



## Supplemental Bear Den Meeting I

### Space

Elective 1b, 1e, 1f.

### Preparation and Materials Needed

- ▶ Determine if you've got a parent who has an interest in this topic to come in as a guest leader for this.
  - And ask Scouts to bring in information, models, and pictures on constellations, satellites, and planets, because one of them might be your hobbyist expert for this meeting.
- ▶ Review materials on constellations, satellites, and planets from **Elective 1**. You might look at these:
  - The National Aeronautics and Space Administration (NASA) "Space Place" Cub Scout Achievements page includes a star finder. See <http://spaceplace.nasa.gov/en/kids/st6starfinder/st6starfinder.shtml>.
  - Information on satellites (including how orbits work, which is how satellites stay up, and these man-made satellites: Galaxy Evolution Explorer, Landsat, Earth Observing 1, GOES and POES (two kinds of weather satellite), and the Hubble Space Telescope) can be found at the NASA Space Place Cub Scout Achievements page, at <http://spaceplace.nasa.gov/en/kids/cubscouts/index.shtml> or search "Cub Scout satellites."
  - Also at the NASA Space Place Cub Scout page, <http://spaceplace.nasa.gov/en/kids/cubscouts/index.shtml> (or search "Cub Scout planets") is information on planets.
  - To add fun to this meeting, you might also search "Cub Scout planets games" or similar phrases, and see what other leaders have done.
- ▶ Materials checklist (add to your den Cub tub of U.S./den flags, paper/pencils, other supplies):
  - Tin can and nail for each boy
  - Several hammers
  - Pictures of Earth and other planets in our solar system and constellation maps for the pinhole planetariums (bring from books, or print from the NASA space place pages)
  - Articles or books about the international space station and the planets

### Before the Meeting

- ▶ Make final preparations with assistance from any assistant den leader or other parent helper, den chief, and/or denner. Organize the space (seating, flags, advancement charts, activity materials, handouts, etc.). If you're snacking, organize space for that and the cleanup.

### Gathering

- ▶ Have a gathering activity (games, puzzles, other) that will keep Scouts interested and busy, and that others may join as they arrive. If the den desires, serve a healthy snack during this time.
- ▶ Collect dues, record attendance and any advancement completed at home (a good job for an assistant den leader). Assign parents to meeting roles and hand out a meeting plan to each.
- ▶ If you've brought books or pictures or materials, also make these available for Scouts to review if they like.

### Opening

- ▶ Flag ceremony (indoor or outdoor; rotate roles to complete **Achievement 3f**) with Pledge of Allegiance; the Cub Scout Promise or a patriotic song (of other opening).
- ▶ Consider a roll call, uniform inspection, or den yell.

### Business Items

- ▶ Use this time to discuss participation in coming pack meetings or pack events, as needed.

### Activities

- ▶ **Elective 1b:** Make a pinhole planetarium and show three constellations:
  - Make a pinhole planetarium with a tin can and a small nail.
  - Make paper patterns of the constellations selected, enlarging the pattern to 2 1/2-inch circles using the grid method. Mark the stars' positions with a pen or pencil.
  - Tape each pattern upside down on the bottom of a clean soda can (upside down, so that you see it correctly).



- Punch tiny holes in the bottom of the can to mark each star's position in a constellation.
  - To use your planetarium, hold the bottom of the can toward a strong light and look through the peep hole.
- ▶ **Elective 1e:** Read and talk about at least one manmade satellite and one natural one:
- Bringing models or pictures from the NASA Space Place page or other sites is important.
  - Solicit the Scouts to name and describe manmade (like the international space station) and natural satellites.

### Want More Fun Activities?

To get some up and about activity in this meeting, you might play Asteroid Field Piloting (to demonstrate what might happen to satellites in space):

- ▶ Place objects (the asteroids), such as chairs, into the playing area (outer space).
  - ▶ Pair off the Scouts. One partner is blindfolded at one end of playing area (the satellite). The non-blindfolded partners (mission control) stand at the opposite end of the playing area.
  - ▶ Each mission control tries to talk their satellite partners through the asteroid field without running into any of the asteroids.
  - ▶ Once they understand, have all of the teams playing at the same time. Make it more difficult by starting satellites at opposite corners, forcing teams to cross each others' paths.
- ▶ **Elective 1f:** Find a picture of another planet in our solar system. Explain how it is different from Earth:
- Bringing models or pictures from the NASA Space Place page or other sites is important.
  - Solicit the Scouts to name and describe the planets of our solar system.

### Want More Fun Activities?

To get some up and about activity in this meeting, you might play a Solar System Planet Orbiter Game (to let each of the Scouts be a planet for a few minutes):

- ▶ This game is like musical chairs, because there is one fewer chairs than boys. Set chairs up in a circle.
- ▶ The extra boy is the Sun. The other boys are each assigned a planet (Mercury, Venus, Earth, Mars . . .), and sit in the designated chairs.
- ▶ The sun orbits around the outside of the chairs calling out the names of planets. When his planet name is called, the boy called gets up and walks (orbits) around the chairs with the sun.
- ▶ When all the planets are in orbit, the den leader yells "Blast off," and all the boys scramble for a chair. The one left standing becomes the Sun.

You could also put the chairs on one end of a room, and have them orbit around the Sun in the middle of the room, staying in the right order (Mercury closest, Venus next, and so on). Before each round, you might also have each Scout describe something about his planet.

### Closing

- ▶ Award (or recognize) any advancement completed at this meeting; thank hosts, guests, and helpers.
- ▶ You might remind the boys that Neil Armstrong, the first person to walk on the moon, is an Eagle Scout. Many other astronauts are Eagle Scouts.
- ▶ Closing ceremony: Retire the colors (fold and return the flag), or have a den leader's minute with a Living Circle, or the Law of the Pack and den yell (or other ceremony).
- ▶ Hand out or send family information letter.

### After the Meeting

- ▶ If you've changed the sequence of den meetings, double-check to make sure you will still advance your boys appropriately and check with the Cubmaster to make sure you stay coordinated with the pack.
- ▶ Refreshments: If appropriate
- ▶ Cleanup: Recruit enough help to do a good job. Scouts always leave an area as clean, or cleaner, than they found it.