

ACTIVITY 1

DESIGN A CONSTELLATION



Level:
**preschool,
Grades 1-2**

Preparation:
easy

Number of students:
**individual or
small groups**

Length:
30 min.

Place:
classroom

Type of activity:
**drawing, discussion,
creation**

BRIEF DESCRIPTION

Students invent and draw a constellation from a map of the sky.

MATERIALS

- 1 map of the sky per person
- Images of the Big Dipper and Cassiopeia constellations

PREAMBLE

Constellations are patterns we've imagined in the sky. By linking the stars with lines in creative ways, humans have seen warriors, animals, and gods from various legends. Different cultures see different constellations. What would we see in the sky if constellations were created today? Which heroes or animals would we choose to immortalize in the sky? This activity lets children invent their own constellation and explain their design.

PREPARATION

Have the sky maps printed so that each child has a copy. Make sure you have a few extra copies in case of mistakes. You have two options; one with a sky with many stars, and one with fewer stars.

Print the images of the Big Dipper and Cassiopeia constellations.

Did you know that 3000 stars are visible in the sky over the countryside, but only a few dozen are visible from the city?

**DID YOU
KNOW... ?**



STEPS

Explain to the students that constellations are drawings that humans have imagined in the sky. You can use the images of the Big Dipper and Cassiopeia to show them examples and share the mythology associated with them.

(See the “Information” section for more information on these two constellations).

Ask the children to create their own constellation.

We’ve outlined some options for guiding your students in their choice, if needed:

- Let the students be completely creative with the position of the stars;
- Ask the students to create a constellation linked to their hero or someone important to them;
- Ask the students to create a constellation and a related story, inspired by the stories behind today’s 88 internationally recognized constellations.

Make sure they name their constellation. You can then ask everyone to describe their constellation in front of the group, or in smaller groups.



The Multicoloured Dragon.

INFORMATION

WHAT IS A CONSTELLATION?

Constellations are patterns we have imagined in the sky. They serve as reference points for way finding. They are not “real objects”; they are simply constructs of imagination. A very long time ago, humans had fun connecting the stars in the sky to create designs, and these are the same designs we still use today.

WHO INVENTED CONSTELLATIONS?

Many cultures have created their own constellations. The 88 internally recognized constellations are used today as the official system, deriving from ancient Greek mythology, as well as from European explorers of the 16th and 17th centuries.

WHY DON'T CONSTELLATIONS RESEMBLE THEIR NAMES?

Sometimes it’s difficult to recognize those official designs in the stars. For many, it takes a lot of imagination! The light pollution created by our lights prevents us from seeing many of the stars that are less bright, which are sometimes necessary to help recognize constellations’ inspiration. On the other hand, even without light pollution, we sometimes wonder how the ancient Greeks saw all these constellation patterns!



WHAT IS THE STORY OF THE BIG DIPPER IN GREEK MYTHOLOGY?

The Big Dipper was once known as Callisto, a woman of great beauty. She had a child with Zeus, the father of the gods. When Zeus' wife discovered that he had a child with another woman, she became enraged and turned Callisto into a bear. Many years later, Callisto's son Arcas had become a teenager and was hunting in the forest. When he was about to kill a bear, who was, in fact, his mother, Zeus intervened to protect Callisto and sent them both up into the sky. Thus, they became the Big Dipper and the Little Dipper (also known as Ursa [bear] Major and Minor).

