RATIONALE FOR ADVENTURE

This adventure will introduce new Scouts to basic outdoor skills while helping more experienced Scouts improve and develop skills they learned in previous ranks.

TAKEAWAYS FOR CUB SCOUTS

- · Reading weather instruments, including a basic understanding of barometers
- · Tying two half hitches
- Improved camping skills (less dependent on parents/adult leaders)
- · Cooking a simple meal
- A Scout is cheerful, clean.



ADVENTURE REQUIREMENTS

Complete requirements 1-4. Requirements 5 and 6 are optional.

- 1. While working on your Bear badge, attend one of the following:
 - A. A daytime or overnight campout with your pack or family
 - B. An outdoor activity with your den or pack
 - C. Day camp
 - D. Resident camp
- 2. Make a list of items you should take along on the activity selected in requirement 1.
- 3. Make a list of equipment that the group should bring along in addition to each Scout's personal gear for the activity selected in requirement 1.
- 4. Help set up a tent. Determine a good spot for the tent, and explain to your den leader why you picked it.
- 5. Demonstrate how to tie two half hitches and explain what the hitch is used for.
- 6. Learn how to read a thermometer and a barometer. Keep track of the temperature and barometric pressure readings and the actual weather at the same time every day for seven days.

Bear Handbook, page 62

NOTES TO DEN LEADER

These den meeting plans, when followed, will meet the requirements for the Bear Necessities adventure. The meeting plans allow for completing requirement 1A (participating in a pack overnighter). The den must not go camping on their own. Only pack overnighters or council-organized family camps are approved camping activities for Bear Scouts and their families.

Meeting 3 will take place at an outdoor camping location. In advance of the outing, the leader will need to make arrangements with the outing location and confirm the outing plan with families, including transportation and any additional items they need to bring. Make sure activity consent forms are distributed, signed, and collected.

This adventure includes optional activities for cooking that are not requirements for this adventure. However, these activities can count toward requirements in the Bear Picnic Basket adventure.

This adventure should help your Cub Scouts further their knowledge of camping and living in the outdoors. Last year, when they were Wolf Scouts, you or another leader probably did most of the work. As the Scouts get older, they should be taking on more of the responsibility for themselves. You may need to borrow camping and cooking equipment from a neighboring troop or pack.

At least one adult leader who is attending the pack overnighter must have completed Basic Adult Leader Outdoor Orientation (BALOO). It is encouraged, though not required, that someone in your den take the training if the den will be attending a council-organized family camp. The course provides excellent information about the proper methods for camping with Cub Scout-aged children and families.

Some chartered organizations do not allow camping as part of the Cub Scout program. Be sure to check with your pack leadership and chartered organization before preparing to use these den meeting plans.

MEETING PLAN

PREPARATION AND MATERIALS NEEDED

- · U.S. and den flags
- Several small tents—with poles, stakes, rain flies, and ground cloths
- Menu items for optional activity (remember to keep things simple!)
- · Homemade barometer parts

GATHERING

Explore a Tent

- Have a tent set up in advance so the Scouts can see what it's supposed to look like: ground cloth laid, stakes properly in the ground, lines all taut, rain fly not touching the tent and placed on level ground.
- Have them look around the meeting area so they can decide where to set up a tent for an
 overnight campout.

NOTE TO DEN LEADER

You will need to review proper tent location, etc., during Activity 1. The Resource section of this meeting has information to assist you.

OPENING

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Recite the Outdoor Code as a den or use the Outdoor Code opening from the appendix.

TALK TIME

- Introduce the Bear Necessities adventure to the den. Build interest by describing the goals of the adventure and some of the activities that are planned.
- · Carry out business items for the den.
- · Allow time for sharing among Cub Scouts

ACTIVITIES

Activity 1: Set Up Tents (Requirement 4)

Assemble a tent with the help of all the Scouts. This can be done indoors if necessary for your meeting, but it would be better outside. Show them how to use a ground cloth properly. Demonstrate how the poles are assembled and attached to the tent. Show how to put the stakes in the ground and how to assemble and attach the rain fly.

