

Traveling Programs

Constellation Scopes

Have you ever wondered which stars in the night time sky belong to different seasonal constellations? In this activity, learn how to recognize these popular constellations in the evening sky. Students will make their own constellation scopes using simple materials, and discover the basic shapes of some of the most famous celestial patterns.

Materials

- Cardboard toilet paper tube
- Scissors
- Glue Stick
- Pencil
- Crayons, markers, or paint
- Constellation Patterns (included below)

Directions

- 1) Print out enough constellation patterns for each student to have their own.
- 2) Have each student decorate the outside of their cardboard toilet paper tube using crayons, markers, or paint.
- 3) Write the name of the constellation on the side of the tube.
- 4) Use scissors to cut out each constellation pattern.
- 5) Place the constellation pattern over one end of the tube and apply glue to keep the pattern in place.
- 6) With a pencil point, carefully poke a small hole where each star of the constellation is located to reveal the constellation.

To Use Your Constellation Scope

Hold the constellation scope up to your eye and look at the light coming through the holes marking each star in the constellation. You will see the outline of each star pattern as it would appear in the real night time sky. After viewing the constellation right-side up, rotate the constellation scope to learn how this pattern looks in the sky when in different orientations throughout the evening. To extend this activity, students can use their constellation scopes at night, and shine a flashlight through the tube to illuminate the constellation on the wall of a dark room.



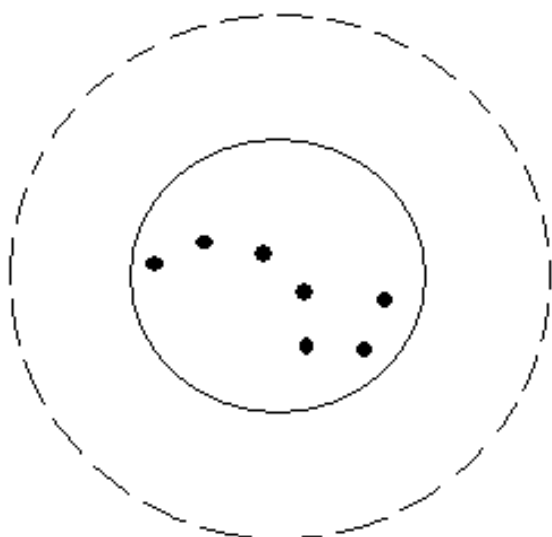
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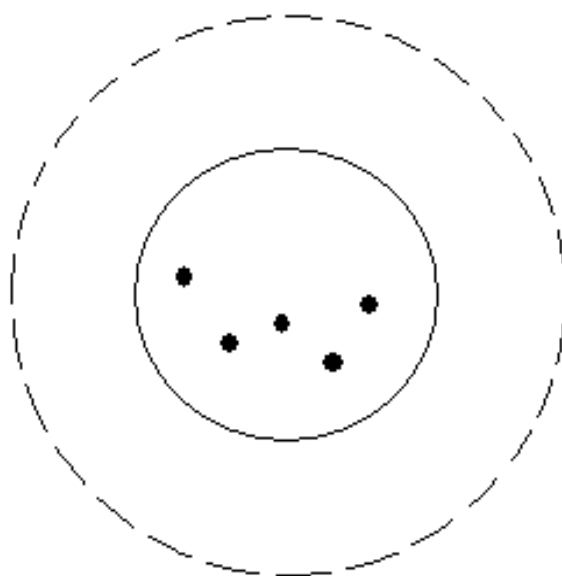


Constellation Patterns

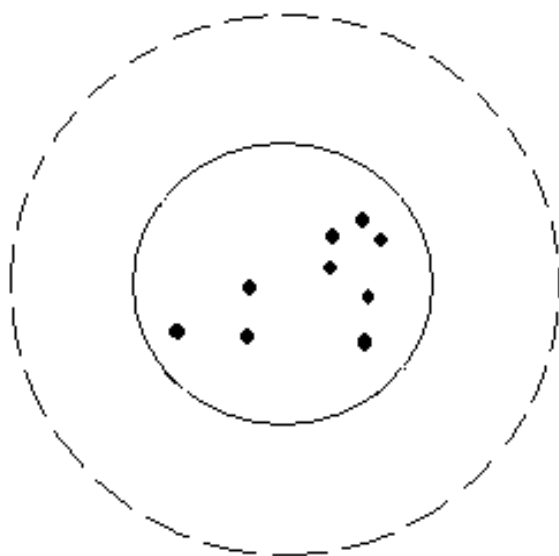
(Instructions: Cut out patterns along the dotted lines, not the solid lines.)



