

#### **RATIONALE FOR ADVENTURE**

Coins are more than just money. In this adventure, Wolves will learn how to spot the various markings on a coin and identify the meanings. Through games and experiments, they will learn how to determine the value of a coin.

#### TAKEAWAYS FOR CUB SCOUTS

- Following directions
- · Practicing mathematical skills
- · Learning how to estimate weight
- A Scout is trustworthy.



#### **ADVENTURE REQUIREMENTS**

Complete requirements 1–4. Requirements 5–7 are optional.

Wolf Handbook, page 106

- 1. Identify different parts of a coin.
- 2. Find the mint mark on a coin. Identify the mint where the coin was made and the year it was made.
- 3. Choose a coin that interests you, and make a coin rubbing. List information next to the coin detailing the pictures on it, the year it was made, and the mint where it was made.
- 4. Play a game or create a game board with your den or family where you can practice adding and subtracting coins.
- 5. Play a coin game.
- 6. Create a balance scale.
- 7. Do a coin-weight investigation.

#### **NOTES TO DEN LEADER**

This adventure has several choices based on which activities you choose to do with your den. These den meeting plans, when followed as written, meet the requirements to earn this adventure. If you choose to make adjustments, be sure you complete at least the minimum requirements.

This adventure does not include a den outing. If desired, an outing to a bank or location featuring coins could be arranged. If an outing is added, the leader will need to make arrangements with the outing location in advance 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.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

## MEETING 1 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Commemorative state quarters—several for each Scout (Gathering)
- Coins of various denominations (cents, nickels, dimes, quarters, half dollars, and dollar coins)
- Coin identification charts on poster board or in the Wolf Handbook
- Visit www.usmint.gov/kids/teachers/coinCurricula/ for large pictures you can print out of individual coin types. Then cut one or more of the pictures into different parts that the Scouts can reassemble like a puzzle in Activity 1.
- Cut out a large cardboard circle so the Scouts can paste the pieces of the puzzle on both sides. When it's complete, they will have a big cardboard coin.
- Paste or glue
- Cups, bowls, or pie tins for the coin game (Requirement 5)

#### **GATHERING**

Give each Scout several commemorative state quarters representing different states. Then try to see how many matching pairs each Scout can find by exchanging one for another.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Optional opening: Hold up a quarter so everyone can see George Washington's head. Make the following points:

George Washington's writings show he was sensitive about his lack of advanced education. He compensated by being an observant student of other people's behavior. Washington's experiences on the frontier and in the army helped develop his confidence.

Young Washington read and copied important ideas from a book called The Rules of Civility. This book was a guide to how to be respectful of others and to be a gentleman. This combination etiquette manual and moral code taught young George how to work with others. By strictly following its advice, young Washington molded his character. The Scout Law gives us a set of values as well. In honor of President Washington, let's recite the 12 points of the Scout Law. I think that he would have found much in these ideas to use to mold his life as well.

#### **TALK TIME**

- Introduce the Adventures in Coins 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.
- Discuss the reasons people carry money and why it is important to have not only paper money but also coins.

#### **ACTIVITIES**

#### Activity 1: Elements of a Coin (Requirement 1)

- Hand a coin to every Scout—preferably a different denomination for each person. Give everyone two
  or three minutes to examine their coins and see how many different markings they can find (edge
  texture, inscriptions, raised surfaces, etc.). (See Meeting 1 Resources.)
- As a group, discuss the similarities and differences in the coins. Using the charts you prepared or the *Wolf Handbook*, help them identify the various parts of a coin.
- Then give them the cardboard circle and the different coin parts you printed out so they can put together a coin puzzle by sticking the pieces in place.

#### Activity 2: Mint Markings (Requirement 2)

- Give Cub Scouts a coin different from the one they had in Activity 1. Going around the group, have them read aloud the year on each coin and the mint mark, if there is one.
- Then talk about the different coin mints across the country that are signified by the marks (e.g., P—Philadelphia, D—Denver, S—San Francisco, W—West Point).

#### Activity 3: Coin Game (Requirement 5)

Have the Scouts play a coin game. This may be any game of your choice that uses coins; here are a couple of options.

- Coin Basketball. Sit down at a table with a large coin—a quarter or half dollar. Place a cup about 2 or 3 feet in front of you. Hold the coin upright on its rim between one finger and thumb. Try tossing the coin into the cup, and maybe attempt some "bank shots": bouncing the coin off the table so that it lands in the cup. Just like in basketball, a player scores two points every time the coin makes it into the cup.
- Coin Kick. Give Scouts each a coin to place on the top of their shoe. They then raise one foot and "kick" the coin into a cup, bowl, or pie tin.

#### **CLOSING**

- Gather all the Scouts together and tell them: A Scout is trustworthy. I am proud of the way you all acted today. I trusted you when I handed out my coins for the activities, and you showed your honesty by helping me gather up all the coins at the end. Thank you. Sometimes people do things that they shouldn't do, and it can be tempting to tell a lie to cover it up. But that is not honest. It's better to live the Scout Law and always be trustworthy. Nobody expects perfection, and we are all here to learn and grow. If we do make mistakes, we should always do our best the next time to make a better choice.
- If time permits, discuss ideas for what type of counting game the Scouts would like to play at the next meeting or with their families. It should involve adding and subtracting coins. If they wish to create a game, assign Scouts to collect the needed materials.

#### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirements 1, 2, and 5.
- · Work together to clean up the meeting place.

### **MEETING 1 RESOURCES**

#### **ACTIVITIES**

#### **Activity 1: Elements of a Coin**

You can find information and graphics showing the elements of a coin at the following websites: coins.about.com/od/coinsglossary/ss/coinanatomy.htm and www.usmint.gov/kids/teachers/.

The **bust** is a picture of a person's head.

The **legend** is the main writing.

The **field** is the background of the coin.

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The **inscription** is writing on the coin.

The **mint mark** is a letter telling where the coin was made.

The **rim** is a raised area near the edge around the coin on both sides. It helps the coin keep from wearing out too quickly.

The **relief** is all of the raised parts of the coin.

The edge is the outer surface of the coin. It could have lettering, designs, or ridges on it.

## MEETING 2 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Items for coin rubbing (Activity 1)
  - One coin of each denomination
  - Paper and colored pencils
- Board for creating a counting game as a den, if Scouts choose that option, OR items for the "Change Mixer" counting game (Activity 2, see Meeting 2 Resources)
- Pennies and a pie tin or a flying disc for the "Coin Kick" game (Gathering)

#### **GATHERING: COIN KICK**

Give Scouts a penny each as they arrive, and have them place the coin on the top of their shoe. Then see if they can "kick" it into the pie tin or an upside-down flying disc.

#### **OPENING**

 Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.

#### TALK TIME

- Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Continue the discussion on trustworthiness from the last meeting and have Scouts explore the difference between borrowing and stealing:
  - Borrowing: You have permission to use an item and you return it.
  - Stealing: You do not have permission and don't return the item.

#### **ACTIVITIES**

#### Activity 1: Coin Rubbing (Requirement 3)

- Hand every Scout a sheet of paper (or have Scouts use the Coin Rubbings page in the *Wolf Handbook* for this activity), one coin, and one pencil—giving each Scout a different coin and color.
- Each member of the den makes a rubbing of a coin—front and back, using the directions in the Wolf
   Handbook—and then passes the coin and pencil to someone else until everyone has made rubbings of
   the whole set.
- Under the rubbings, have everyone list the markings they found: images on the coin, year, and mint mark.

### Activity 2: Counting Game (Requirement 4)

Have the Scouts create or play a game that will help them practice adding and subtracting coins (see Meeting 2 Resources for two suggestions). They can design a game with guidance from you or play one with established rules such as "Change Mixer."

#### **CLOSING**

- Gather everyone in a circle, and have Scouts each share their favorite activity from the meeting.
- Close with a grand howl.

#### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirements 4 and 5.
- Work together to clean up the meeting place.

### **MEETING 2 RESOURCES**

#### **ACTIVITIES**

#### **Activity 2: Counting Game**

#### **Change Mixer**

**Materials:** Four sheets of paper displaying the numbers 1 through 4; four sports or traffic cones labeled "pennies," "nickels," "dimes," and "quarters"; coins of those denominations, one coin per Scout; music (upbeat)

#### Instructions:

- Give each player one coin.
- Have players begin by standing next to the cone labeled with their coin name.
- Start the music and tell players to move around the room in a particular motion (skipping, sliding, running, jogging, or jumping), but keep things slow and safe.
- Stop the music and hold up one of the numbers. Players then gather into groups of that number, and each group counts the total value of their coins.
- Have the groups share their totals. The group with the lowest sum drops out of the game, and the rounds continue until only one group remains.
- Then start the game again with players moving in a different motion.

#### Going to the Bank

**Materials:** Dice; playing pieces, one per Scout (e.g., multicolored buttons or paper clips); one circular or square board with spaces marked with "plus" or "minus" signs; index cards with instructions for "plus" spaces (e.g., "You cleaned three rooms in your house and received a quarter for each room. How much were you paid?") or "minus" spaces (e.g., "You received a dollar for your birthday and bought 35 cents' worth of candy at the store. How much do you have left?")

#### Instructions:

- Each Scout, in turn, rolls the dice and moves that number of spaces with a playing piece.
- The Scout lands on a space, answers the question associated with it, then receives the balance in coins from the "banker" (the den chief or an adult leader). As the game continues, players can also exchange coins with the banker—for example, trading in two nickels for a dime.
- When the game is finished, the Scouts count their change to see who collected the largest amount. Then everyone deposits their money back into the bank.

## MEETING 2 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for coin weight guessing game: small bags; a large number of coins in various denominations (Gathering)
- Materials for making balance scales: four paper cups of equal size and weight; two 10-gallon paint sticks; two binder clips; two pencils; two heavy books; string; masking tape (Activity 1)

#### **GATHERING**

Before the meeting, fill several pairs of small bags with coins that total the same amount but in different denominations. For example, put 20 dimes in one bag and put eight quarters in another bag. Give each Scout a pair of bags each as they arrive and ask them to hold one in each hand and estimate which bag contains the most money. Make a note of what each Scout estimates.

#### **OPENING**

 Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.

#### **TALK TIME**

- · Carry out business items for the den.
- · Allow time for sharing among Cub Scouts.
- Review the estimates in the Gathering game, and then reveal that the value was actually the same in each pair of bags, even if one bag weighed more than the other.

#### **ACTIVITIES**

### Activity 1: Building a Balance Scale (Requirement 6)





- Divide Wolf Scouts into two groups and have each build a balance scale from these directions:
  - Poke holes in the rims of two cups and run string through the holes so the cups can hang like buckets from opposite ends of a 10-gallon paint stick. Attach the string ends to the stick with masking tape to keep the cups from falling off when the stick tilts.
  - Attach a binder clip to the middle of the stick and dangle it from your fingers, working the clip back and forth sideways until the stick hangs level.
  - Insert a pencil through the binder clip and secure one end of the pencil to a table top by laying a
    heavy book on top of it.

### Activity 2: Weight Comparison (Requirement 7)

Now the Scouts can use their balance scales to weigh various arrangements of coins. Have them begin with one coin in each denomination. Then give them groups of coins so they can compare four nickels to the weight of two dimes, etc.

The most important relationships will come from coins made of the same substance. Five dimes, for example, will have the same weight as two quarters. Two quarters will have the same weight as a single half-dollar coin. These relationships are based on the history of these coins being made of precious materials. The five-cent coin, made of nickel, is larger than the dime because the metal it is made from is worth less than the metal used to manufacture a dime.

#### **CLOSING**

Recite the Scout Law and ask the Scouts which values they think were used in the den meeting.

#### **AFTER THE MEETING**

- Serve refreshments, if desired.
- Record completion of requirements 6 and 7.
- Work together to clean up the meeting place.

Upon completion of the Adventures in Coins adventure, your Wolves 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.





#### RATIONALE FOR ADVENTURE

This STEM-based adventure helps Wolves explore basic aspects of air—an often overlooked substance. Then they discover some of the many things that air can do for us.

#### TAKEAWAYS FOR CUB SCOUTS

- Scientific discovery
- · Easy yet fun activities
- Creativity
- A Scout is obedient.



#### **ADVENTURE REQUIREMENTS**

Wolf Handbook, page 124

Complete the following requirements.

- 1. Conduct two of the following investigations to see how air affects different objects:
  - A. Make a paper airplane and fly it five times. Try to make it fly farther by altering its shape. Fly it at least five more times to see if your changes were effective.
  - B. Make a balloon-powered sled or a balloon-powered boat. Test your sled or boat with larger and smaller balloons.
  - C. Bounce a basketball that doesn't have enough air in it. Then bounce it when it has the right amount of air in it. Do each one 10 times. Describe how the ball bounces differently when the amount of air changes.
  - D. Roll a tire or ball that doesn't have enough air in it, and then roll it again with the right amount of air. Describe differences in how they move.
- 2. Complete two of the following:
  - A. With other members of your den, go outside and record the sounds you hear. Identify which of these sounds is the result of moving air.
  - B. Create a musical wind instrument, and play it as part of a den band.
  - C. With an adult, conduct an investigation on how speed can affect sound.
  - D. Make a kite using household materials. With your den or family, explain the rules for safely flying kites. Fly your kite.
  - E. With your family, den, or pack, participate in a kite derby, space derby, or raingutter regatta. Explain how air helps the vehicle move.

#### **NOTES TO DEN LEADER**

This adventure has several choices based on which activities you choose to do with your den. These den meeting plans, when followed as written, meet the requirements to earn this adventure. If you choose to make adjustments, be sure you complete at least the minimum requirements.