NOTE TO DEN LEADER

While most tents are put together in a similar fashion, each one is a bit different. Be sure you practice before the meeting so you know how it's done.

A ground cloth is a piece of plastic or a tarp and should not be larger than the tent. It is placed on the ground first and the tent sits on top of it. It should not stick out from underneath the tent as this will cause rain to collect between the tent and ground cloth.

Once the Scouts see how it all comes together, have two of them take down the tent, fold it up, and then assemble it again. Switch to a new team and continue until all of them have had a chance to assemble and take down a tent (it will be helpful to have more than one tent for this exercise). Remind them that a Scout is helpful, and they can take part in setting up and breaking down campsites now that they are older Cub Scouts.

Now proceed to the locations they chose for setting up a tent, and discuss campsite consideration based on what they selected (see Meeting 1 Resources for more information). It would be good to reinforce this discussion during the next campout, when you can point out some "unhelpful" elements at the site (rocks, drains, winds, etc.). If you are meeting indoors, you can use index cards to label mock elements around your meeting room for Scouts to consider.

Activity 2: Meal Planning (Optional)

The goal is to cook a SIMPLE meal with good, balanced food choices that will involve minimal cleanup. Items like packaged mac and cheese, beef stew, or other simple heat-and-eat choices will be fine. Be sure to plan a balanced meal by including fruits and vegetables and a healthy drink to round out the menu.

- · Decide which meal the den will cook-lunch or dinner.
- · Be aware of any allergies in your group and adjust accordingly.
- With the den, decide who will buy and transport the food. Will you do it as a group? Will every Scout bring part of the meal?

Activity 3: Barometer Activity (Requirement 6)

- Distribute the homemade barometer parts. Show the Scouts how to assemble them as described in the Meeting 1 Resources.
- Then show Scouts how to take a barometer reading. Have them mark the current pressure level on the cardboard. Be prepared with the exact current barometric pressure from a newspaper or online source to give Scouts a starting point for their scale.

You can find the current barometric pressure reading in your area by visiting www.noaa.gov/. Enter your location under the forecast search, and it will provide the barometric pressure.

- Have Scouts place the barometers on a level surface indoors when they bring them home. Tell them to
 read their barometers each day, mark the current level on the cardboard, and record the reading on the
 chart in their handbooks; the point is to observe whether the barometric pressure is going up or down.
- They should also record the temperature—either from their own thermometers or by watching a TV
 weather report. If the weather report includes a barometric pressure reading, they should continue to
 record that as well and compare the exact readings to the movement of the straw.

CLOSING

Den Leader's Minute: Give a quick reflection on what it means to you as an adult to camp in the
outdoors. Ask each Scout, in turn, to say what it means to them.

AFTER THE MEETING

- · Serve refreshments, if desired.
- · Record completion of requirement 6.
- Work together to clean up the meeting place.

MEETING 1 RESOURCES

CAMPSITE CONSIDERATIONS

Cub Scout camping will take place in sites approved by the local council (council camps, local parks, campgrounds). However, there are still several considerations to keep in mind when laying out your campsite for a pack event.