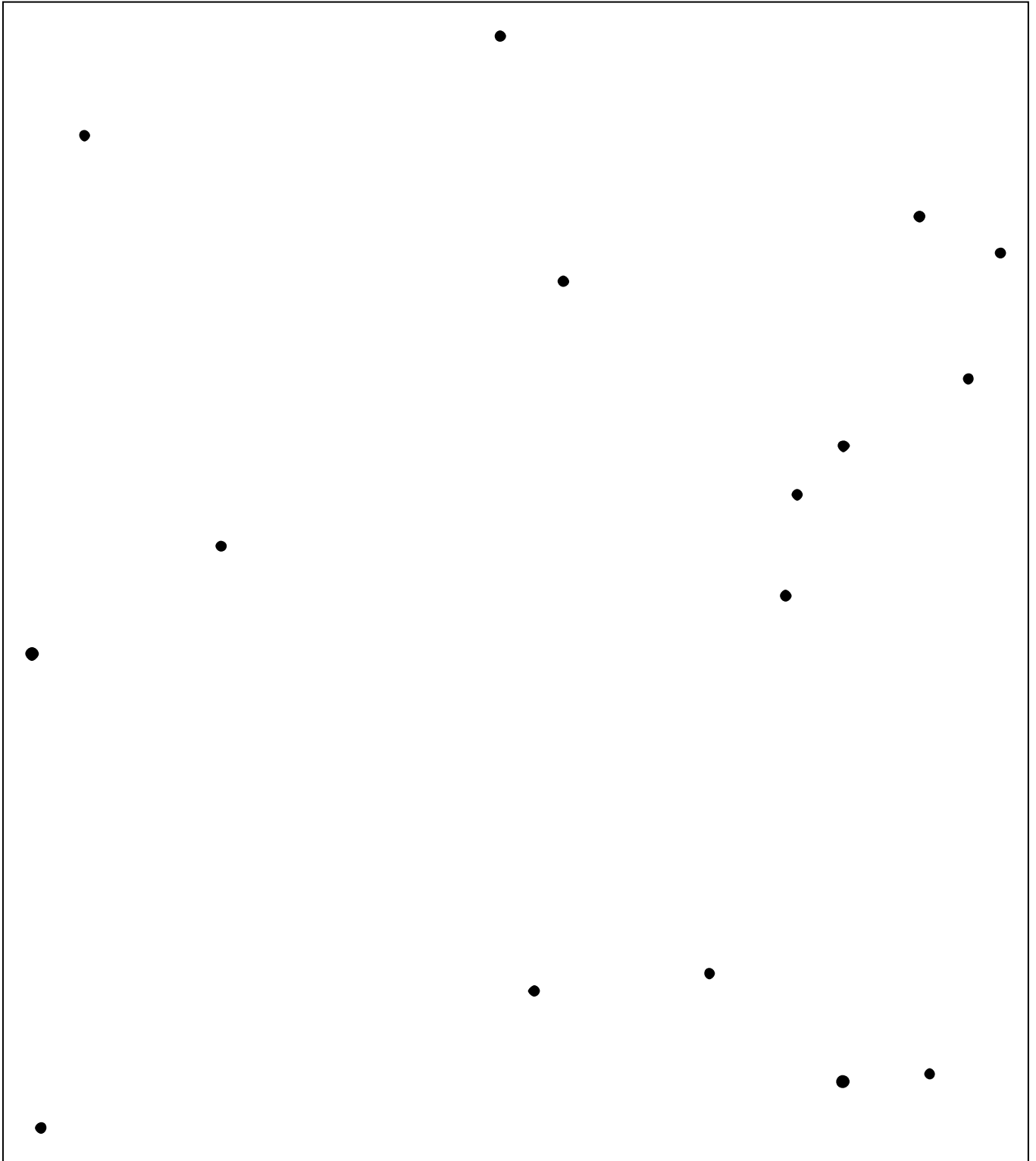
WHAT IS THE STORY OF CASSIOPEIA IN GREEK MYTHOLOGY?

Cassiopeia is a queen of Ethiopia, wife of King Cepheus and mother of the princess Andromeda. Cepheus and Andromeda are also constellations, and are visible near Cassiopeia in the sky. The story goes that Cassiopeia liked to boast of her beauty and that of her daughter. As punishment, she was condemned to circle the sky on her throne, spending half the year upside down—an undignified position for a queen!

