

## LESSON PLAN: Constellations with *Smack Dab in the Middle of Maybe*

*In Smack Dab in the Middle of Maybe*, some of the clues direct Cricket to find a constellation. Using the book as a starting point, provide students with more information about constellations, their history, and how to locate some of them in the night sky.

### Learning Objectives

- Students will be able to define “constellation”.
- Students will recognize that many constellations are named after characters in Greek mythology.
- Students will be able to recognize several well-known constellations.
- Students will create their own constellations.

### Supplies

- *Smack Dab in the Middle of Maybe*
- Computer
- Projector
- 1/2 piece black poster board per student
- White copier paper
- Paint Brushes
- White acrylic paint
- Pencils

### Introduction

*In Smack Dab in the Middle of Maybe*, some of the clues direct Cricket to find a constellation. Students will discover what constellations are and how to find them in the night sky.

1. Provide students with the definition of constellation: groups of stars in the sky that form a particular pattern and have been given a name.
2. Watch the following video about constellations:  
<https://www.youtube.com/watch?v=MZffhapfOgg>
3. Explain that the students will be making their own constellations.

## Main Lesson

1. Explain that many different constellations fill the evening sky in the northern hemisphere. Depending on your location and the season, different constellations can be seen.
2. Some constellations can be seen all year long in the night sky of the northern hemisphere. They are: Cassiopeia, Cepheus, Draco, Ursa Major, and Ursa Minor. Using a computer and projector, show Ursa Major and Ursa Minor using this website: <https://www.dkfindout.com/us/space/constellations/>. Point out the Big Dipper and the Little Dipper.
3. Choose other constellations to show to the class. Read the myths that corresponds with the constellations as you show them.

## Independent Practice

1. Inform the students they will be creating their own constellations.
2. Direct the students to think of an object or animal to use as the basis of a constellation.
3. Provide each student with a piece of plain white paper. Instruct the students to draw the object or animal on the white paper. This is their planning/design paper and will not be part of the final project. Provide the students with additional paper if necessary.
4. When the students are done with their design, provide each one with  $\frac{1}{2}$  piece of black poster board. Direct students to use their smaller drawings as a guide for drawing the object or animal on the poster board. Students should use pencil for their drawings so that the lines will not be noticeable on the final product.
5. Instruct students to mark seven to eight points with white paint on the outline. These are the stars in the constellation. Remind the students that these points can be different sizes, as some stars appear smaller than others.
6. Have the students present their constellations to the class one at a time. Instruct the other students to write down what they think each constellation represents. After each one, ask the student who created the constellation if the other students were correct. If not, have the student show his/her design paper with the outline of the constellation.

## Extensions:

- The bright star at the end of the ladle of the Little Dipper is Polaris, also known as the North Star. Research and write a short paper about Polaris. Identify Polaris in the sky.

- Make a Star Finder for the current month found on NASA's website: <https://spaceplace.nasa.gov/starfinder/en/>. On the Star Finder, locate the North Star, Ursa Major, Ursa Minor. Then, try to locate the constellations in the night sky. What other constellations can you find?
- Ask the students to chart the constellations they can find over a period of two weeks. Instruct them to go outside approximately one to two hours after sundown. Students should pick a fixed point/landmark, lay down in the grass, and draw the stars above. They should keep their drawings in order to track any changes.

### Assessment:

- Students stand and present their own constellations.

### Standards:

CCSS.ELA-LITERACY.RST.6-8.4  
CCSS.ELA-LITERACY.RST.6-8.9  
CCSS.ELA-LITERACY.RI.6.7  
CCSS.ELA-LITERACY.SL.6.2  
CCSS.ELA-LITERACY.L.6.1  
CCSS.ELA-LITERACY.L.6.3