- Location. A campsite facing the south or southeast will get more sunlight and generally will be drier
 than one on the north side of a hill or in the shade of mountains or cliffs. Cold, damp air tends to settle,
 causing the bottoms of valleys to be more cool and moist than locations a little higher. On the other
 hand, hilltops and sharp ridges can be very windy and should be avoided in lightning-prone areas.
- Size and shape. A good campsite has plenty of space for your tents and enough room to conduct your
 activities. It should be usable as it is, so you won't need to do any digging or major rock removal to
 shape the area. The less rearranging you do, the easier it will be to follow Leave No Trace principles and
 leave the site exactly as you found it.
- **Protection.** Consider the direction of the wind and the direction from which a storm will approach. Is your campsite in the open or is it protected by a hill or a stand of trees? Is there a solitary tree nearby that may attract lightning? Don't camp under dead trees or trees with dead branches that may come down in a storm or light wind. The best campsites are found near small, forested ridges and hills.
- Insects and animals. All creatures have their favorite habitats. The best way to avoid mosquitoes
 and biting flies is to camp away from marshes, bogs, and pools of stagnant water. Breezes discourage insects, so you might look for an elevated, open campsite. Don't forget to check around for
 beehives, hornet nests, and ant mounds; their inhabitants usually won't bother you as long as you
 leave them alone, but give them plenty of room. The same goes for most animals.
- Ground cover. Any vegetation covering a campsite will receive a lot of wear and tear. Tents will smother
 it, sleepers will pack it down, and walkers will bruise it with the soles of their shoes. Some ground cover
 is tough enough to absorb the abuse, but much of it is not. Whenever you can, make your camp on
 naturally bare earth, sand, graveled soil, or ground covered with pine needles or leaves.
- Drainage. While a campsite should be relatively flat, it should slope enough to allow rainwater to run
 off. However, you don't want to be in the path of natural drainage. Check uphill from where you plan
 to set up your tent to make sure water won't run through the site. Never camp in a stream bed!
 Also, you want to avoid depressions in the ground, as even shallow ones can collect water in a storm.
- Privacy. One of the pleasures of camping is getting away from crowds and the fast pace of city life.
 Make camp in places that are far enough away from trails and other campsites. That way you can enjoy peace and privacy while respecting the privacy of other campers.

- Beauty. The beauty of a campsite often is what attracts visitors to it. Being able to look out from a tent and see towering mountains, glistening lakes, or miles of canyon land or rolling prairie is part of what camping is all about. Find a campsite that gives you spectacular scenery, but camp there only if the site is appropriate for every other reason, too.
- Outdoor ethics. Be gentle on Mother Nature. You can do a lot to protect and preserve the wilderness by leaving no trace of your visit, no marks along the trail, and a tidy campsite—cleaner than you found it. Don't harm plants, animals, or insects. Take nothing but pictures, leave nothing but footprints, and kill nothing but time. That philosophy fits as well in a county park as it does anywhere else.

Activity 3: Barometer

Using Atmospheric Pressure to Forecast the Weather

A shift in atmospheric pressure is one of the most common predictors of weather changes. Weather maps show high and low pressure systems as well as lines of equal pressure called isobars.

Atmospheric pressure that rises slowly over one or two weeks typically indicates settled weather that will last a long time. A sudden drop in atmospheric pressure over a few hours often forecasts an approaching storm, which will not last long, with heavy rain and strong winds.

You can forecast local weather using a barometer and these simple guidelines:

- Decreasing barometric pressure indicates storms, rain, and windy weather.
- · Rising barometric pressure indicates dry and colder weather.
- Slow, regular, and moderate drops in pressure suggest a low pressure system is passing in a nearby region. Significant changes are unlikely in the weather where you are located.
- Small, rapid decreases in pressure indicate a nearby change in weather. This is usually followed by brief spells of wind and showers.
- A quick drop in pressure over a short time indicates a storm is likely in five to six hours.
- Large, slow, and sustained decreases in pressure forecast a long period of severe weather, which will be more pronounced if the pressure starts rising before it begins to drop.
- A rapid rise in pressure during fair weather indicates a low pressure cell is approaching. The pressure will soon drop, signaling the severe weather to come.
- Quickly rising pressure, when the pressure has been low, suggests a short period of fair weather is likely.
- A large, slow, and sustained rise in pressure forecasts a longer period of fair weather is on its way.

Barometers are widely used and generally quite reliable at forecasting the weather. There are many types of barometers for sale at a wide range of prices, but a fun project for Scouts is to make barometers of their own from simple household items.