Requirement 4 is for Wolf Scouts to participate in a kite derby, space derby, or raingutter regatta. The event can occur as part of a den activity or part of a larger event put on by the pack. If the event will be an outing or special event at a location other than the den's regular meeting place, the leader will need to make arrangements with the outing location and confirm plans with families, including the event rules, plans for inclement weather, transportation, and any additional items they need to bring. Make sure activity consent forms are distributed, signed, and collected.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

## MEETING 1 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Paper for making paper airplanes (Gathering)
- Items for activities:
  - Activity 1: 12-inch balloons (using latex-free balloons if there are any latex allergies in the group);
     balance beam (see Meeting 1 Resources); several paper clips or pennies
  - Activity 2: balloons; a tape measure; thread; a pan
  - Activity 3 (optional): air pump; a basketball or tire

#### **GATHERING**

- Have each Wolf Scout make a paper airplane and fly it five times, adjusting the shape afterward to make the plane go farther and then flying it again. Use the Scouts' neckerchiefs to mark distances.
- Encourage adult family members to stay and participate to help with making paper airplanes.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Optional opening: Hold a kite up as a prop.

Say: Kites will fly when four things are arranged properly: lift, drag, thrust, and weight.

As Cub Scouts, we have lots of things acting on us: our friends, our families, our values, and our interests. The values in the Scout Law serve to lift us up and encourage us to do more for ourselves and for others. Together, let's recite the 12 points of the Scout Law and remember how those values serve to lift us up in service to other people.

#### **TALK TIME**

- Introduce the Air of the Wolf adventure to the den. Build interest by describing the goals of the adventure and some of the activities that are planned.
- Ask the Cub Scouts in your den if they have ever noticed the air. Everyone has witnessed really windy
  days, but most have probably never thought about air as a substance. Describe how air may be used
  for many things:
  - Baseballs curve when the seams of the spinning ball interact with the air.
  - Air flowing over the dimples of a golf ball may determine the distance the ball travels.

- Windmills generate electricity.
- Mechanics often use air-powered tools.
- Carry out business items for the den.
- Allow time for sharing among Cub Scouts.

#### **ACTIVITIES**

#### ♦ Activity 1: The Weight of Air (Optional)

Ask the Cub Scouts in your den if they think air has any weight. After a few guesses, help them conduct this investigation.

- Tie two deflated balloons to a balance beam that you have prepared (see Meeting 1 Resources), with one balloon on either end of the stick.
- Now remove one of the balloons, inflate it, and reattach it in the same spot, which will make that end of the stick heavier. Or you can start with two identically inflated balloons and then let the air out of one or pop it, which will also affect the weight.
- Share this interesting fact: The air in a balloon blown up to 10½ feet in diameter would weigh 50 pounds.
- If the Cub Scouts seem especially interested, you may try to actually weigh the air in the inflated balloon. Put paper clips or pennies in the deflated balloon, and see how many it takes to balance the beam. Use one of these formulas to guess the weight: one standard paper clip = 1 gram; one U.S. penny = 2.5 grams. If you want to convert the total to ounces: 1 ounce = 28.35 grams, or 0.1 ounce = 2.83 grams.

#### Activity 2: Temperature of Air (Optional)

Testing the effect of warming or cooling on air is easy.

- First, give one of the Scouts a deflated balloon (again, be aware of any latex allergies in the den). Have the Scouts each tie their balloon shut and set it in a pan of very warm water. While the balloon won't inflate, it will puff up enough for everyone to see that warm air takes more space (volume) than cooler air.
- Take another balloon, inflate it halfway, and have the Scouts measure its circumference. Then tie a
  thread loosely around the balloon and set it in the same water for three to five minutes. As the balloon
  gets warmer, note that the thread is visibly holding to its surface. Now, measure the balloon to see
  how much it expanded.
- Finally, to test the effects of cooling, have the Scouts set an inflated balloon inside a refrigerator or in ice water.

#### **CLOSING**

If you have enough balloons left, finish the meeting with the thunder of bursting balloons. Tell the Scouts to imagine the sound of one balloon popping as being like a child alone. Then pop all the other balloons at once—that's the sound of Scouting!

#### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Work together to clean up the meeting place.
- Remind each Scout to bring a rinsed-out 20-ounce soft drink bottle for the next meeting's Bottle Band activity.

### **MEETING 1 RESOURCES**

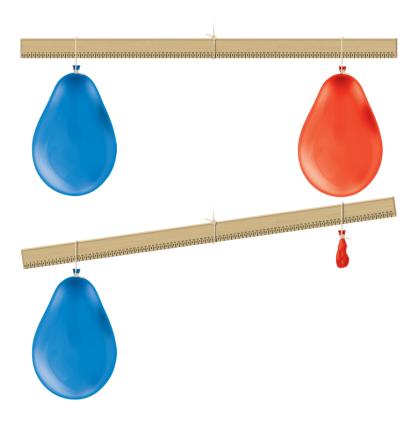
#### **GATHERING**

- Books on paper airplanes may be available at your local library, and you might also look at websites like www.funpaperairplanes.com and www.10paperairplanes.com. Print out several patterns of models that vary from the traditional dart-like plane.
- Show the Scouts how cutting flaps into the back edges of the wings and folding the flaps upward—
  or just bending up the back edges—may keep the planes aloft a bit longer. Either way, the air moving
  over the back edges will tend to push the nose of the plane up.
- If they require an explanation, have them hold a fairly large piece of cardboard at an angle and move their arms forward quickly. They should be able to feel the lift.

#### **ACTIVITIES**

#### **Activity 1: The Weight of Air**

- You can make a balance beam with a dowel or other narrow piece of wood. Use a screw to attach a
  cross member so that it can swing easily.
- The cross member should be balanced, but if not, use small weights to make it balance (tape, small coins, or paper clips should work). Or, it may be easier to start with a balloon attached to each end and then balance the beam.



## MEETING 2 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- · Items for activities:
  - Activity 1: a voice recorder or other device that Scouts can use to record sounds outdoors
  - Activity 2: cardboard tube; string
  - Activity 3: water; eight 20-ounce soft drink bottles; straws; measuring cup
  - Activity 4: sections of corrugated cardboard (1½ x 8 inches); straws
- · Materials for craft stick harmonicas (see Meeting 2 Resources)
- If you have access to the internet during the meeting, find some videos of aeolian harps—instruments played solely by the motion of wind. The Scouts will likely be fascinated by these instruments. (Talk Time)

#### **GATHERING**

As Scouts arrive, have them create harmonicas.

#### **OPENING**

- Have Scouts hum "God Bless America" on the craft stick harmonicas they made during the Gathering.
- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.

#### **TALK TIME**

- Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Discuss how the previous week's meeting on air serves as the basis for this week's meeting in which Cub Scouts will explore how wind can make music.

#### **ACTIVITIES**

#### Activity 1: Wind Sounds (Requirement 2A)

- Have the den go outside, and encourage everyone to listen closely for sounds that are associated
  with the wind. There may be many such noises (e.g., cans rolling on the pavement, wind whistling
  through the trees), but even gentle breezes will cause leaves to rustle or move wind chimes. If there
  is no wind, ask Scouts to describe things they may have heard in the past that are associated with
  the wind.
- While the Scouts are listening, record as many different sounds as you can, including some that aren't related to wind. Then play the recording and have everyone identify a sound that resulted from wind.

### ♦ Activity 2: Speed and Sound Investigation (Requirement 2C)

Tell Scouts that in some countries, there is an instrument called a "bullroarer" that uses speed to create sound. This activity will use a similar concept to investigate how sound can be affected by speed.

Tie a string to a cardboard tube, ensuring that the knot is secure.

Have Scouts create a large circle with a single Scout in the center, and test the safety distance to ensure the circle is wide enough to keep the tube from hitting anyone.

When ready, have the Scout hold the string and swing the tube above their head in a circle. Have each Scout take a turn, and encourage Scouts to try speeding up or slowing down the tube to see how the change in speed affects the sound.

After each Scout has had a turn, have them share what they noticed.

#### Activity 3: Bottle Band (Requirement 2B)

- Have each Scout remove the cap from a 20-ounce bottle and blow gently across the top to hear the tone the bottle makes. Then line up the bottles on a flat surface.
- Leave one bottle empty, but pour the following amounts of water into the other seven bottles: 1% cups, 2 cups, 2% cups, 3 cups, 3% cups, 4 cups, and 4% cups. Now have the Scouts experiment, blowing gently across the open tops and listening for variations in tone. The water amounts given should produce a fairly accurate musical scale, and with some practice, the "bottle band" might play a tune!
- You will find that the more water a bottle contains, the higher its tone will be. The tone can be altered by
  inserting a straw in the bottle, placing a finger over the end of the straw, or pouring out some water.

#### Activity 4: Soda Straw Pipe Organ (Optional)

Here's another way to create a musical wind instrument, if the den has time:

- Cut the eight straws down to the following lengths in inches: 41/4, 41/2, 51/4, 6, 63/4, 7, 73/4, and 81/2.
- Starting about 1½ inches from one end of the cardboard, push the straws between the corrugations and leave four empty corrugations between each straw.
- Flatten the top ends of the straws and cut off the corners. Blow into the instrument with your lips lightly around the straws—like a harmonica. Listen to the unique sounds that come out as you continue blowing and sliding the instrument across your lips.

#### **CLOSING**

- Tie the musical activities at this meeting to relevant points of the Scout Law. For example, the Wolf Scouts helped each other make the Bottle Band, and creating music probably made them feel cheerful.
- Review details for the upcoming outing in Meeting 3 if the kite derby will be held at a location and/or time different from the den meeting. Make sure all Scouts and their families know the plans.

#### AFTER THE MEETING

- · Serve refreshments, if desired.
- Record completion of requirements 2A, 2B, and 2C.
- Work together to clean up the meeting place.
- Remind each Scout to bring materials for making a kite at the next meeting.

### **MEETING 2 RESOURCES**

#### **GATHERING**

#### **Wooden Harmonicas**

Use the instructions for requirement 2B in the *Wolf Handbook* to create harmonicas using craft sticks.

#### **Materials:**

- Two tongue depressors or wide craft sticks
- Scissors
- Paper
- Clear tape
- Three rubber bands (one wide, two skinny)
- 1. Cut two strips of paper the same size as a tongue depressor.
- 2. Place one tongue depressor on top of the other. Wrap one paper strip around each end of the tongue depressors. Wrap tape around each loop without touching the tongue depressors.
- 3. Slide off one tongue depressor. Stretch the wide rubber band around the length of the tongue depressor and paper loops.
- 4. Place the second tongue depressor back on top. Wrap one skinny rubber band around each end outside of each paper loop.





## MEETING 3 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for making kites (paper, sticks, string, glue, scissors, markers) and kite reels (wood blocks, dowels, glue, and a drill if the wood is not predrilled). Have a parent or other adult present to help each Scout.
- If the den will hold a kite derby as part of this meeting, be sure that the meeting location allows a safe outdoor space for flying the kites.
- 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.
- Prepare simple enough ribbons or awards for each Scout to be presented with a special award at the end of the kite derby. Awards could include: Most Colorful, Highest Flying, Fastest, etc.

#### **GATHERING**

As Scouts arrive, have them decorate the paper they will use to create their kites.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- During the ceremony, you could tie the waving of the flag into the previous week's discoveries about wind.

#### TALK TIME

- Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Review the information on kite safety (requirement 2D) and the science of air (requirement 2E) in the Wolf Handbook.

#### **ACTIVITIES**

#### Activity 1: Making a Kite (Requirement 2D)

- Have each Cub Scout in your den build a kite and assemble a kite reel. Use the directions in the Wolf Handbook for a newspaper kite (see the Meeting 3 Resources), or choose other design options for the den.
- If limited space is an issue, try making finger kites, which are not more than 8 to 10 inches long and can be flown by simply running.

### ♦ Activity 2: Kite Derby (Requirement 2E)

- Have the Wolf Scouts take their new kites outdoors to hold a small-scale kite derby. As an alternative, this can be planned as a separate activity with the pack or as part of a community event.
- Allow time for Wolves and adults who are able to help to try launching and flying their kites.

#### **CLOSING**

Close the meeting with appropriate remarks about kites flying high and a comparison to Scouts "flying high" by doing their best and "soaring" to their rank advancement.

#### **AFTER THE MEETING**

- Serve refreshments, if desired.
- Record completion of requirements 3A, 3B, and 4.
- Work together to clean up the meeting place.

## **MEETING 3 RESOURCES**

#### **Activity 1: Making a Kite**

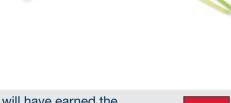
Use the instructions for requirement 2D in the

Wolf Handbook if your den will create newspaper kites.

#### **Materials:**

- Two-page spread of newspaper
- Scissors
- Cellophane tape
- String
- Long sticks, bamboo plant rods, or 1/4-inch wooden dowels
- Marker









#### **RATIONALE FOR ADVENTURE**

This STEM-based adventure engages Wolves in fun math-related activities that range from counting and simple arithmetic to geometric shapes and code.

#### TAKEAWAYS FOR CUB SCOUTS

- Realization that math is all around us
- · Starting to see math as a fun tool
- Creativity and deductive reasoning
- A Scout is cheerful, thrifty.



#### **ADVENTURE REQUIREMENTS**

Wolf Handbook, page 142

Complete the following requirements.

- 1. Complete two of the following:
  - A. With the members of your den or family, make a game with simple materials that requires math to keep score.
  - B. Play a game of "Go Fish for 10s."
  - C. Do five activities at home, at school, or in your den that use mathematics, and then explain to your den how you used everyday math.
  - D. Make a rekenrek with two rows, and show your den leader or other adult how you would represent the numbers 4, 6, 9, and 14.
  - E. Make a rain gauge or some other measuring device, and use it.
- 2. Complete one of the following:
  - A. With other members of your den or family, identify three different types of shapes that you see in nature.
  - B. With other members of your den or family, identify two shapes you can see in the construction of bridges.
  - C. Select a single shape or figure. Observe the world around you for at least a week, and write down where you see this shape or figure and how it is used.
- 3. Complete one of the following:
  - A. With your den, find something that comes with many small, colored items in one package. Count the number of items of each color in your package. Keep track of each color. Then:
    - i. Draw a graph showing the number of items of each color.
    - ii. Determine what the most common color is.
    - iii. Compare your results to those of the other Scouts.
    - iv. Predict how many items of each color you will find in one more package.
    - v. Decide if your prediction was close.
  - B. With your den or family, measure the height of everyone in the group and see who takes more steps to walk 100 feet.
  - C. Have each member of your den shoot a basketball. Count the number of shots it takes for each Scout to sink five baskets. Make a graph that shows how successful your den was. Your graph should show each group that needed 5, 6-10, 11-15, 16-20, and more than 20 tries to sink their shots.

