

STAR FANTASIES

Activity 34

AGE LEVEL = 9-12 (7-14)
DURATION = 45-60 min.
LEARNING STATION = Outdoors

WHEN = 



UNDERSTANDING: Throughout human history, people have peered at the night sky and created stories to explain the natural world.

SPECIAL NOTES: 1) This activity can be done year-round and works best outdoors away from city lights on moonless nights. 2) For the optimal learning experience, have one leader per 6 to 8 children.

MATERIALS:

- A strong-beamed flashlight
- Luminescent star-finder (optional)
- Plastic ground sheet (optional)
- Various props (optional)

PREPARATION: Choose a dry, open area away from strong light sources. Place the plastic ground sheet down. Make sure the children are dressed warmly. Review STAR FANTASIES. Coach several children beforehand on developing a brief story or skit on the legend.

LESSON:

Warm-up: Discuss how constellations were first described, by whom and for what purpose. Use the following paragraph as a guideline:

“Throughout history, people have looked up at the stars and wondered what they were. The Greeks, Romans, Norsemen, American Indians and others created fantasies to explain what they saw. They noticed that by connecting stars with imaginary lines, patterns emerged. With imagination, those patterns looked like bears, dragons, people and even gods. Today, we call these patterns constellations. The shapes became central characters in legends whose story lines often explain how a pattern came to be.”

Have the skit team perform using props. (If you are ambitious, have several teams prepare skits on several legends.) Explain that legends have been told for thousands of years, and that the children will get a chance to create their own.

Activity: At the learning site, have the children lie down on their backs in a circle (save a space for yourself), with their heads toward the center like the spokes of a wheel. Take a few minutes for the children’s eyes to adjust.

The star fantasy is created by each person adding a new character to the story. Start it yourself, or call on a volunteer to begin. Use the high-powered flashlight to beam up towards the first character (constellation). (Remember to flash the light only into the night sky. Otherwise night vision will be ruined.) Begin the story based on the first character. Have the next person pick up where you leave off. By the fantasy’s end, all constellations should be reviewed. Conclude by explaining the constellation’s origins.

Wrap-up: Look for constellations identified by earlier civilizations. Begin with the Big Dipper. From the last two stars in the dipper, draw an imaginary line up into the sky until you reach the next visible star. This star is the North Star. It is the last star in the handle of the Little Dipper. Try to weave your flashlight between the Big and Little Dippers to locate Draco the Dragon. Another popular constellation is Cassiopeia. Use Star-Finders to locate other constellations.

Finish your star search with the following questions: Why have people looked to the stars? Why do we continue to look to the stars today? What are astronomers looking for? What do you feel when you look towards the night sky? Where you live, is it easy for you to view the night sky? Why or why not? Explain that all earthly things (including humans), as well as objects in the universe, are made up of the same star dust. What can we learn from this?

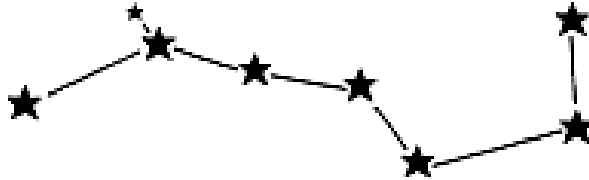
OPTIONS AND FURTHER EXPLORATIONS:

1. On a cloudy night, have the group lay under a clump of trees and create stories from shapes made by leaves, branches and moving clouds.
2. Focus on daytime cloud patterns. Have the children repeat the exercise.
3. Prepare constellation patterns in case of bad weather. Punch out small holes on a sheet of construction paper and place on an overhead projector. Turn off the lights, block off the windows and show the star patterns on the wall. Have the children work in small groups, drawing constellation pictures or preparing star fantasies for the group.
4. Using constellation cards (depict "true" constellations) instruct the children on common constellations found in the night sky. Show these with the overhead projector just prior to going outside to review the actual constellations.

URSA MAJOR, The Great Bear

One of the myths ancient Greeks loved to relate concerned the plight of two mortals, beautiful Callisto and her son Arcas, who incurred the wrath of jealous Juno, goddess queen and wife of Jupiter, King of Olympus. Callisto was changed into a bear and separated from Arcas, who was left an orphan boy. When he grew up, Arcas the Hunter came upon a docile bear in the woods near his home. Callisto couldn't speak, and Arcas didn't realize the tame bear was his mother. He was about to shoot when Jupiter changed Arcas into a bear, too. Then he changed them into stars and placed in the northern sky, lifting them by their tails. The weight of the bears stretched their tails into long ones!

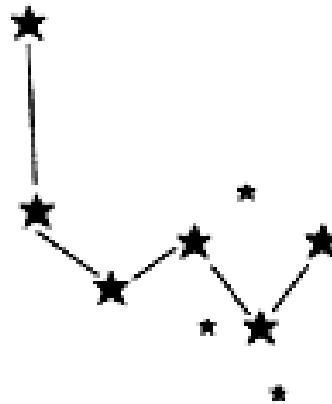
LOOK: The second star from the end of the Big Dipper (housed within the constellation Ursa Major) is actually a double star. It's often called "Horse and Rider." These stars test our eyesight by being difficult to detect. In ancient Egypt, warriors in training were told to look at the two stars. If they could see both stars, they were allowed to become warriors. If not, they were rejected.