Coffee Can Barometer

Materials:

- Balloon (Note: Before using balloons, check to see if anyone in the den is allergic to latex.)
- · Clean, empty metal can
- Rubber band
- Straw
- Tape or craft glue
- · Toothpick or straight pin
- Cardboard



Instructions:

- 1. Cut the balloon in half. Throw away the half with the hole; you will only need the rounded half.
- 2. Stretch the balloon piece across the open top of the can.
- 3. Secure the balloon to the coffee can with the rubber band. Make sure it is stretched tightly across and that no air can leak out. (This would prevent the barometer from working properly.)
- 4. Set one end of the straw at the center of the balloon cover and lay it across the edge of the can. Glue it in place. (Do not use hot glue, which would melt the balloon.)
- 5. Glue the pin to the loose end of the straw. The pin will indicate the pressure measurements.
- 6. Stand the cardboard vertically next to the pin or tape it to a wall.
- 7. Check the internet or news reports to find the barometric pressure in inches for the day, and make a precise mark on the cardboard at the level of the pin to indicate the pressure.
- 8. Check and record the pressure each day to begin creating a scale.

Bottle Barometer

Materials:

- · Clear glass bottle with a long neck
- Water
- Food coloring
- · Clear straw or narrow tube
- · Rubber stopper or cork for the bottle
- · Cardboard or paper

Instructions:

- Fill the bottle just over half full with water. Add a few drops of food coloring to the water.
- 2. Bore a hole through the cork or rubber stopper, so the straw will fit through it and still be snug.
- 3. Fit the stopper with the straw into the bottle neck to seal it. The straw should be in the water and extend above the top of the bottle.
- 4. Gently blow bubbles using the straw to make water rise through it above the stopper.
- 5. Follow directions 6 through 8 from the coffee can barometer to create a measuring scale. The water in the straw will rise if the air pressure is low. The water will go down if the air pressure is high.



MEETING 2 PLAN

PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Gear lists personal and group (See Meeting 2 Resources.)
- · Personal gear list items
- Some group gear list items
- Flying disc or ball for "500" game
- Instructions for "The List Game" (See Meeting 2 Resources.)
- · Items for preparing food
- Small tents

GATHERING

Game: Going the Distance (See Meeting 2 Resources.)

OPENING

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- · Recite the Outdoor Code.

TALK TIME

- Carry out business items for the den.
- · Allow time for sharing among Cub Scouts.

ACTIVITIES

♦ Activity 1: Check Weather Logs (Requirement 6)

Are the barometers working? Did you forecast any interesting weather, such as a rain storm, while recording the measurements? What happened to your readings when the weather changed?

Activity 2: Gear (Requirements 2 and 3)

- Discuss with the Scouts what gear they should bring on the campout for their own personal care and comfort, based on where and when you are camping. Steer them toward items like tents, sleeping bags, ground cloths, pillows, sleeping pads or mattresses, warm clothes, raincoats, eating utensils, hats or caps, toothpaste and toothbrushes, etc. (See Meeting 2 Resources.) Ask them which items they think are the most important, going around the group and letting each one choose something. Have each Scout say why he picked that item (i.e., a sleeping bag to stay warm at night, to sleep well, and to be ready for the next day). Continue until all the items have been discussed. Talk about the importance of each item on the list, not just the first two or three that were picked. Don't forget the Cub Scout Six Essentials!
- Play the "500" game (see Meeting 2 Resources).
- Make a Group Gear List (see Meeting 2 Resources).
 - Have the Scouts make their own lists of other gear the group will need to bring, such as a cooking stove, a cooler to keep the food cold, a group first-aid kit, cooking utensils, fire starters, and rope.
 - Once they have done this, play "The List Game" with the lists (see Meeting 2 Resources) and see who has the most items left when they're finished. The object of this activity is to get them thinking about the needs of the group, not to come up with an exhaustive list.

Activity 3: Menu Review (Optional)

Review the menu choices that were made last time. Do you need to prepare any food before the trip? Have all Scouts made plans to bring their required food items?

CLOSING

- Sing Cub Scout Vespers (see Meeting 2 Resources).
- Review details for the upcoming outing in Meeting 3. Make sure all Scouts and their families know the plans.

AFTER THE MEETING

- · Serve refreshments, if desired.
- · Record completion of requirements 2 and 3.
- · Work together to clean up the meeting place.
- · Prepare thank-you notes for the Scouts to sign at the next meeting.

MEETING 2 RESOURCES

GATHERING

Game: Going the Distance

Materials:

- · Several paper bags, buckets, or small boxes
- Items to throw (small beanbags, wrapped candy, small plastic balls, etc.). Be sure to have twice the number of items as paper bags or buckets, so two Cub Scouts can play at a time.