- 4. Complete one of the following:
  - A. Use a secret code using numbers to send a message to one of your den members or your den leader. Have that person send a message back to you. Be sure you both use the same code.
  - B. Send a message to another member of your den or your den leader using the pig pen code or another code that changes letters into special shapes.
  - C. Practice using a code stick to create and decode a message.

#### **NOTES TO DEN LEADER**

This adventure does not include plans for a den outing. If a den outing is desired, the leader may plan to hold one of the meetings at a location where Wolf Scouts could learn about geometry and bridges as part of fulfilling requirement 2. All event coordination and activity consent forms would need to be in place in advance, depending on the location selected.

See the options in the *Wolf Handbook* for requirement 1. Adjust meeting plans as needed if your den chooses different options to complete the requirement.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

## MEETING 1 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- For Gathering—materials for "Bull's-Eye" (see Meeting 1 Resources)
- Materials for making a rain gauge or other measuring device (Activity 1, requirement 1E)
- Cards for playing "Go Fish for 10s" or materials for making a game that requires math to keep score (Activity 2, requirements 1A and 1B)

#### **GATHERING**

Have the Scouts take turns at playing "Bull's-Eye" while waiting for everyone to arrive. An adult or the den chief should keep track as each Scout tries to reach a score of 25.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Optional opening: Lead the den in singing "Boom Chicka Boom" (see Meeting 1 Resources).

#### **TALK TIME**

- Introduce the Code of the Wolf 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: Rain Gauge (Requirement 1E)

Have each Scout build a rain gauge, using the instructions in the *Wolf Handbook*. (Note: If Scouts prefer to make something else, the *Cub Scout Leader How-To Book* offers instructions for a liquid barometer and a wind gauge, also known as an anemometer.)





#### Activity 2: Adding Game (Requirement 1A or 1B)

Scouts may play "Go Fish for 10s" as a second activity (see the *Wolf Handbook* for rules), or they could create a game of their own that requires math to keep score. The *Wolf Handbook* provides some suggestions, and here is one more:

**Life-size board game.** Use two boxes to create a large pair of dice. Then map out a game board on the floor, using construction paper for the spaces. Have Scouts take one turn each, rolling the dice and adding the numbers to see how many spaces they should move. Create simple instructions to appear on certain spaces on the board, such as "Skip two spaces," "Lose a turn," "Move back five spaces," etc. The game doesn't need to be elaborate.

#### **CLOSING**

Here's a chance to note that the Scout Law has 12 points. Recite the words together; then have each Cub Scout say what one of the points means to them.

#### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirements 1A or 1B and 1C.
- Work together to clean up the meeting place.

### MEETING 1 RESOURCES

#### **GATHERING: BULL'S-EYE**

The objective in this game is to reach a score of 25 by tossing small objects onto paper plates marked with different numbers.

**Materials:** Small objects to use as counters (e.g., pennies, beans); six paper plates (two sets of three) with the numbers 1, 5, and 10 marked on them

**Instructions:** Establish two throwing lines, and set three paper plates in straight succession at varying distances from the line. As Cub Scouts arrive for the meeting, give each Scout 10 of the counters so they can attempt a score of 25—scoring one point if they hit the nearest plate, five points for the next one, and 10 points if they reach the farthest plate.

#### **OPENING: "BOOM CHICKA BOOM"**

The leader slaps both legs and snaps their fingers as lines are added one at a time, and chants the lyrics as the group repeats each line.

I said boom!

I said boom chicka-boom!

I said booma-chicka-rocka!

I said booma-chicka-rocka-chicka-rocka-chicka-boom!

Uh huh!

Oh yeah!

One more time. ...

This time higher. ...

(Repeat the above verses in different ways—in a lower voice, faster, slower, etc.

Make up any variations that you think the Scouts will enjoy.)

## MEETING 2 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for invisible ink investigations (Gathering)
  - White paper
  - Hair dryer
  - Baking soda
  - Cotton swabs, toothpicks, or paintbrushes
  - White crayons
  - Lemon juice
  - Watercolors
- Materials for graphing (Activity 1)
  - Graph paper for each Scout or a large sheet of poster board
  - Two packages of the same multicolored object (paper clips, marbles, colored candies, etc.)
- Paper for writing secret codes (Activity 2), and more materials if the den will be making code sticks:
  - Scissors
  - Tape
  - Unsharpened pencils (one per Scout) to wrap the paper around
  - Pens or pencils to write the code letters

#### **GATHERING**

Set the materials for the invisible ink investigations on a table and have each Scout participate when they arrive for the meeting.

- Mix baking soda with water. Then dip a cotton swab, toothpick, or paintbrush into the mixture and
  use it to write a message on plain white paper. Heat the message by blowing the hair dryer over it,
  and watch the message turn a brownish color.
- Now clean off the writing instrument, dip it into lemon juice, and perform the same experiment.
- Write another message on white paper with a white crayon. Then brush a watercolor over the message; the crayon will resist the watercolor and stay white.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Lead the Scouts in the Centipede Yell: "Ninety-nine THUMP! Ninety-nine THUMP! Ninety-nine THUMP! This wooden leg is murder!" Then add some variations for the last line, like "My feet are killing me!" and "My shoe bill is outrageous!"

#### **TALK TIME**

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

#### **ACTIVITIES**

#### ♦ Activity 1: Graphing (Requirement 3A)

Graphing is an important skill because it teaches observation and deductive reasoning. The Scouts may do this activity in teams or individually, using the instructions in the *Wolf Handbook*. Including an edible treat works well because you can use things like trail mix or mixed candy to graph, and then let the Scouts eat the "materials" after they finish the activity. (If you do use food, check in advance to see if there are any allergies in the group.)

Ideally, each small package of whatever item you use will contain 20 to 30 pieces (or more), enough to give you a reasonable sampling of the item. Graph paper may be helpful in drawing charts, but it is not necessary. If you prefer to build a single chart using poster board, you could draw the graph using 1- or ½-inch scales for each item.

### Activity 2: Secret Codes (Requirement 4)

Have the Cub Scouts in your den do at least one of the activities for this requirement in the *Wolf Handbook*: Exchange messages via code numbers or shape codes, or create and use a code stick.

#### **CLOSING**

Lead the America Cheer. Call out, "Give me an 'A,' give me an 'M,' give me an 'E,'" etc., until "AMERICA" is spelled out. Then shout, "What's that spell?" Scouts respond, "America—land that I love!"

#### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- · Record completion of requirements 3 and 4.
- · Work together to clean up the meeting place.

## MEETING 3 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for the "Bounce 'n' Catch" game (Gathering): eight plastic cups; basket of pingpong balls; table
- Books or magazines to identify shapes in nature (for Activity 1 if the weather does not permit doing this outside)
- Materials for making tangram puzzles: pencils, rulers, scissors, envelopes, and one cardboard square per Scout

#### **GATHERING**

Place the basket of pingpong balls on the table before the meeting. When Scouts arrive, have them take a turn at the game. Each player starts by holding a plastic cup in one hand and bouncing a pingpong ball off the floor and into the cup. Once a ball makes it into the cup, players stack a new cup on top of the ball in the first cup and bounce another ball into the empty cup. Play continues until all eight cups contain one ball and are stacked on top of each other.

#### **OPENING**

- Have Cub Scouts form a circle and pass the Cub Scout handshake from one to another until it
  reaches the Scout who started it. Then, on the count of three, they all give a wolf howl.
- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.

#### **TALK TIME**

- · Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Review the information on shapes used in the construction of bridges in the Wolf Handbook (requirement 2B).

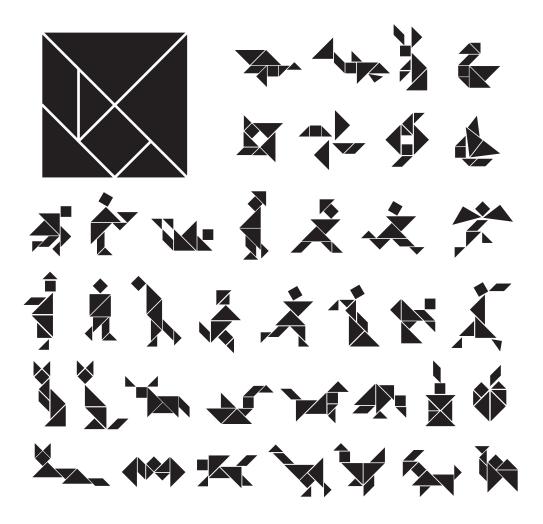
#### **ACTIVITIES**

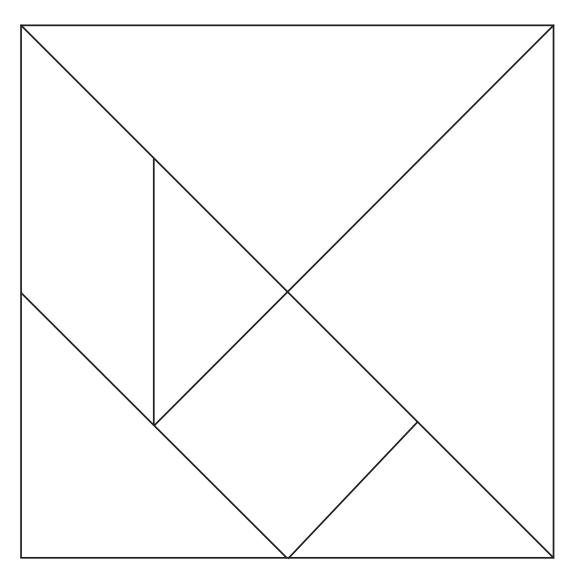
#### Activity 1: Shapes in Nature (Requirement 2A)

- Have the Scouts take a walk outside, stopping to note the shapes of leaves, flowers, trees, rocks, clouds, and blades of grass.
- If weather conditions make this impossible, browse through the books and magazines so the Scouts can identify three different types of shapes found in nature.

#### Activity 2: Making a Tangram (Optional)

The tangram, a puzzle that originated in ancient China, is a square made of seven flat shapes that can be put together to form other shapes. For this activity, have each Scout use a pencil and ruler to mark off the seven shapes on one square of cardboard. Then Scouts will cut the shapes from the cardboard and use the pieces to make silhouettes of animals, people, geometric figures, or anything else they choose. The pieces can be stored in the envelopes for the Scouts to take home after the meeting.





#### **CLOSING**

Gather the den in a circle and sing "I've Got That Cub Scout Spirit" (Tune: "I've Got That Joy, Joy, Joy, Joy")

I've got that Cub Scout spirit up in my head, Up in my head, up in my head. I've got that Cub Scout spirit up in my head, Up in my head, to stay.

(Sing three more verses, replacing "up in my head" with different words each time: "deep in my heart," "down in my feet," "all over me.")

#### **AFTER THE MEETING**

- Serve refreshments, if desired.
- · Record completion of requirement 2.
- Work together to clean up the meeting place.

Upon completion of the Code of the Wolf adventure, your Wolves 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.



## NOTES



#### **RATIONALE FOR ADVENTURE**

Everywhere we look, we see collections. A collection of plants is a garden; a collection of cows is a herd. And any group of objects that are similar and special to you counts as a collection, too. That collection tells others what you find interesting, and as you expand the collection, you gain new skills and understanding.

#### TAKEAWAYS FOR CUB SCOUTS

- · Enthusiasm for starting a collection
- Cooperation and showing respect for others
- Completing a task
- · Listening skills
- A Scout is courteous.

Wolf Handbook, page 164

#### **ADVENTURE REQUIREMENTS**

Complete the following requirements.

- 1. Begin a collection of 10 items that all have something in common. Label the items and title your collection.
- 2. Share your collection at a den meeting.
- 3. Complete one of the following and tell your den what you learned:
  - A. Visit a show or museum that displays different collections or models.
  - B. Watch a webcast or other media presentation about collecting or model building.
- 4. Complete one of the following:
  - A. Create an autograph book, and get 10 autographs. Start with members of your den.
  - B. With your parent's or guardian's permission, pick a famous living person, and write him or her a letter. In your letter, ask the person to send you an autographed photo.

#### **NOTES TO DEN LEADER**

Meeting 3 will be a den outing to a show or museum that displays different collections or models (requirement 3A). You will need to schedule the outing in advance. Work with families to plan transportation to and from the location. Make sure activity consent forms are distributed and signed.

For requirement 3B, be sure there is an internet connection available. To complete this requirement, you may meet at a local public library that has free internet access.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

## MEETING 1 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for "Tape Web" (Gathering): painter's tape; pom-poms
- Materials for "Autograph Books" (Activity 2): white paper; construction paper or card stock for covers; colored pencils; stapler or brads

- Materials for "Clothespin Collection Tag" (Activity 3): clothespins marked with a different color for each Scout (number of pins can vary, but the minimum is six.)
- Samples of collections
- · Activity consent forms for den outing

#### **GATHERING: TAPE WEB**

- Create a web that crisscrosses an open space or hallway, using painter's tape (the type that will
  not stick to walls or lift paint). Make sure that there are large enough openings for Scouts to crawl
  through or step over.
- Attach colored pom-poms to the sticky side of the tape.
- As everyone arrives for the meeting, assign a pom-pom color to each Cub Scout and have them
  work their way through the web, collecting their color as they go. Warn them to be careful and not
  get caught in the web!
- If part of the web comes down during the activity, simply put it back up.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Briefly explain to the den that the Scout Law is a collection of values by which we live.