CASSIOPEIA, The Queen

A queen, as everyone knows, must always maintain dignity on the throne, so we cannot help feeling sorry for Queen Cassiopeia, wife of Cepheus. Both she and her daughter were beautiful, and the Queen Mother could not resist the temptation to boast of their beauty. Sea nymphs, the goddesses of the sea, were offended when mortal Cassiopeia praised herself as more beautiful than the nymphs. They appealed to the heavenly council, which voted to punish Cassiopeia by embarrassing her. The queen on the throne was changed into stars in the northern sky. As she revolved around Polaris, she would, for six months of the year, sit on her throne head down, like a tumbler. This position would remind her and other mortals never to compare themselves to the gods. To show the justice of the council, Queen Cassiopeia was permitted to be upright on her throne, as a dignified queen should be, for the other six months of the year.

LOOK: The most conspicuous figure in Cassiopeia is "W" or "M" shaped. Cassiopeia is just across from the Big Dipper. Both are circumpolar constellations; when one is high in the sky, the other is low over the north pole.

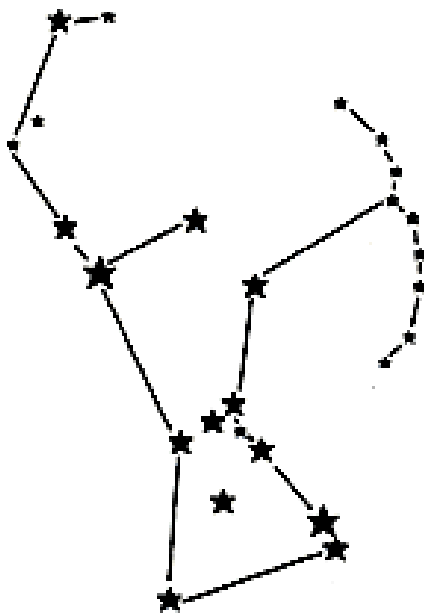


ORION, The Hunter

Orion was an important hunter-warrior. In return for ridding the kingdom of Chios of wicked beasts, Orion was promised beautiful Merope for his bride by her father, King Enopion. When the king refused to keep his promise, Orion tried to take Merope by force. Enopion became enraged and blinded Orion. Orion wandered sightless over the Earth until the God Vulcan sent Cedalion, his cyclops assistant, to turn Orion toward the rising sun. This restored his sight. Orion went back to his hunting and met Diana, Goddess of the Hunt.

Diana's brother, Apollo, was alarmed that his sister might break her vow never to marry and that a romance might develop with Orion. To prevent this, he tricked Diana into a target shooting test in which she was to hit a small dark target far out in the sea. The target was Orion's head. Diana did not miss. Grieving at what she'd done, Diana made Orion into a constellation with his hunting dogs, Canis Major and Canis Minor, close by.

LOOK: Orion is the brightest of all the constellations. The three stars forming Orion's belt make a striking figure. The North East star of the constellation is called Betelgeuse (bet-el-gerz). The brightest star below the belt is Rigel (ri-jel), which means "foot." With a pair of binoculars, one can see the Sword of the Great Nebula M42, a great mass of glowing gas.



POLARIS, The North Star

There is one great star that does not travel with the rest. We call this star Qui-am-i Wintook — the North Star. Once, long ago there was a mountain sheep named Na-gah. He was daring, brave, sure-footed and courageous. Everywhere Na-gah went, he climbed, climbed and climbed, because he did this best.

One day long ago, Na-gah came upon a very high peak. The sides were smooth and steep, so Na-gah began searching for a way to scale the peak. Around and around he went looking for a safe path up. Almost giving up hope, Na-gah found a crack in the rock. Squeezing his body in the crack he noticed it sloped up. Na-gah began to go up and up, but the way was steep and dangerous. Exhausted, Na-gah decided he would turn back and find a new way to climb the mountain. However, Na-gah had kicked loose so many rocks that they lodged themselves in the crack. Na-gah had to continue upward.

After much climbing, Na-gah saw a little light. When at last he came out, he had scarcely enough room to turn around, but he was at the highest peak. He had no way to get down and knew he would die at the top of the world, but he had climbed the mountain.

When Shnob, the Indian God, saw Na-gah's plight he was saddened. Shnob said, "I will turn him into poot-see, a star, and he can stand there and shine where all can see him. He shall be a guide mark for all the living things upon the Earth or in the sky." Na-gah became a star seen by everyone and the only star that can always be found in the same place. Compass directions are set by him so that travelers can always find their way. American Indians call him "Qui-am-i Wintook Poot-see," the North Star.

