dispose of waste properly. Toilet paper does not grow on trees, nor does it grow up from the ground. If you choose to use toilet paper, it is important that you take it home with you in a small re-sealable plastic bag. Feel free to think creatively about other natural forms of "toilet paper". Some hikers use leaves (be careful not to use poison ivy! ouch!), smooth river rocks, smooth sticks or the air dry method when you pee.



Learn to identify Poison Ivy!



1. Get the real scoop on the best ways to manage human wastes in various environments. How would methods of human waste disposal differ in a lush temperate forest as compared with a desert environment? Find out and share with your

helper how these techniques differ.
2. Research how your city sewer and wastewater treatment system operates. If you live in a suburban or rural area, what happens to the wastes you flush?

Camping Adventures Glossary

B

Base camping – Remaining in the same place; not moving from campsite to campsite as you would if you were backpacking.

Bight – A bend in the rope.

British Thermal Unit (BTU) – The amount of heat to change one pound of water one degree Fahrenheit at sea level.

C

Camp site – A location where one pitches a tent, sets up a camp trailer, motor home or sleeping bag, etc.

Campground(s) – Usually a large area where a number of sites have been established for camping.

Cathole – A 6–8 inch deep hole used by an individual for human waste disposal.

Conservation – Preserving natural resources.

Criteria – A standard to test an item.

D

Dutch oven – A large, heavy cast-iron pot with a tight-fitting lid. The Dutch oven can be placed on a campfire to make baked goods.

G

Giardia – A tear-drop shaped flagellated protozoan that lives in the small intestine and is transmitted primarily when the infective cysts are ingested in water.

L

Latrine – A small trench used by more than one person for depositing human waste.

Layering/*Layers – Using multiple garments for increased insulation. Layering allows for the use of different garments to be used for different temperatures.

LNT – *Leave No Trace

Loop – Crossing one part of the rope over another part.

M

Microorganisms – Microscopic forms of life.

N

***Niche** – A plant or animal's place in a natural community.

O

Overhand loop – When the free end crosses over the standing end.

P

Philosophy – The ideal and values of a group.

Phosphorous – A natural element found in plants and animals; humans often create phosphorous imbalances which can pollute the environment.

***Pristine** – Unspoiled, in its original state.

R

Riparian – The thin ribbon of lush green land on the banks of any river, stream or brook. This area supports a wide diversity of life.

S

Standing end – The rest of the rope you are not working with.

Stewardship – The careful and responsible management of something entrusted to one's care.

U

Underhand Loop – When the free end crosses under the standing end.

V

Ventilation – To provide fresh air.

W

Working end or *free end – The part of the rope you are working with.

Glossary Word Find

See if you can find the glossary words in the Word Bank.

M G Y H P O S O L I H P S U S
R I N G C A T H O L E C D N T
V E C I N A P O O L O L N D A
E C S R P I M U H N B A U E N
N R S E O M R P S K I T O R D
T I R M R O A E S J G R R H I
I T E F I V R C Y I H I G A N
L E Y D P V A G E A T N P N G
A R A E A P Z T A S L E M D E
T I L T L B A S I N A K A L N
I A I D R A I G U O I B C O D
O O D U T C H O V E N S C O X
N P H O S P H O R O U S M P S
I P I H S D R A W E T S F S M
E C A R T O N E V A E L M Y B

Word Bank

Base camping
Bight
British Thermal Unit
Camp site
Campgrounds
Cathole
Conservation
Criteria
Dutch oven
Giardia
Latrine
Layering
Layers
Leave no trace
Loop
Microorganisms
Niche overhand loop
Philosophy
Phosphorous
Pristine
Riparian
Reservation
Rolling pin
Standing end
Stewardship
Underhand loop
Ventilation
Working end
Free end