#### **TALK TIME**

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

#### **ACTIVITIES**

#### Activity 1: Planning a Collection (Optional)

- Share with Scouts the sample collections you brought to the meeting.
- Have them share about collections that they own or want to start. These could include—but are not limited to—types of toys, models, rocks, or drawings. Each Scout should bring a small collection from home to share at the next meeting (requirement 2).
- Demonstrate ways that different types of collections may be displayed.

#### Activity 2: Autograph Books (Requirement 4A)

- Have Scouts assemble and decorate their autograph books. They can get their first signatures from fellow den members. Then have them brainstorm on ways each den member can gather other signatures.
- Assembling the books may be a simple project, or you can make it elaborate, depending on the supplies you have available. To make the simplest type:
  - Fold a sheet of card stock or construction paper in half to make a cover.
  - Fold sheets of construction or printer paper in half and fit them inside the cover.
  - To bind the book, staple the sheets along the fold, or punch holes and use brads to fasten the sheets together.

#### Activity 3: Clothespin Collection Tag (OPTIONAL)

- See the suggestions for this activity in the Wolf Handbook.
- If weather conditions prevent playing this game outside, consider having everyone use animal movements, such as duck waddles or crab walks, to chase one another.

#### **CLOSING: DEN LEADER MOMENT**

Say: "Collections are a wonderful way to look at the world around you. When collecting from nature, remember that it is always best to leave the beauty you find for others to see-especially plants and flowers - but you can draw them or take a picture. I am really looking forward to seeing the collections that you bring and learning more about the things that interest you."



#### **Do-at-Home Project Reminder:**

Remind Wolves to begin a collection at home of at least 10 items (requirement 1). They will bring this collection, or another one, to share at the next meeting (requirement 2). They should be prepared to answer these questions: Why did you choose those items to collect? Where did you find the items? How will you add to your collection?

Also for the next meeting, Scouts should think about the famous person they want to write to and find the mailing address online—with permission and assistance from their parent or quardian (requirement 4B).

#### AFTER THE MEETING

- Serve refreshments, if desired.
- Record completion of requirement 4A.
- Work together to clean up the meeting place.
- Prepare thank-you notes for the Wolves to sign at the next meeting.



#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for "Scout Law Scavenger Hunt" (Gathering): all 12 points of the Scout Law, written individually on slips of paper and hidden around the room; tape; a poster board with the words "A Scout is" written at the top
- Paper, pens, envelopes, and stamps for writing and sending a letter (Activity 2)
- Materials for "Sensory Scavenger Hunt" (Activity 3): a variety of objects chosen for a distinctive texture and shape; a list of all the objects (one copy per Scout); pencils; and paper bags. Hide each object—wrapped in a closed paper bag—outside or in a different room from the one where the Scout Law Scavenger Hunt will be played.

#### **GATHERING**

- · Hide the Scout Law words around the room. As Wolves arrive for the meeting, have each of them find two words. They must not tell anyone the words they found.
- When all 12 words have been found, bring everyone together and have them tape their words on the poster board in the correct order of the Scout Law: A Scout is trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent.

#### **OPENING**

 Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.

#### **TALK TIME**

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

#### **ACTIVITIES**

#### Activity 1: Personal Collections (Requirements 1 and 2)

Have Scouts share the collection they brought and have them tell why they chose to collect those items, where they found them, and how they plan to add to the collection.

#### Activity 2: Writing to a Famous Person (Requirement 4B)

- Hand out paper and pens for the Scouts to write their letters.
- Provide a template, using the example in the Meeting 2 Resources or one you prepared yourself.
- Be sure an adult leader and the den chief are available during this activity to help if anyone has any trouble composing their letters.
- If you cannot find an address for a Cub Scout's first choice, you may need to help identify another person.

#### Activity 3: Sensory Scavenger Hunt (Optional)

- Give each Scout a copy of the list and a pencil. When they locate one of the bags, have them close their eyes, reach inside to feel around, and put a check mark next to the object they think it is.
- When everyone has finished their search, display the contents of each bag so they can see if their guesses were correct.

#### **CLOSING**

- Make sure Scouts each know who their buddy will be during the den outing.
- Confirm plans for the following meeting's den outing to a show or museum where collections are displayed. Make sure all transportation needs are covered.

#### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirements 1, 2, and 4B.
- Work together to clean up the meeting place.
- Have Scouts sign thank-you notes for anyone who helps with the outing.

## **MEETING 2 RESOURCES**

[Today's date]

[Mr./Mrs./Miss/Dr. and the person's full name

Street address

City, state, zip code]

[Greeting],

[First, tell the person why you are writing a letter. Be polite. Then, tell why you enjoy what the person does or how you support what they do. Tell a little about yourself, too, and that you are working on your Wolf rank in Cub Scouts. Finally, say that you would appreciate it if they could send you a photo. Explain that you have enclosed a self-addressed, stamped envelope for them to send you the photo. End by thanking them for their time.]

Sincerely,

[Your signature]

Your name

Your street address or PO box

City, state, zip code]

# MEETING 3 PLAN (DEN OUTING)

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Confirm that transportation to and from the event is in place. Secure activity consent forms.
- The unit den leader should bring a copy of the Guide to Safe Scouting.

#### **GATHERING**

- Play a game of "I Spy" while waiting for everyone to arrive.
- Remind everyone that it is important to stay together, be on their best behavior, and use the buddy system. Have Wolves share things they would like to learn during the visit.
- Review any questions the Scouts want to ask to make certain all are appropriate.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Recite the Scout Law and ask Scouts to name points of the law they will demonstrate during the outing.

#### **TALK TIME**

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

#### **ACTIVITIES**

#### Activity 1: Visit to Show or Museum (Requirement 3)

- Visit the facility as a group, and take a guided tour if possible.
- Engage Scouts by having them identify different types of collections.
- Have Scouts ask the questions they have prepared.
- When the tour ends, have the Wolves give their thank-you cards to anyone who helped, including tour guides. Then offer a relay clap for the guides: The first Cub Scout claps the second Scout's hand, and the clap is then relayed through the group.

#### **CLOSING**

- Have the den members form a friendship circle: All arms are crossed with each person extending
  their right arm over their left and grasping the left hand of the person beside them. Everyone makes a
  silent wish and gently passes a friendship squeeze from hand to hand.
- · Ask Wolves to describe a favorite exhibit and why they thought it was best.

#### **AFTER THE MEETING**

- Serve refreshments, if desired.
- Record completion of requirement 3.
- Work together to clean up the meeting place.

Upon completion of the Collections and Hobbies adventure, your Wolves 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.



#### **RATIONALE FOR ADVENTURE**

This adventure is intended to help Wolf Scouts learn about physical disabilities, which are more easily understood at their age than learning and intellectual disabilities.

#### TAKEAWAYS FOR CUB SCOUTS

- Empathy
- Awareness of disabilities
- A Scout is kind, helpful, friendly, cheerful.



#### **ADVENTURE REQUIREMENTS**

Complete at least four of the following requirements.

- 1. With other members of your den, try using a wheelchair or crutches, and reflect on the process.
- 2. Learn about a sport that has been adapted so that people in wheelchairs or with some other physical disability can play, and tell your den about it.
- 3. Learn about "invisible" disabilities. Take part in an activity that develops an understanding of invisible disabilities.
- 4. With your den, try doing three of the following things while wearing gloves or mittens:
  - A. Tying your shoes
  - B. Using a fork to pick up food
  - C. Playing a card game
  - D. Playing a video game
  - E. Playing checkers or another board game
  - F. Blowing bubbles
- 5. Draw or paint a picture two different ways: Draw or paint it once the way you usually would and then again while using a blindfold. Discuss with your den the ways the process was different.
- 6. Use American Sign Language to communicate either a simple sentence or at least four points of the Scout Law.
- Learn about someone famous who has or had a disability, and share the person's story with your den or family.
- 8. Attend an event where people with disabilities are participants or where accommodations for people with disabilities are made a part of the event.

Wolf Handbook, page 176

#### **NOTES TO DEN LEADER**

This adventure has several choices based on which four activities you choose to do with your den. These den meeting plans in this book, when followed as written, meet the requirements to earn this adventure. If you choose to make adjustments, be sure you complete at least four requirements.

Meeting 1 includes several options for activities that can be used to complete requirement 4. Prepare materials according to the needs of the requirement option your den selects. Requirement 4D can be completed at home with the permission of a Scout's parent or guardian.

For Meeting 2, invite a guest speaker who is an expert on physical disabilities such as a physical therapist, someone with the Special Olympics or Easter Seals, to talk to the Cub Scouts about the work they do and how it helps others. If you have a personal relationship with someone who has a disability, you may consider asking them to meet with your den to share how they overcome their physical challenges. This is an optional part of the adventure.

Check with your local hospital or Red Cross chapter to see if they have access to a wheelchair, crutches, or other resources that could be borrowed for completion of requirement 1. If you decide to have a guest speaker, he or she may be able to assist you in securing the needed equipment for Meeting 2.

This adventure does not include plans for a den outing to fulfill requirement 8. If that requirement is selected, leaders should make arrangements with the outing location, provide families with planning information, and submit all required paperwork in advance.

Scouts might choose to complete requirements 2, 7, or 8 independently at home. Encourage Scouts who do so to share what they learned and how the activity helped them increase their awareness of certain disabilities or people who live with them.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

## MEETING 1 PLAN

#### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Photos or illustrations of the words "loyal" and "friendly" being spoken in American Sign Language (ASL) (Gathering)
- Gloves or mittens for each Scout. Gardening or dishwashing gloves also work well.
- Checkers and a playing board for each pair of Scouts (If possible, set out the boards and checkers before the meeting begins, to save time.)
- Plastic forks (one per Scout)
- Dried beans (10 per Scout)
- · Paper plates (two per Scout)
- Deck of cards for playing "Go Fish"

#### **GATHERING: AMERICAN SIGN LANGUAGE (REQUIREMENT 6)**

 Use the photos or illustrations to teach the Scouts how to say "loyal" and "friendly" in American Sign Language. Have them practice until everyone has arrived for the meeting.

#### **OPENING**

 Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.





Loyal

Friendly

 Have the Scouts sign "loyal" and "friendly" when they get to those words in the Scout Law. (Note: This fulfills half of requirement 6; the other half will be done at Meeting 3, when the Scouts learn "cheerful" and "clean" in ASL.)

#### TALK TIME

- Introduce the Cubs Who Care 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.
- Explain that for people with certain disabilities it is difficult to do things without full use of their hands and fingers. At this meeting, Wolves will do three activities while wearing gloves, to give them an idea of the challenges that some people face and overcome.
- Tell the Scouts about the guest speaker who will join them for the next meeting. Make sure they know
  what behavior will be expected of them, and help them to plan some questions. Later, when they
  thank their guest for coming, they should mention things they appreciated learning from him or her.

#### **ACTIVITIES**

#### Activity 1: Checkers (Requirement 4E)

- Divide the Scouts into pairs. Have them put on their gloves or mittens and then play a game of checkers.
- If anyone in the den isn't familiar with the game, review the rules in Meeting 1 Resources before they start. Let the Scouts know that after 10 minutes, they will put away the checkers and play another day.
- When time is up, ask the Wolves if they found it difficult to play with gloves on. Could they adjust if they had to wear gloves every time they played the game? Help them see how this relates to the challenges faced by people with disabilities affecting motor skills.

#### Activity 2: Shoe Tying Relay (Requirement 4A)

- See Meeting 1 Resource for instructions. The Scouts will play this relay with a twist: They must wear
  the gloves when they tie and untie their shoes.
- Again, discuss with them how this challenge is similar to dealing with some disabilities. Ask which
  point of the Scout Law would be a good one to remember when they encounter people who have a
  disability that makes it difficult for them to use their hands and fingers.

### Activity 3: Fork Lift (Requirement 4B)

- While they are still wearing the gloves, have the Scouts race to see who can transfer 10 beans the fastest from one paper plate to another—using a single fork.
- Talk about why we need to have patience and show courtesy and respect to individuals who have difficulty with tasks due to a disability.

### ♦ Activity 4: Go Fish (Requirement 4C)

- Have Scouts put on their gloves or mittens and then play a game of Go Fish.
- If anyone in the den isn't familiar with the game, review the rules in Meeting 1 Resources before they start.
- After the game is finished, ask how it felt to play cards while wearing the gloves. How does this help them relate to people with disabilities that affect their hands or fingers?

#### **CLOSING**

Gather for a Living Circle. All members of the den form a close circle, and everybody turns to the right while stretching their left hands into the center with palms facing downward. Each person grasps the left thumb of the person next to them, making a complete circle with the group. Then they hold their right hands straight up in the Cub Scout sign. Pumping their left hands, they say in unison the Cub Scout motto and then give a howl. (See "Closing Ceremonies" in the appendix.)

#### **AFTER THE MEETING**

- Serve refreshments, if desired.
- Record completion of requirements 4A, 4B, 4C, and 4E.
- Work together to clean up the meeting place.
- Prepare thank-you notes for the Wolves to sign at the next meeting.

#### **SCOUT LAW IN AMERICAN SIGN LANGUAGE**





















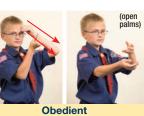




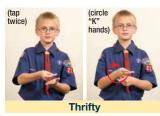
Α



















**NOTE:** Some English words are not signed or do not have a one-to-one translation in American Sign Language. American Sign Language is a conceptual language, which means that not every word of spoken English is signed. Sentences in sign language may also have a different structure than those written or spoken in English.

### **ACTIVITIES**

### **Activity 1: Checkers**

If anyone in the den isn't familiar with the game, here are the basic instructions.