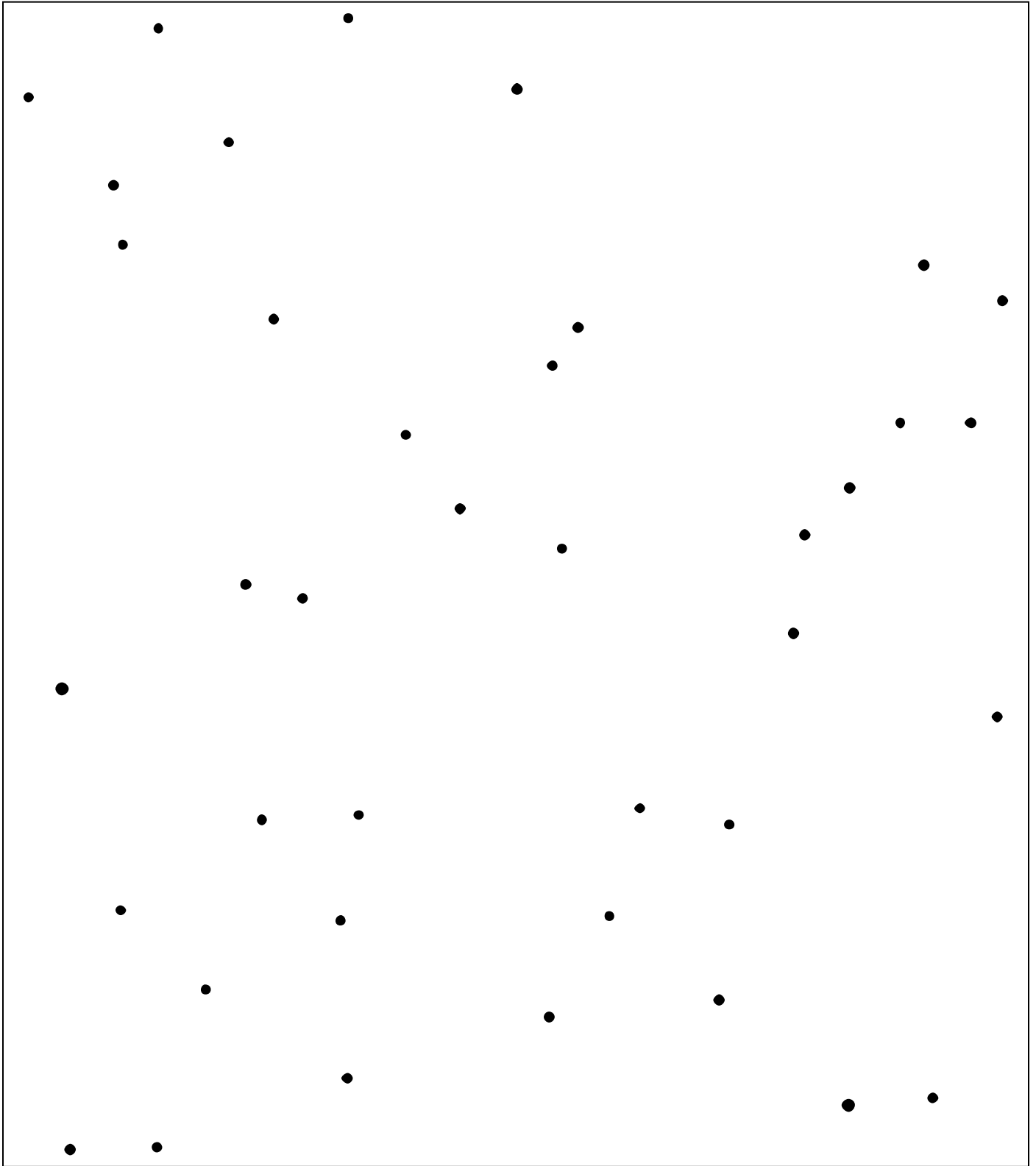
TO FIND OUT MORE

- [Cassiopeia](#), *Wikipedia* page.
- [Andromeda](#), *Wikipedia* page (to find out more about the Cassiopeia story).
- [Big Dipper](#), *Wikipedia* page.
- [List of constellations](#), *Wikipedia* page.

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Don't show the students this sheet before doing the activity! Instead, let them be creative and invent their own constellations. This image is provided to show the constellation in this corner of the sky if children are curious after doing the activity. It is not really "the right answer."

