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

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 PLAN

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.

Wolf Handbook, page 190

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.

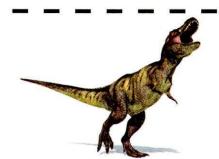
MEETING 1 RESOURCES

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.



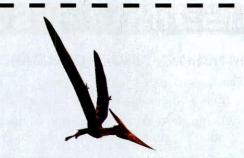
Parasaurolophus

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

l 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.

MEETING 3 PLAN

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