- The player with the black color pieces traditionally moves first, and then the players take turns moving a piece. Pieces are always moved diagonally; this can be done in two ways: forward (toward your opponent) or "jump" one of your opponent's pieces, if it is diagonal to your piece and there is an empty space on the other side. This removes your opponent's piece. Remember that you can do multiple jumps at once if you are moving in a straight diagonal line. If a jump is possible, you must take it.
- The row closest to the player on both sides of the board is called the king row. If you succeed in moving a piece across the board all the way to the opponent's king row, that piece becomes a king. Stack one of the pieces you have lost on to that piece, so it can now be distinguished as a king. Once a piece is "crowned" in this way, you must wait until another turn to move it out of the king row. King pieces can move either forward or backward and still only diagonally.
- The game is over when an opponent runs out of pieces or still has pieces but can't move them. If neither player can move, the game ends in a tie.

## **Activity 2: Shoe Tying Relay**

Again, Scouts must do this relay with their gloves on.

- Mark a start line and a line for stopping and tying shoes. This can be done before the meeting to save time.
- Divide the den into two teams. Each Scout on a team runs to the stop line, bends down to untie and retie one of their shoes, then runs back to the start line and tags the next Scout, who repeats the process. This continues until the whole team has completed the course.
- If you have a small den (three or four members), have them play as a single team and time the relay through several runs to see if their speed improves.

## **Activity 4: Go Fish**

If anyone in the den isn't familiar with the game, here are the basic instructions.

- Deal five cards to each Scout. Set the remainder of the deck in the center of the circle.
- The denner goes first and asks a specific player for cards of a specific type. (The denner must already have one of those cards in their hand.) Example: "Ben, please give me your threes." Ben must hand over all the cards he has of that rank. If he doesn't have any, he says, "Go fish."
- The denner then draws one card from the deck. If the card is the one that was requested, the player gets to go again. If not, the Scout to the denner's right takes a turn.
- After collecting four cards of the same rank, a Scout has a "book." The Scout with the most books at the end of the game wins.



### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- One plastic cup for each Scout
- Sandpaper with three different levels of grit, ranging from very fine to very coarse. Cut the sandpaper into small squares so each Wolf will get a sample of each type.
- 6-10 clear glasses of water and colored drink mix
- Cotton balls (one for each pair of Scouts)
- Balloons—minimum of four (If someone is allergic to latex, make sure to use latex-free balloons.)
- Invite and confirm a guest speaker who lives with a disability and is open to sharing his or her experience with the den.

### **GATHERING: COTTON BALL TOSS**

As Scouts arrive, pair them into teams. Have them pass a cotton ball back and forth between them, using only a plastic cup in their nondominant hands to both catch and toss. Have them start playing about 12 inches apart and increase their distance 1 foot at a time as their skills improve.

### **OPENING**

 Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Cub Scout motto: Do Your Best.

### **TALK TIME**

- Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Introduce the guest speaker, and ask him or her to talk about the nature of the work they do with people
  who have disabilities, why they choose to be in this line of work, and what skills are important for them
  to have. If the guest speakers have a disability themselves, discuss with them beforehand what they
  would be comfortable discussing.
- When the speaker is finished, give the Scouts time to ask their questions. (They may have many questions.)

### **ACTIVITIES**

## Activity 1: Invisible Disabilities Stations (Requirement 3)

- Introduce the idea of invisible disabilities to Scouts, noting that many people have disabilities that
  others can't see. ADHD and autism spectrum disorders are two examples of invisible disabilities that
  can cause people to think or feel things differently. Remind Scouts that people with invisible disabilities have many positive attributes and abilities and that getting to know people as individuals is the
  only true way to get to know them.
- Ask if anyone knows what the word "spectrum" means, and explain that a spectrum is a wide range.
   In the case of invisible disabilities, no two people will be impacted in exactly the same way. There is a wide spectrum, and each person fits in a different place on that spectrum.
- There are a number of activities you can do with Scouts to build awareness of invisible disabilities
  and the concept of a spectrum. The following activities were adapted from the Eagle project of Justin
  Krejcha for The Autism Empowerment Great Quest for Autism Acceptance.

### - Autism Is a Spectrum:

- 1. Set up 6-10 glasses of water in a line.
- 2. Begin to add powdered drink mix to the cups, increasing the amount for each cup as you go down the line. The first cup should have minimal color, and the last cup should be a deeply saturated color.
- 3. Tell Scouts that the glasses of water represent how autism means something different to each person. There is no single type of person with autism. Some people with autism might have very few symptoms and be able to participate in the daily activities of school and life with need for only minor accommodations. Others might have significant symptoms and triggers that impact basic activities of living. And still others will be at every place along the spectrum—no two people with autism are alike.

#### — Tactile Station:

- 1. Explain that some people with autism are what is known as touch-sensitive. That means that even very soft fabrics can feel like rough sandpaper on their skin.
- 2. Provide each Scout with three pieces of sandpaper: one with a very fine grit, one with a medium grit, and one with a very coarse grit.
- 3. Have Wolves share how the sandpaper pieces feel different and how uncomfortable each piece is to touch. They can rate how uncomfortable each piece feels on a scale of 1–5, with 1 being not much and 5 being very uncomfortable.

- 4. Ask: How would that affect someone whose clothes feel that way to them when they are getting dressed in the morning? Remind Scouts that many things people without autism or similar disabilities don't think about every day (such as how clothes feel on your skin) can be extremely important to someone with autism.
- Additional information on autism can be found at www.autismempowerment.org/.

### **CLOSING**

· Recite the Scout Oath in unison while giving the Cub Scout sign.

### **NOTE TO DEN LEADER**

It is important to lead a reflection at the conclusion of these activities. It is important for the members of your den to recognize that their peers who are differently abled are just like them, except in one small way. See the "Leading a Reflection" guidelines in the appendix.

### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirement 3 and any other requirements fulfilled by selected activities.
- Work together to clean up the meeting place.
- Remind Scouts and parents to find old T-shirts the Scouts can wear over their uniforms during the
  painting activity at the next meeting.

# MEETING 3 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Photos or illustrations of the words "cheerful" and "clean" being spoken in American Sign Language (Gathering)
- Materials for painting (Activity 1):
  - Washable paints
  - Paper (enough for each Scout to paint two pictures) or a small painting canvas (4"x4" or 6"x6")
    if using acrylic paints
  - Old T-shirts (Scouts should all bring an old shirt to wear over their uniforms while painting; have an extra available for Scouts who do not bring one.)
  - Blindfolds (one per Scout)
  - Paintbrushes (one per Scout)
  - Plastic cups with water for rinsing paintbrushes (one per Scout)
  - Plastic cover or inexpensive tablecloth
- A wheelchair or crutches and cones or other items to set up a simple obstacle course

### **GATHERING (REQUIREMENT 6)**

• Use the photos or illustrations to teach the Scouts how to say "cheerful" and "clean" in American Sign Language. Have them practice until everyone has arrived for the meeting.



Cheerful

Clean

### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.
- Have the Cub Scouts sign "cheerful" and "clean" when they get to those words in the Scout Law.
   (Note: This fulfills the other half of requirement 6.)

### **TALK TIME**

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

### **ACTIVITIES**

## Activity 1: Painting (Requirement 5)

- Make sure everyone wears the old T-shirts over their uniforms to avoid stains.
- First, have each Scout paint a picture as they normally would. To prevent too much time being spent on deciding what to paint, consider giving the Scouts direction with a simple image to paint.
- Then have them try to paint the same picture while wearing a neckerchief as a blindfold. (As this
  part of the activity will probably be messier, be sure to put the plastic cover or tablecloth over the
  painting area.)

## Activity 2: Wheelchair or Crutches Obstacle Course (Requirement 1)

- Set up a simple obstacle course on a flat paved surface for Scouts to navigate using crutches or a wheelchair.
- Have Scouts take turns going through the course, trying their best to move and maneuver using the selected device.
- After the activity is finished, ask how it felt to go through the course on crutches or in a wheelchair. How does this help them relate to people with disabilities that affect their mobility?

### **CLOSING**

Bring all the Scouts together and have them sign the words "loyal," "friendly," "cheerful," and "clean." Then close with a grand howl!

### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Work together to clean up the meeting place.
- Record completion of requirements 1, 5, and 6.

Upon completion of the Cubs Who Care adventure, your Wolves 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.



### RATIONALE FOR ADVENTURE

This elective adventure will help Wolf Scouts understand the formation of fossils.

### TAKEAWAYS FOR CUB SCOUTS

- Understanding that fossils are affected by the ground around them
- Learning about different types of dinosaurs
- Listening to instructions
- Making a layered dessert
- A Scout is thrifty.



### **ADVENTURE REQUIREMENTS**

Wolf Handbook, page 190

Complete the following requirements.

- 1. Play a game that demonstrates your knowledge of dinosaurs, such as a dinosaur match game.
- 2. Create an imaginary dinosaur. Share with your den its name, what it eats, and where it lives.
- 3. Complete one of the following:
  - A. Make a fossil cast.
  - B. Make a dinosaur dig. Be a paleontologist, and dig through a dinosaur dig made by another member of your den. Show and explain the ways a paleontologist works carefully during a dig.
- 4. Make edible fossil layers. Explain how this snack is a good model for the formation of fossils.

### **NOTES TO DEN LEADER**

This adventure does not include plans for a den outing. If a den outing is desired, the leader may plan to hold one of the meetings at a location suitable for learning about dinosaurs or paleontology, such as a natural history museum. All event coordination and activity consent forms would need to be in place in advance, depending on the location selected.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

# MEETING

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Copies of the Dino Match game cards in Meeting 1 Resources (Gathering)
- One beanbag (Activity 1)
- Materials for building imaginary dinosaurs (Activity 2). These may include tape, glue, construction paper or felt, clay, papier-mâché, buttons, chenille stems, spools, and brads. Also, make sure to call parents in advance to have the Scouts bring recyclables like plastic bottles and caps, soda cans, cereal boxes, container lids, and cardboard tubes.

### **GATHERING**

Hand out the "Dino Match" cards as Scouts arrive, and when everyone is there, play the card game.

### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout
  Oath and Scout Law.
- The den members form a circle and give the Cub Scout sign. They repeat in unison, "A Scout is thrifty." Then Wolf Scouts each tell what being thrifty means to them.

### **TALK TIME**

- Introduce the Digging in the Past 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: Play "Herbivore! Carnivore!" (Requirement 1)

- Have the Cub Scouts in your den sit in a circle with one Wolf Scout in the center holding the beanbag. The Cub Scout with the beanbag then tosses it to someone in the circle and shouts, "Herbivore!" or "Carnivore!"
- The player who receives the bag must say the name of a dinosaur in that category before the player in the center can finish counting to 10.
- Once a dinosaur has been named, it may not be called again. Players who don't name one in time trade places with the Scout in the center.

# Activity 2: Imaginary Dinosaur (Requirement 2)

- Have each Scout build an imaginary dinosaur using the construction materials you gathered and the recyclables the Cub Scouts brought from home.
- Wolf Scouts are very creative! Encourage them to use their Wolf imaginations to invent and name their dinosaurs.

### **CLOSING**

Have the den members form a circle and pass the Cub Scout handshake from one to another until it reaches the Cub Scout who started it. As Wolf Scouts each receive the handshake, they silently make a wish and pledge to do their best.

### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirements 1 and 2.
- Work together to clean up the meeting place.

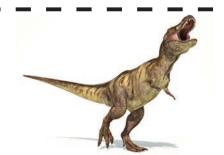
# MEETING 1 RESOURCES

### **GATHERING: DINO MATCH CARD GAME**

- As Scouts gather for the meeting, give each of them two cards: one showing the picture of a dinosaur and the other showing the name and description of a different dinosaur.
- When everyone has arrived and all the cards are distributed, have the Cub Scouts in your den go around the room and find the matching names and pictures for their cards.
- Encourage them to share any other information that they know about the dinosaurs.

# Tyrannosaurus rex

I am a carnivore with little arms and a big bite.



# **Triceratops**

I have three horns and a bony frill with points on its edges.



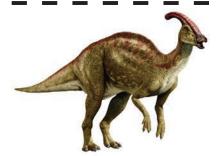
# Archaeopteryx

I am only about 12 inches long and have three fingers with claws on each of my wings.



# Parasaurolophus

I weigh about 4 tons and have a bony crest on my head.



# Pteranodon

I am a reptile that lived alongside dinosaurs. I am able to fly because I am very light—my hollow bones are filled with air sacs.



# **Apatosaurus**

I am one of the largest land animals. I have a long neck and eat only plants.



# Velociraptor

I am small and fast. I have sharp claws on my front and hind feet.



# **Ankylosaurus**

My protection comes in the form of spines on my body and a long heavy club tail that could be used to break the legs of enemies.



# **Spinosaurus**

I am longer than the T. rex; I have a sail on my back, and scientists think I speared fish out of the water.



# Hesperornithiformes

I use my webbed feet to dive for fish.



# MEETING 2 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Items for the "Dinosaur Eggs" game (Gathering): dried beans (12 per Scout); small paper plates (one per Scout); and toothpicks (two per Scout)
- Materials for fossil prints (Activity 1): air-dry clay; paper plates; permanent markers; leaves; sticks; rocks; small plastic dinosaurs; plastic bugs or spiders
- Materials for "Dino Dig" Part I (Activity 2): square disposable aluminum pan (one per Scout); plaster of paris; safety glasses; dust masks; various small objects (plastic dinosaurs, polished rocks, silk leaves, etc.)
- Two flashlights or battery-operated candles—one larger than the other (Closing)

### **GATHERING: DINOSAUR EGGS**

As Scouts arrive, have them sit around a table or kneel in a circle on the floor. Give each Cub Scout two toothpicks and a small paper plate with 12 dried beans on it. On your signal, see who will be the fastest at lifting out five beans.

### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.
- Have the den members make the Cub Scout sign as they recite the Scout Oath and Scout Law.

### **TALK TIME**

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

### **ACTIVITIES**

### ♦ Activity 1: Fossil Prints (Requirement 3A)

• Give Scouts all a piece of the air-dry clay and a paper plate. Have them make a fossil print, following the instructions in the *Wolf Handbook*. When the clay has hardened, have them write their name on the back using a permanent marker.