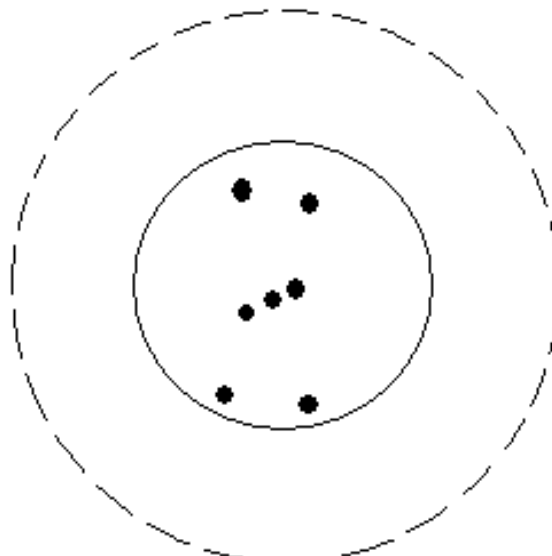
THE BIG DIPPER, part of the
Great Bear



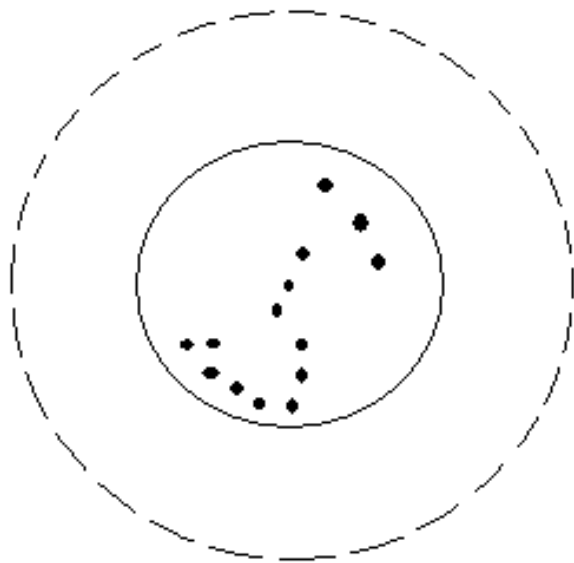
CASSIOPEIA, the Queen



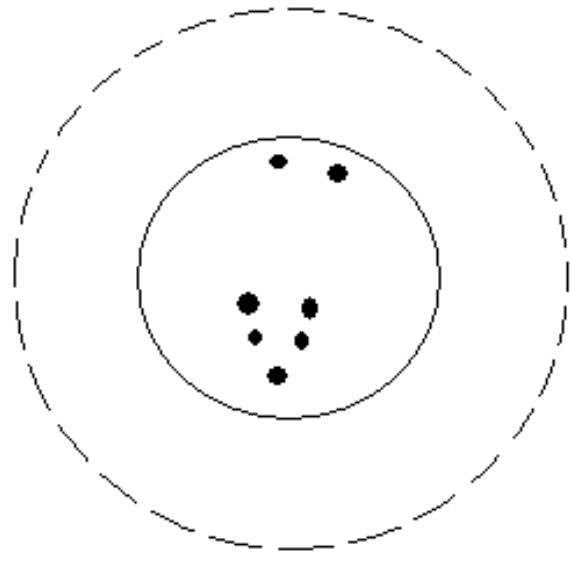
LEO, the Lion



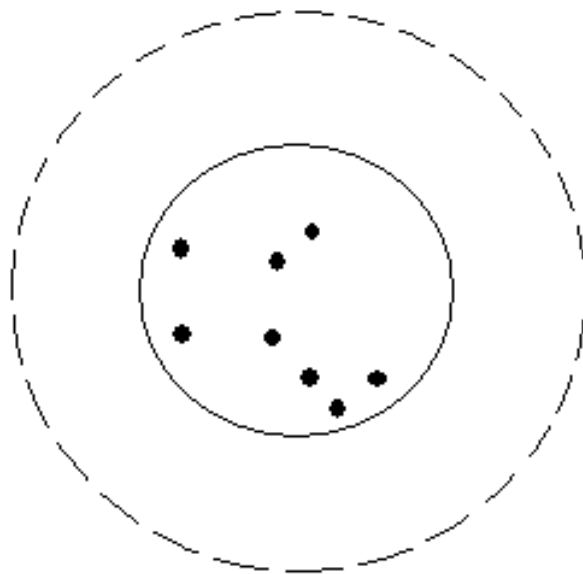
ORION, the Hunter



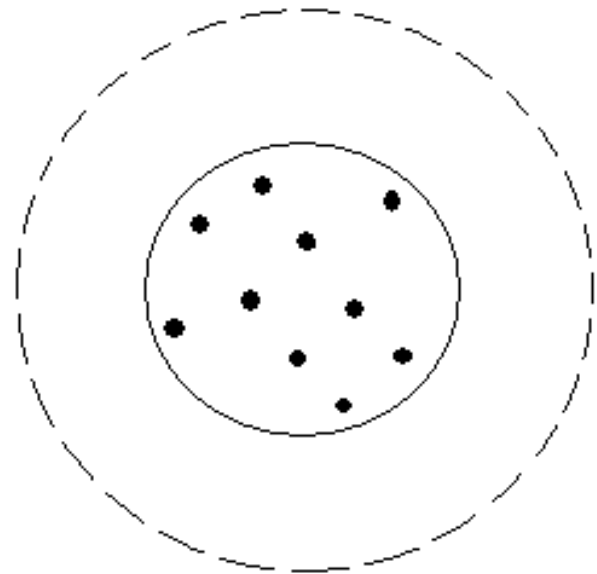
SCORPIUS, the Scorpion



TAURUS, the Bull



PEGASUS, the Horse



GEMINI, the Twins