Instructions:

- 1. Put the containers at separate places along a straight line. Assign points to each place (i.e., two points to the closest, five points to the next, 10 points to the next, etc.).
- Have the members of your den line up. One or two at a time, they will toss their items into the containers to score points. They must keep track of their total points using the honor system. A Scout is trustworthy.
- 3. You can make this game more challenging by moving some of the containers far away. Or, have the Cub Scouts toss the items with their backs to the targets.



PACK CAMPING GEAR

In addition to individual equipment, the equipment listed below should be available for group use.

Required Items First-aid kit Good Cooking utensils as needed by menu, or cook kit Stove and fuel, or firewood, charcoal, and cooking grate Matches, fire starters, charcoal chimney-style lighters Aluminum foil Biodegradable soap Sanitizing agent (liquid bleach) Plastic scouring pads, dish mop, wash tubs 100 feet of quarter-inch rope Water containers Trash bags Paper towels	Spare Items Tent stakes Fuel canisters (Liquid fuels are not allowed.) Ground cloth or tarp Insect repellent Eating utensils Blanket Optional Items Dutch oven Marshmallows, popcorn, etc. Cooking fly or tarp Musical instruments Lawn chairs, camp stools	
 □ U.S. flag, pack flag □ Repair kit (rubber bands, safety pins, sewing gear) □ Toilet paper □ Shovel □ Cooler □ Activity gear (game materials, craft supplies, etc.) □ Roll of duct tape And to sleep overnight, we'll need:	Personal Gear List Cub Scout Six Essentials: First-aid kit Flashlight Filled water bottle Trail food Sun protection Whistle	
Group Gear List Group items:		

♦ "500" Game

Location:

This game should be played outside.

Materials:

Flying disc, softball, rubber ball, football, or any other throwing item

Instructions:

The object is to catch the disc or ball enough times to become the thrower.

One Scout starts as the thrower. The other players gather around at a throwing distance from that Scout, who then yells out, "100" or "200," or any amount the Scout wants the throw to be worth. The disc or ball is thrown toward the group of Scouts. The first catcher to reach 500 becomes the thrower.

"500" Game Variations

- When a new thrower is up, everyone starts over at zero or keeps their current tally, whichever is decided at the start of the game.
- Dead or Alive: Two values can be assigned to a throw, such as "100 dead, 400 alive." If a person
 catches the object in the air, that player gets the "alive" value. If the object hits the ground first, the
 player gets the "dead" value. Values like "200 dead, 400 alive" are legal.
- If using a ball that bounces, standard values can be assigned such as 200 in the air, 100 after one bounce, 50 after two bounces, and 25 for all others.
- Grab Bag: If the thrower yells, "Grab bag" for a throw, the Scouts have no idea what the value is. It
 may be 500 or minus 10,000. Typically, "Grab Bag" is ruled illegal at the start of a game.
- Jackpot: Whoever catches this throw is automatically the next thrower. "Jackpot" is typically used when a thrower has been up a long time or when it is time to end the game.

The List Game

This game can be used for any activity that involves brainstorming for lists of items.

Give the Scouts a topic and tell them to come up with items that are needed. For instance, "What items will the den or pack need to bring in addition to your personal gear?"

Let them write down the items privately for a minute or two. Once they're done, pick a Scout to say one item. If the item is also on someone else's list, it does not count for points. If a Scout comes up with an idea no one else listed, that Scout gets a point. Continue around the group until all listed items have been mentioned, and then total up the points. The winner receives a round of applause.

The object is to encourage the Scouts to come up with ideas that aren't just the common, easy answers.

CLOSING

Song: Cub Scout Vespers

(Tune: "O Christmas Tree" or "O Tannenbaum")

Song: Cub Scout Vespers

(Tune: "O Christmas Tree" or "O Tannenbaum")

As the night comes to this land, On my promise I will stand. I will help the pack to go, As our pack helps me to grow. Yes, I'll always give goodwill.
I'll follow my Akela still.
And before I stop to rest,
I will do my very best.