# ♦ Activity 2: "Dino Dig" Part I (Requirement 3B)

- Each Scout will now make a dinosaur dig based on the instructions in the Wolf Handbook.
- Make sure that only adults prepare the plaster of paris, wearing safety glasses and dust masks. Allow them plenty of space, and keep the Scouts from getting too close until the job is done.
- When the activity is finished, set the pans aside to dry until the next meeting.

# Activity 3: Dinosaur's Tail (Optional)

- Everyone stands single file, with Scouts placing their hands on the shoulders of the person in front of them. The first in line is the "head" of the dinosaur, and the last is the "tail."
- The head tries to catch the tail by maneuvering the line around so that they can tag the end player. All other players do their best to keep the head from catching the tail. The line must not break.
- When the head catches the tail, the end player becomes the head and the head player moves to the second place in line.

### **CLOSING: CUB SCOUT LIGHT**

Place the two flashlights or battery-operated candles on a table. The den leader asks Wolf Scouts to sit on the floor in a circle. Then the leader dims the lights.

**Den chief** (picking up the small light): "I will light this small candle. It represents the goodwill given by one Cub Scout. See how it shines? The rays from several Cub Scouts make a brighter light. Each Scout lets their light shine by doing their best and helping other people."

**Den leader:** "I'll light this large candle. This represents that there is a brighter light that leads us all. Let us always think first of God, second of others, and finally of ourselves."

### **AFTER THE MEETING**

- Serve refreshments, if desired.
- Record completion of requirements 3 and 4.
- Work together to clean up the meeting place.



### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Items for the Musical Dino Eggs (Gathering): one beanbag, recorded music
- Materials for "Edible Fossil Layers" (Activity 1; check with parents to see if there are any food allergies
  or dietary restrictions and plan accordingly: large clear plastic cups (one per Scout), flavored gelatin,
  animal crackers, crushed graham crackers, pudding.
  - Before the meeting, prepare each cup with an inch of gelatin in the bottom, and place a few animal crackers in the gelatin before it solidifies. Prepare a large bowl of pudding, and fill another large bowl with crushed graham crackers.
- Materials for "Dino Dig" Part II (Activity 2): craft sticks (one per Scout); small paintbrushes (one per Scout); dinosaur digs made at the last meeting
- Two round balloons (using latex-free balloons if there are any latex allergies in the group) for the Dinosaur Egg Relay (Activity 3)

### **GATHERING: MUSICAL DINO EGGS**

Have the arriving Wolf Scouts sit in a circle and pass around a "dinosaur egg" (the beanbag). Play the recorded music and, similar to "Hot Potato," when the music stops the player holding the egg is out. Continue until only one Scout remains.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.
- The denner calls roll, and each Cub Scout responds by naming a point of the Scout Law when their name is called.

### **TALK TIME**

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

### **ACTIVITIES**

# Activity 1: Edible Fossil Layers (Requirement 4)

- Have Wolf Scouts make a snack, using the ingredients you prepared and following the directions in the Wolf Handbook.
- When finished, they should set the snacks aside until after the meeting.

# Activity 2: "Dino Dig" Part II (Requirement 3B)

- Tell the Scouts: Paleontologists use many different tools to dig out bones and fossils. Because they do not want to damage anything, they typically use small tools like chisels and paintbrushes. We'll be digging through plaster of paris instead of rock, so you will use craft sticks and paintbrushes.
- Now have the Cub Scouts dig their objects out of the plaster of paris. Note: If time is limited, this activity may need to be completed at home.

# Activity 3: Dinosaur Egg Relay (Optional)

- Divide Wolf Scouts into two teams. Tell them that you have "dinosaur eggs" (two inflated balloons) that must be moved before they hatch.
- They must move the balloons only with their fingertips. That's because the "eggs" might hatch early from the warmth of a whole hand.
- Give each team one balloon. The object of the relay is for a pair of players to hold the balloon between them, each Scout using only one fingertip. They transport the "egg" across the jungle and back, and then pass it on to the next pair on their team—again, using only single fingertips.
- The first team to finish the relay sits down and raises the Cub Scout sign so the game warden can report success to the base camp!

## **CLOSING**

Form a circle and recite the Outdoor Code in unison.

### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- · Record completion of requirements 3B and 4.
- Work together to clean up the meeting place.

Upon completion of the Digging in the Past adventure, your Wolves 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.



# NOTES



### RATIONALE FOR ADVENTURE

Learning to read and use a map and a compass is a valuable skill. In this adventure, Scouts will receive an introduction to maps, symbols, and the cardinal directions of north, south, east, and west. They will also learn the basic functions of a compass.

### TAKEAWAYS FOR CUB SCOUTS

- Following and giving directions
- Observing and reading a map
- · Cardinal directions—north, south, east, and west
- Navigating with a compass
- Working with others
- The buddy system

### **ADVENTURE REQUIREMENTS**

Wolf Handbook, page 208

Complete the following requirements.

- 1. Do the following:
  - A. Using a map of your city or town, locate where you live.
  - B. Draw a map for a friend so he or she can locate your home, a park, a school, or other locations in your neighborhood. Use symbols to show parks, buildings, trees, and water. You can invent your own symbols. Be sure to include a key so your symbols can be identified.
- 2. Do the following:
  - A. Identify what a compass rose is and where it is on the map.
  - B. Use a compass to identify which direction is north. Show how to determine which way is south, east, and west.
- 3. Go on a scavenger hunt using a compass, and locate an object with a compass.
- 4. Using a map and compass, go on a hike or walk with your den or family.

### **NOTES TO DEN LEADER**

The requirements in this adventure can be done with the Paws on the Path adventure.

Meeting 3 will take place at an outdoor location for a hike. 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 and signed.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

# MEETING 1 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Flag for folding ceremony (Closing)
- Words to the "Happy Wanderer" song, either on a poster or as a handout for the Scouts (Gathering; see Meeting 1 Resources)
- Various maps, including your town or city (one copy per Scout if possible), the United States, and the earth. Other types to consider are globes, nautical maps, GPS displays, and the map for a local park.
- Small, removable stickers (stars or dots)
- Compass with a needle, direction-of-travel arrow, and baseplate (one per Scout or one for each pair of buddies)
- Hand-sketched map
- Paper (plain or graph for sketching maps)
- Crayons or colored pencils

### **GATHERING**

- Display a compass and the various maps you collected. Give Wolf Scouts time to view the items before the den discusses them during Talk Time.
- As Scouts arrive, help them locate their home on a city map.
- Have the den chief teach the Scouts the "Happy Wanderer" song (see Meeting 1 Resources).

### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.
- When the den chief calls each Wolf Scout's name, the Scout steps forward and puts a sticker on the city map where their home is located (requirement 1A).
- After roll call, everyone recites the Cub Scout motto.

### **TALK TIME**

- Introduce the Finding Your Way adventure to the den. Introduce the topic of maps by talking about how many different types there are and how those maps help us. Maps can be found everywhere: a GPS display or printed maps in a car, maps in a classroom, maps in a shopping mall, etc. Ask what maps the Scouts have used.
- Show a hand-sketched map and explain how it can be used to help someone reach a destination if they are lost or haven't been there before.
- Show how the legend on a map can help us find local parks, buildings, bodies of water, etc.
- · Carry out business items for the den.
- · Allow time for sharing among Cub Scouts.

### **ACTIVITIES**

# Activity 1: Drawing Maps (Requirement 1B)

- Hand out the paper and colored pencils or crayons, so Scouts can draw a map that shows the location of their homes, a park, a school, and other important places in the community.
- Make sure each Cub Scout saves space on the map to draw a basic legend with symbols for water, trees, parks, and large buildings. Also, have Scouts place those symbols where they should go around the map.

# Activity 2: Using a Compass (Requirement 2B)

• If weather permits, move the den outside so Wolves can have fun learning to use their compasses in natural surroundings. Show them how to use a compass to see which way is north.

### **CLOSING**

Flag Folding Ceremony. Have three Scouts fold the flag while the other Cub Scouts stand respectfully in a semicircle.

### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirements 1A, 1B, and 2B.
- · Work together to clean up the meeting place.

# **MEETING 1 RESOURCES**

## **Using a Compass**

Tell Scouts that north, south, east, and west are the points of a compass. A compass can help them figure out what direction is north. Once they know that, they can decide which direction to go to move toward their destination. Scouts can also use a map and compass to figure out how to get from one place to another. The compass needle always points north.

- Have Scouts hold a compass flat in their hand and away from anything metal, like their belt buckle or adventure loops.
- Instruct the Cub Scouts in your den to look down at the needle to see where it is pointing, then turn
  their bodies slowly. They should keep turning until the compass needle lines up with the north line or
  "N" on the grid.
- Remind Scouts that the floating needle is magnetized and the red end will always point to magnetic north. You can always figure out the other points of the compass when you stand facing north.
- When Scouts are facing north using a compass, east will be on their right, south will be directly behind them, and west will be to their left. If they forget, teach Scouts the phrase "Never Eat Soggy Waffles" and they'll get right back on track.

# MEETING 2 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Pieces for the "Sign Match" Game (Gathering; see Meeting 2 Resources)
- Den cheer written on a poster board in large letters (Opening)
- Items for the "Scavenger Hunt" (Activity 1)
  - One compass per Scout (or one for each buddy pair) with a needle, direction-of-travel arrow, and a baseplate
  - Items to hide before the meeting
- Healthy snacks—raisins, apples, sunflower seeds, oranges, fruit cups, etc. (These may also serve
  as scavenger hunt items. Note: Please check for food allergies among den members before
  selecting snacks.)
- World map or globe (Activity 2)
- Small, removable stickers (stars or dots)
- Paper or cards for Scouts to write thank-you notes for anyone helping with the den hike during Meeting 3

### **GATHERING**

As Wolf Scouts arrive, have them play the "Sign Match" game. Give all Scouts one set of cards as they arrive, and pair Scouts up to play together. Have players combine and mix up their cards in a pile on the floor, with all cards facing down. When the cards have been mixed up, organize them into a grid. Scouts may flip over two cards in each turn, trying to create a pair. If the cards do not display a pair, they should be flipped back over and the turn changes to the other Scout. If a Wolf Scout gets a pair, they keep the cards and take another turn. The goal is to have the most pairs when the cards are all gone.

### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Lead the den in an opening cheer: "Today we'll face north, south, east, and west. But whatever way and whatever day, we will always do our best! We're Wolf Scouts! Howl!"

### **TALK TIME**

- Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Talk about the Gathering game. Ask the Scouts if they recognized any of the signs. Discuss how
  different types of signs are useful in helping people find their way.

### **ACTIVITIES**

# Activity 1: Scavenger Hunt (Requirement 3)

- Review what was learned at the last meeting about how to use a compass.
- Then give them directions on how to find each hidden item using their compasses.

# Activity 2: Snacks Around the World (Optional)

- Distribute the snacks and have the Scouts check the label on each one to find its place of origin. Which snack traveled the farthest to get to where it is now?
- Help the Scouts find those areas on the map or globe, and have Scouts each put a sticker on the location for their snack.

### **CLOSING**

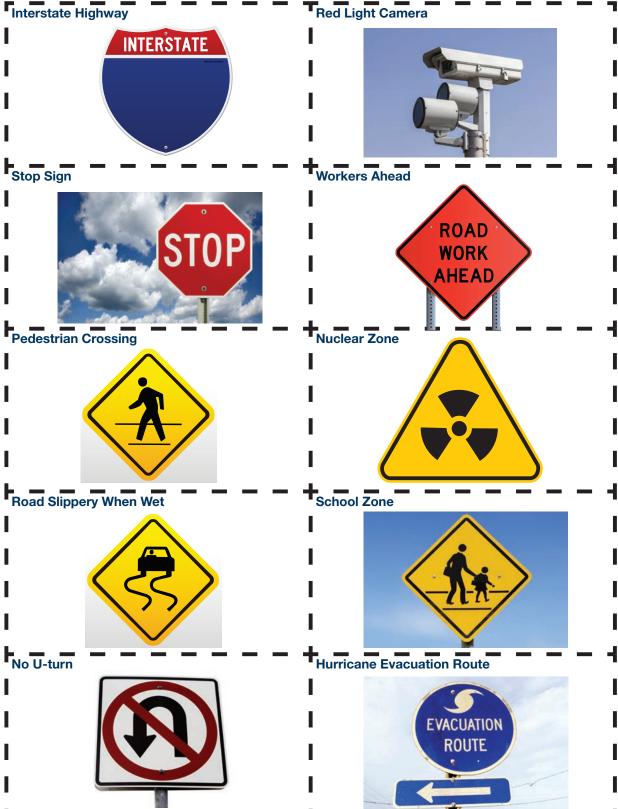
- Have Wolf Scouts form a circle and pass the Cub Scout handshake from one to another around the group until it reaches the Scout who started it. When Scouts each receive the handshake, they silently and pledge to do their best.
- · Review details for the upcoming outing in Meeting 3. Make sure all Scouts and their families know the plans.