BIG DIPPER

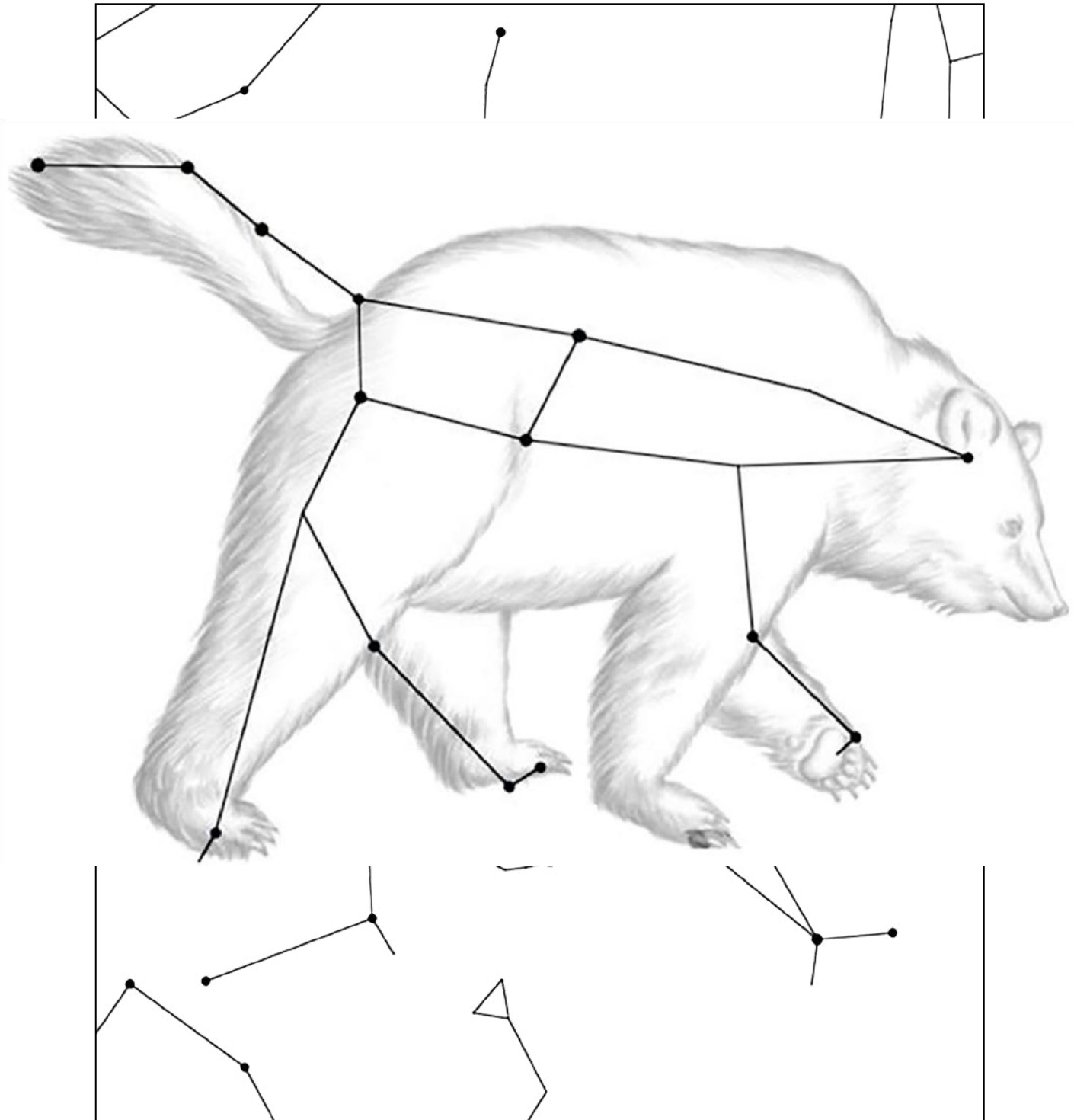


Image created with *Starry Night Pro* software.

CASSIOPEIA



Image created with *Starry Night Pro* software.