MEETING 3 PLAN (Den Outing)

PREPARATION AND MATERIALS NEEDED

- Camping gear from lists (Personal and Group)
- Food for cooking meals
- · Thermometer and homemade barometer
- Rope—a 6-foot piece for each Scout
- Plan for transportation to and from camp location.
- Confirm that transportation to and from the event is in place. Secure signed activity consent forms.
- The unit den leader should bring a copy of the Guide to Safe Scouting.

NOTE TO DEN LEADER

This outing will complete requirement 1 for this adventure.

GATHERING

Remind the Scouts of the slogan, "Take only memories, leave only footprints," and the adage that Scouts always leave a campsite better than they found it. Bear Scouts focus on the Outdoor Code principle of "Be considerate in the outdoors." Discuss ways that they can demonstrate that principle when they are at a campsite. Point out to them the things that previous campers may have left behind and remind them that if we leave it here also, other campers will think it was ours. So let's clean up!

OPENING

- Say the Pledge of Allegiance and the Scout Oath and Scout Law. If the den does not have a United States flag, ask one Scout to display the flag on their uniform for the group.
- · Go over the activities planned for the outing.
- Share the time that the dinner preparation will begin.
- Share the time the campfire will begin.

TALK TIME

- · Carry out business items for the den.
- · Allow time for sharing among Cub Scouts.

ACTIVITIES

Activity 1: Set Up Camp (Requirement 4)

The Scouts should be putting up their own tents with minimal help from adults. They should be able to explain why they are putting their tent in this specific location based on site considerations. Have them lay out the tent on the ground where they think it should go. Then, before completely pitching it, have them review the location with an adult.

Activity 2: Prepare and Cook Your Meal (optional for the Cub Scouts to be involved)

• Prepare and cook your meal. Try to let every Scout have a hand in preparing and cooking the food, if possible. If you have a large group, divide the tasks so that some will do the cooking for one meal and cleanup for the next, or vice versa. You need to be sure all Scouts have a practical hand in the project and learn something from it. This might be a good time to discuss how a Scout is clean. Remind them of the importance of washing hands before preparing food to avoid spreading germs. Be sure everyone helps clean the utensils used to cook and eat the meal. Be sure all trash and food scraps are disposed of properly.

 Be sure to have the Scouts help with at least one other meal so they can improve on the skills they learned and add to their cooking knowledge.

Activity 3: Two Half Hitches (Requirement 5)

 Have the Scouts demonstrate how to tie two half hitches to secure a rope to a post, rail, or tree. Have them teach the knot to another Scout. Scouts can find instructions for the knot in the Bear Handbook.

Activity 4: Thermometer and Barometer (Requirement 6)

Set up the thermometer and homemade barometer. Have the Scouts observe the readings at several
times during the day. Does the weather appear to be changing? Use the barometer you constructed
as a model for Scouts to follow as they construct their own barometers.

Activity 5: Games (Optional)

· Play "500" or any other game.

Activity 6: Campfire (Optional)

· Prepare s'mores, Dutch oven cobbler, or another treat around the campfire.

Enjoy the campout!

CLOSING

The closing for this plan may be part of the ending of the campfire, or maybe the morning after camping
out. It should be inspirational and ideally reference the outdoors.

A Walk with Nature

John Muir was a naturalist, writer, conservationist, and founder of the Sierra Club. He said "In every walk with Nature one receives far more than he seeks."

I ask you, what did you seek when you arrived at this outing? Did you find it, experience it? Now think for a moment about what else you have experienced in our time outdoors. (Pause). Let us travel safely from this place, back to our homes, in hopes that we may soon walk again with Nature.

AFTER THE MEETING

- Record completion of requirements 1, 4, and 5.
- Work together to clean up the campsite.
- Send thank-you notes to those who helped.

Upon completion of the Bear Necessities adventure, your Bears will have earned the adventure loop shown here. Make sure they are recognized for their completion by presenting the adventure loops, to be worn on their belts, as soon as possible according to your pack's tradition.