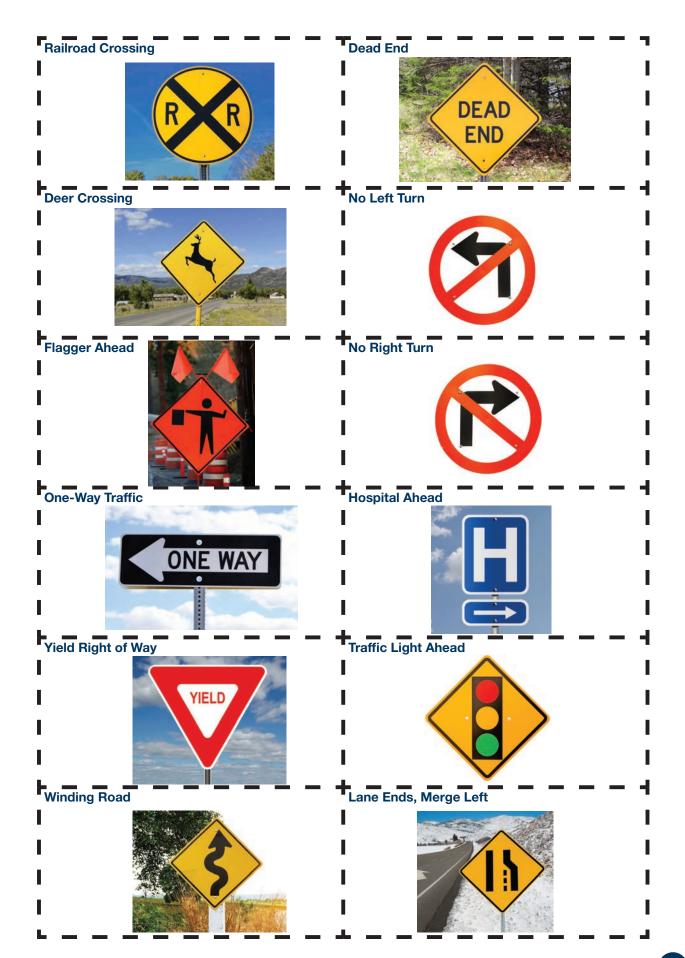
### **AFTER THE MEETING**

- · Serve refreshments, if desired.
- Record completion of requirement 3.
- Work together to clean up the meeting place.
- · Have the Scouts write thank-you notes for those who will help with the outing.

### **GATHERING: SIGN MATCH GAME**

Print as many copies of these signs as you need for Scouts to play the game.





# MEETING 3 PLAN (DEN OUTING)

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- A map of the trail or area you will use for your hike
- Cub Scout Six Essentials (Den members are each responsible for bringing their own materials.)
- Water to fill bottles as needed
- One compass per Scout (or one for each buddy pair)
- Printed example of a compass rose
- Thank-you notes
- 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.

### **GATHERING**

- Conduct a gear check as Scouts arrive, fill water bottles, distribute trail food, tie shoes, etc.
- Play the "Changing Winds" game
  - Use a compass to establish the four main directions.
  - Have everyone stand facing one player who is the "wind." The wind tells the direction they are blowing by saying, "The wind blows . . . south." All players must face south. If a player is already facing that direction and moves, they are out.
  - The "wind" may confuse the other players by facing any direction. Players turning the wrong direction are out. The winner is the last player still in the game.

### **OPENING**

- Say the Pledge of Allegiance and the Scout Oath and Scout Law.
- As a group, lead Scouts as they recite the Outdoor Code and Leave No Trace Principles for Kids.

### **TALK TIME**

- · Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Discuss the buddy system and what Scouts should do if they become separated from the group during the hike. Use the STOP (Stay calm, Think, Observe, Plan) procedure from the Paws on the Path adventure in the Wolf Handbook.

### **ACTIVITIES**

## Activity 1: Compass Rose (Requirement 2A)

- Identify what a compass rose is and where it is on the map.
- Introduce walking between the four points of the compass rose. Discuss the difference between the
  four cardinal directions—north, south, east, and west—and the ordinal directions between them:
  northeast, southeast, southwest, and northwest. Demonstrate that if Scouts are walking between
  north and west, they are going northwest, and so on.

# Activity 2: Den Hike (Requirement 4)

- Using the map, make sure everyone understands the path the den will be taking before the hike begins.
- During the hike, each time the den arrives at a point that is marked on the map, have them stop and use the map to orient themselves.

### **CLOSING**

Gather everyone together after the hike and discuss what they liked about the hike and what parts of the Leave No Trace principles they followed.

### **AFTER THE MEETING**

- Have Scouts give their thank-you notes to those who helped.
- · Record completion of requirements 2A and 4.

Upon completion of the Finding Your Way adventure, your Wolves 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.



# NOTES



### RATIONALE FOR ADVENTURE

This adventure teaches Wolf Scouts about the importance of keeping a clean room, proper hand washing, and covering their sneezes—through fun, hands-on science experiments.

### TAKEAWAYS FOR CUB SCOUTS

- Knowing the proper way to wash hands
- Why we cover a sneeze
- · What mucus does for our bodies
- The importance of cleaning our rooms
- Bacteria are present even if we can't see them.
- A Scout is clean, courteous.



### **ADVENTURE REQUIREMENTS**

Complete at least five of the following requirements.

- 1. Wash your hands while singing the "Happy Birthday" song.
- 2. Play Germ Magnet with your den or your family. Wash your hands afterward.
- 3. Conduct the sneeze demonstration.
- 4. Conduct the mucus demonstration with your den or family.
- 5. Grow a mold culture. At a den or pack meeting, show what formed.
- 6. Make a clean room chart, and do your chores for at least one week.

### **NOTES TO DEN LEADER**

This adventure has several choices based on which activities you choose to do with your den. These den meeting plans, when followed as written, meet the requirements to earn this adventure. If you choose to make adjustments, be sure you complete at least the minimum requirements.

This adventure does not include plans for a Meeting 3 den outing. If an outing is desired, all outing and transportation information would need to be planned in advance.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

# MEETING 1 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Soap, water, and sink for washing hands. (If a sink is not readily available, use a bucket and a pitcher
  of water.)
- Items for the "Sink the Germs" game (Gathering)
  - Six beanbags
  - Removable tape
  - One large, open box with a picture of a sink drawn or taped to the front
  - One large printed copy of the "When to Wash Your Hands" chart (Meeting 1 Resources)

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- Brightly colored glitter or washable paint for the "Germ Magnet" game (Activity 2)
- Items for the sneeze demonstration (Activity 3)
  - One blanket, old sheet, or tarp with concentric bull's-eye rings drawn on it in washable ink. Each inner ring should be about 12 inches narrower than the one that surrounds it.
  - One balloon (check for latex allergies in the den)
  - Paper confetti
  - One sheet of paper to roll into a funnel
  - Tape
  - Tape measure

### **GATHERING: SINK THE GERMS**

- Set the large open box on the floor to represent a sink.
- Use tape to mark a throwing line on the floor. Then tape the large copy of the "When to Wash Your Hands" chart (see Meeting 1 Resources) behind the line and place one beanbag over each of the six squares.
- As each Wolf Scout arrives, have them take a turn throwing the six beanbags, one by one, into the box. If time allows, have them try again.

### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.
- Find out who in the den has an upcoming birthday or had one recently. Have the den sing the "Happy Birthday" song to them. Tell them that the time it takes to sing the song twice is the same amount of time they should spend washing their hands.

#### **TALK TIME**

- Introduce the Germs Alive! adventure to the den. Tell the Cub Scouts in your den: Our hands are valuable tools. We use them every day. Because of this, hands become "germ magnets," and when we touch other people, those germs move from hand to hand! So you need to remember to wash your hands often every day to make sure your "Wolf paws" are as clean as can be!
- Ask them to name the six times that it is very important to wash their hands. (Note: The answers were presented during the Gathering game.)
- · Carry out business items for the den.
- Allow time for sharing among Cub Scouts.

### **ACTIVITIES**

# Activity 1: Soap and a Song (Requirement 1)

- Have Wolf Scouts wash their hands while singing the "Happy Birthday" song again.
- When someone works soap and warm water into a lather on both hands and then sings the "Happy Birthday" song twice, that will be long enough to wash away all the germs.

# Activity 2: Germ Magnet (Requirement 2)

- Have Scouts play the "Germ Magnet" game, using the directions in the Wolf Handbook.
- The game is likely to be messy, so you may want to move the den outside for this activity or use washable paint rather than glitter. Also, make sure that none of the Scouts rub their eyes while they still have glitter or paint on their hands.

# Activity 3: Sneeze Demonstration (Requirement 3)

- Tell the Scouts that when they played "Germ Magnet," they were practicing the "A Scout is clean" part of the Scout Law. They learned that germs can spread and that we wash our hands to remove germs.
- Do the sneeze demonstration, using the materials you collected and involving the Scouts in every step as presented in the Wolf Handbook - except for popping the balloon, which should be done by an adult. The bull's-eye represents each individual's personal space, the popping balloon is like a sneeze, and the confetti represents the germs that are spread. (Note: Be sure Scouts pinch off the end of the balloon if they stop blowing, or the confetti in the balloon may get in their mouths.)
- In this activity, they see the importance of "A Scout is courteous." Just as popping the balloon spreads the confetti, sneezing causes germs to spread quickly and powerfully. Scouts protect those around them and are courteous by sneezing into their elbows.

### **CLOSING**

Gather the den in a circle. Starting with the denner, Scouts will each step into the center and shake hands with their fellow Wolf Scouts, moving counterclockwise and using the Cub Scout handshake. This continues until every Scout has their turn at initiating the handshakes.

### AFTER THE MEETING

- Serve refreshments, if desired.
- Record completion of requirements 1, 2, and 3.
- Work together to clean up the meeting place.

# MEETING 1 RESOURCES

### **GATHERING: SINK THE GERMS**

Make a copy of this chart that is large enough to place each of the six beanbags over one of the reasons why we would need to wash our hands throughout the day.

# When to Wash Your Hands



# MEETING 2 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Paper and colored pencils or crayons for "Design a Germ" drawings (Gathering)
- Paper, pencils, and rulers for making chore charts (Activity 1)
- Materials for the Sweeping the Germs Away relay (Activity 3)
  - One broom for each team of three Scouts
  - Empty 1- or 2-liter bottles with caps (one per team)
  - One permanent marker
  - Food coloring (one color per team)
  - Removable tape or chalk

### **GATHERING: DESIGN A GERM**

- As they arrive, have all Scouts design and name their own "germ," using the drawing materials you collected.
- These drawings may be saved and displayed at the next pack meeting.

### **OPENING**

 Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.

### **TALK TIME**

- · Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Ask the Cub Scouts in your den if they have ever thought about growing mold. Explain: Molds are
  very small and can live and grow on many surfaces. We cannot see mold at first unless we look
  at them through a microscope. There are different types of mold that can grow in and outside of
  our homes.
- Each Wolf Scout will create a mold "culture" (experiment) at home with the help of an adult (requirement 5). They will follow the directions in the *Wolf Handbook* and take photos each day of the results. These photos will be brought to the next meeting to share with the den.

### **ACTIVITIES**

# Activity 1: Chore Charts (Requirement 6)

- When preparing for this activity, communicate with parents or guardians in the den to discuss responsibilities Cub Scouts currently have at home and opportunities for new ones.
- Have each Scout draw a "clean room" chore chart based on the one in the Wolf Handbook, using a
  pencil, paper, and ruler. All Scouts should adapt the chart to fit their own situation. For example, they
  may have a cat instead of a dog, and they probably already have some assigned chores to add to
  the chart.
- Scouts will keep a record of the chores they complete during the week.

# ♦ Activity 2: Germ Tag (Optional)

- To start this game, one Scout will be a "germ." At the word "Go," the germ tries to touch the other players on the arm. Once a player is touched, they become a germ as well and try to catch the others. The game ends when everyone is a germ.
- Remind everyone that this is not a tackling, hitting, or grabbing game.

# Activity 3: Sweeping the Germs Away (Optional)

- Give a bottle to each team of three Wolf Scouts. Have the teams pour a half cup of water into their bottles and give each team a different color food dye to mix with the water. Place the cap on the bottle. Now they can draw faces on the bottles with the permanent marker, and each bottle becomes that team's "germ."
- Using the tape or chalk, mark separate start and finish lines for each team, making sure the lines are the same distance apart.
- On the word "Go," the relay begins. Members on each team take turns pushing the germ with their broom to the finish line and back, then hand off the broom to the next Cub Scout. The first team to finish sweeping their germ back and forth wins.
- If you have a small den, the Scouts can play as a single team, trying to beat their own time in two or three rounds. If you don't have an even number of Scouts, put the den chief on one of the teams.

### **CLOSING**

All the Wolves gather in a circle and make the Cub Scout sign. Then they recite in unison, "A Scout is courteous," and each Scout says something that being "courteous" means to them.

# **Do-at-Home Project Reminder:**

Remind Wolves to make their mold cultures at home, following the directions in the *Wolf Handbook*. For materials, each Cub Scout in your den will need a banana, a slice of bread, a piece of cheese, three paper plates, labels to put on the plates (so no one mistakenly eats the molds), and a pair of rubber gloves (check for latex allergies). They should take photos to compare at the next meeting, but each Scout should dispose of the mold cultures at home, wearing the gloves for safety. The molds will not be brought to the next meeting—only the photos.

### **AFTER THE MEETING**

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

# MEETING 3 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Dried pinto beans (20 to 30 per Scout) in plastic bags (Gathering)
- Photos of each Scout's mold culture from the Do-at-Home Project (Talk Time)
- Items for "mucus" demonstration (Activity 2)
  - Borax
  - Warm water
  - White school glue
  - Dirt, flour, glitter, or cocoa
  - Food coloring
  - Small bowls or plastic containers (two per Scout)
  - Quart-size resealable storage bags (one per Scout)
  - Paper plates (one per Scout)

### **GATHERING: BACKHAND BEANS**

- As they arrive, give all Wolf Scouts a small bag filled with 20 to 30 dried pinto beans.
- The Scouts should dump the beans in a small pile on the floor or table. They then pick up one bean with the thumb and forefinger of one hand, transfer it to the thumb and forefinger of their other hand, and place it on the back of the first hand.
- Have the Cub Scouts continue this pattern, adding more beans to the back of their hand and trying not to drop them. If the beans do fall off, have them start over.

### **OPENING**

- · Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout Oath and Scout Law.
- All the Wolves make the Cub Scout sign. Then they recite in unison, "A Scout is clean," and each Scout says something that being "clean" means to them.

### TALK TIME

- · Carry out business items for the den.
- · Allow time for sharing among Cub Scouts.
- Have everyone tell about the chores they did during the week.
- Have the Scouts display and compare their photos of the mold cultures they grew at home. Ask them: Which of the three types of molds—banana, bread, or cheese—grew the fastest?

### **ACTIVITIES**

# Activity 1: Mucus Demonstration (Requirement 4)

- Have the Scouts conduct their "mucus" demonstrations, using the materials you collected and following the directions in the Wolf Handbook.
- This activity will help Wolves understand the role of mucus in protecting us from germs. Give each Scout the chance to mix their own bag, so they can see firsthand evidence of the chemical change when the Borax and glue interact.
- Let them play with their slimy creations for a few minutes. Ask: What does it feel like? How do you think something so slimy could protect your body?
- Now have each Cub Scout do a filtering test by putting their fake mucus on a paper plate and gently blowing a pinch of dirt, glitter, flour, or cocoa onto it. Ask: Does this help you see how the mucus in the membranes inside your nose might keep you from breathing in germs, bacteria, and viruses?

# Activity 2: Wolf! Wolf! (Optional)

- All the Scouts sit in a circle around the Cub Scout who is "It," or "the wolf." The Scouts in the circle say, "Wolf! Wolf! What are you doing?"
- The wolf can respond by saying a one-sentence action that protects a person from germs, like "brushing my teeth," "washing my hands," or "cleaning my room." But if the wolf says "Chasing you," the other Scouts must scatter to keep from being tagged by the wolf-just like a germ floating through the air.

### **CLOSING**

- The whole den forms a friendship circle. Everyone crosses one arm over the other and grasps the hand of the person on either side.
- Close by asking Scouts what song do you sing when you wash your hands? Then lead everyone in singing the "Happy Birthday" song.

### **AFTER THE MEETING**

- Serve refreshments, if desired.
- Record completion of requirements 4 and 5.
- Work together to clean up the meeting place.

Upon completion of the Germs Alive! adventure, your Wolves 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.





### RATIONALE FOR ADVENTURE

In this adventure, Wolves will come to understand how plants grow and the importance of taking care of our natural resources and the environment. They will also learn about the tools needed to plant and tend a garden.

### **TAKEAWAYS FOR CUB SCOUTS**

- Learning important life skills
- · Learning how to observe and listen carefully
- Taking care of plants and the environment
- Working in teams

Wolf Handbook, page 234

### **ADVENTURE REQUIREMENTS**

Complete the following requirements.

- 1. Select a seed, and plant it in a small container. Care for it for 30 days. Take a picture or make a drawing of your plant once each week to share with your den or family.
- 2. Find out the growing zone for your area, and share the types of plants that will grow best in your zone.
- 3. Visit or research a botanical or community garden in your area, and learn about two of the plants that grow there. Share what you have learned with your den or family.
- 4. Complete one of the following:
  - A. Make a terrarium.
  - B. Using a seed tray, grow a garden inside your home. Keep a journal of its progress for 30 days. Share the results with your den or family.
  - C. Grow a sweet potato plant in water. Keep a journal of its growth for two weeks. Share the information with your den or family.

### **NOTES TO DEN LEADER**

Meeting 3 will be a den outing to a botanical or community garden in your area, or—if those choices are not available—a plant nursery or garden club (requirement 3). 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 and signed.

See the appendix for optional den meeting activities, including openings, gatherings, and closings.

# MEETING 1 PLAN

### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for Nature's Layer Cake (Gathering)
  - Rinsed-out jars with tight-fitting lids (one per Scout)
  - 1 scoop of soil for each Scout
  - Water

- Map that shows the growing zones in the United States, downloaded from the internet and printed out (Talk Time)
- Materials for making Grass Buddies (Activity 1)
  - Potting soil
  - Plant seeds or grass seeds (any type of grass would serve, but rye seed grows very quickly)
  - Clear plastic cup or container (one per Scout)
  - Items for decorating (e.g., pom-poms, chenille stems, googly eyes, craft foam, glue, and permanent markers)

### **GATHERING: NATURE'S LAYER CAKE**

- Soil is made up of many layers as well as particles of various sizes. As Scouts gather for the meeting, have them do this activity so they can distinguish one layer from another.
- Fill half of a jar with soil and add water to the top. Screw the lid on tightly, shake the jar well, and give the contents time to settle. Before long, everyone should see leaf litter floating on the top, and sand and clay that give structure to the soil. Stones that settle on the bottom will help the water drain away, which keeps the soil from becoming waterlogged.
- Have each Cub Scout take samples from different areas of their "layer cake," so they can see how the layers differ.

#### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance and the Scout Oath and Scout Law.
- Lead Wolves in the Seed Cheer: First they curl themselves tightly in a ball. Then they slowly "grow" upward. Once the Cub Scouts are standing up, on the count of three, have them stretch out their arms like flower petals and shout, "Grow!"

## **TALK TIME (REQUIREMENT 2)**

- · Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Review requirements 5A and 5B, and help Wolves decide which Do-at-Home Project they will complete this month: growing a small garden in a seed tray or growing a sweet potato plant in water. They will keep journals of their progress to share at the next two meetings.
- Talk about the science of soil, seeds, and plants, and the difference between planting seeds versus
  transplanting a plant from a pot to the ground. Explain to the Cub Scouts in your den that good soil
  is a very important part of growing plants and vegetables. As they could see in the Gathering activity,
  there are many things that make up our soil. That is why it is important to prepare the soil before
  we plant.
- Discuss other elements needed for plants to grow, including water and different balances of sun, shade, heat, and cold—depending on what a particular plant requires for it to thrive.
- Use the map you printed to introduce the topic of "growing zones," and how to find out if a plant can grow well in a specific part of the country. This information is often provided on the back of seed packets, along with instructions on watering and the type of light a plant needs. Focus the conversation on the best plants to grow in your area.

#### **ACTIVITIES**

# Activity 1: Grass Buddies (Requirement 1)

- · Give each Wolf Scout one of the small containers, and have them fill it halfway with potting soil.
- Now have each of them add one plant seed, or a heaping teaspoon of grass seed, to their containers. Then they should add more soil until the containers are three-quarters full.

- Pass out the materials for decorating the containers, encouraging everyone to get creative with this project.
- Finally, have each Scout gently water their Grass Buddies. After the meeting, they will take their new friend home to grow throughout the next 30 days. Make sure to provide instructions on how often they should water, and remind them to keep their plant in sunlight.

# Activity 2: "The Green Grass Grew All Around" (Optional)

- Teach the Scouts a new song that they can add words to. The song is a traditional children's song based on the song "And the Green Grass Grew All Around," written in 1912 (music by Harry Von Tilzer, lyrics by William Jerome). This is a "repeat after me" song.
- Get the song started with the verses below, and then have the Cub Scouts create new verses.

There was a hole in the middle of the ground, the prettiest hole that you ever did see.

Well, the hole in the ground,

And the green grass grew all around and around,

And the green grass grew all around.

And in that hole there was a root, the prettiest root that you ever did see. Well, the hole in the ground, and the root in the hole, And the green grass grew all around and around, And the green grass grew all around.

### **CLOSING**

Have the den members form a friendship circle: All arms are crossed with each person extending their right arm over their left and grasping the left hand of the person beside them. Everyone makes a silent wish and gently passes a friendship squeeze from hand to hand.



### **Do-at-Home Project Reminder:**

Tell Scouts to start working on requirement 5A or requirement 5B at home, so they can share their journals during the next few weeks. They will also be caring for the Grass Buddies they made at this meeting, and taking a photo or drawing a picture each week to show its progress to the rest of the den.

### **AFTER THE MEETING**

- Serve refreshments, if desired. Fresh vegetables would be a great snack for this adventure.
- Record completion of requirement 2.
- Work together to clean up the meeting place.
- Prepare thank-you notes for the Wolves to sign at the next meeting.



### PREPARATION AND MATERIALS NEEDED

- U.S. and den flags
- Materials for Scene Rubbings (Gathering)
  - Artificial or real leaves
  - Large sheets of white paper (two per Scout)
  - Crayons or colored pencils
- Photos or drawings of the growing Grass Buddies, brought by the Scouts (Talk Time)

- Materials for making terrariums (Activity 1)
  - 1 clear glass container for each Scout (e.g., aquarium of any size, goldfish bowl, cookie jar, pickle jar, vase with a broad bottom)
  - Enough small rocks to fill the bottom of each container
  - Activated charcoal bits (one bag per Scout)
  - Sterilized potting soil
  - Miniature plants of different colors, shapes, and textures
  - Optional decorations: moss, pebbles, shells, ceramic figures
- Materials for the Seed Relay Game (Activity 2)
  - Chalk
  - 2 small cups filled with dried beans
  - Open, rinsed-out jars or juice bottles (enough to place a pair of them at 3-foot distances along the playing area)
- Thank-you cards for the den outing

### **GATHERING: SCENE RUBBINGS**

- When they arrive, give all Scouts a large sheet of paper and enough real or artificial leaves to create the figure of their choice (e.g., a car, person, or animal) on the paper.
- Then give the Scout another sheet of paper to lay over the first one, and one or more colored pencils or crayons to rub and recreate the picture—with the textures of the leaves—on the new sheet.

### **OPENING**

- Conduct a flag ceremony of your choosing that includes the Pledge of Allegiance as well as the Scout
  Oath and Scout Law.
- Lead the den in singing "The More We Get Together" to the tune of "Ach Du Lieber Augustine."

The more we get together, together, together, The more we get together, the happier we'll be. For your friends are my friends, and my friends are your friends, The more we get together, the happier we'll be.

The more we get together, together, together, The more we get together, the happier we'll be. For you know that I know, and I know that you know, The more we get together, the happier we'll be.

### **TALK TIME**

- Carry out business items for the den.
- Allow time for sharing among Cub Scouts.
- Have everyone compare the photos or drawings they brought to show the progress of their Grass Buddies. Scouts should also give an update on how their seed tray garden or sweet potato plant is coming along.





### **ACTIVITIES**

# Activity 1: Making a Terrarium (Requirement 4A)

- A terrarium is a miniature garden that is planted in a clear glass or plastic container. In order to make the garden a mini-greenhouse, the container either is completely covered with a removable lid or has just a small opening. This allows sunlight to enter through the glass or plastic and warm the plants, soil, and air—the same way that the sun warms our planet as it comes through the atmosphere. The glass or plastic holds in the moisture and warmth, allowing the plants to grow with little or no water added.
- Have the Wolf Scouts build their terrariums with the materials you collected, using the picture and directions in the *Wolf Handbook* as a guide.

# ♦ Activity 2: Seed Relay Game (Optional)

- Using the chalk, draw a straight line lengthwise through the playing area. Put a mark on the line at every 3 feet (or less, depending on how much space is available). Parallel to those marks, set the pairs of jars or juice bottles—with one jar on either side about 1½ feet away from the line.
- Divide the den into two teams. Each team should line up behind one of the rows of jars, and both teams will start at the same end of the playing area.
- Have one Scout on each team go first, with both of them carrying a cup of dried beans. They will
  follow the line drawn on the floor by placing the heel of one foot against the toe of the other. Every 3
  feet, they must stop and place a bean in their team's jar.
- When a Cub Scout reaches the end, they run back and hand the cup of beans to the next person on their team, who "plants" their beans in the same manner. The first team to finish wins.
- Try several variations to make the game fun and challenging. The players can try tossing the beans in, or you can use larger or smaller jars.

### **CLOSING**

- Tell the Scouts: Today we sowed plants that will grow strong during the next few weeks if they are given water, sunlight, and fresh air. We, too, will grow and thrive like our plants if we take care of our bodies by keeping them nourished, always getting a good night's sleep, and playing in the fresh air and sunlight.
- 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.
- Work together to clean up the meeting place.
- Record completion of requirement 4A.
- · Have Scouts sign thank-you notes for anyone who helps with the outing.

# MEETING 3 PLAN (Den Outing)

### PREPARATION AND MATERIALS NEEDED

- Confirm that transportation to and from the event is in place. Secure activity consent forms.
- The unit den leader should bring a copy of the Guide to Safe Scouting.
- Contact the outing location to confirm plans. Find out if a representative will be assigned to guide your group.

### **GATHERING: MONKEY IN A TREE**

- While waiting for everyone to arrive, have the Cub Scouts play Monkey in a Tree:
  - Form two small circles with three or four players linking their arms to make a "tree." Have one
    player stand in the middle of each circle. This represents a monkey in the tree.
  - Have one player be "It," standing outside all the circles and pretending to be a monkey without a tree.
  - On a signal, the other monkeys leave their trees. Then all of the monkeys, including "It," scramble
    to get into another tree before time is called. The one left out becomes "It" for the next round.

#### **OPENING**

- Say the Pledge of Allegiance and the Scout Oath and Scout Law.
- Ask Scouts to name points of the Scout Law that they will demonstrate during the outing.
- Remind everyone in the den that it is important to stay together, be on their best behavior, and use the buddy system.

### **TALK TIME**

- · Carry out business items for the den.
- Have Wolves share things they would like to learn about during the visit.
- Review any questions the Scouts want to ask to make certain all are appropriate. (See the Wolf Handbook for suggestions, if needed.)
- Before starting the tour, give the Wolves time for a final comparison of their Grass Buddy photos or drawings and an update on how their terrariums, seed trays, or sweet potatoes are progressing.

### **ACTIVITIES**

# Activity 1: Visit to Botanical or Community Garden (Requirement 3)

- Visit the location as a group, and take a guided tour if this is possible.
- Engage Scouts by having them identify different types of plants. Be sure the den has time to learn in detail about at least two of the plants or flowers they see.
- · Have Scouts ask the questions they prepared.
- When the visit ends, have the Wolves give their signed thank you cards to anyone who helped, including tour guides.

### **CLOSING**

• Gather everyone together for a "round of applause" cheer for the tour guides: While clapping, move your hands around in a circle in front of you.

#### AFTER THE MEETING

- Serve refreshments, if desired.
- Record completion of requirements 1, 3, and 4B or 4C.

Upon completion of the Grow Something adventure, your Wolves 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.

