

## **Stories and Constellations**

Grade: 8

Time: 30 minutes

Lesson Plan – Learning about Constellations and their multicultural origins

Materials Needed:

- pencils
- constellation worksheet
- markers
- paper
- handouts (see attached)
- constellation handouts (see attached)

Goals/ Objectives:

- Students will learn about different constellations
- Learn about how constellations came to be
- Students will learn about the importance of constellations in different cultures
- Students will learn about different cultural contributions to astronomy and star lore
- Students will make their own constellation
- Students will make up a story to explain the origin of their constellation

NJCCCS Addressed

- Standards 5.1.8A, 5.2.48, 5.2.8B in Science
- Standard 4.3.8A, 4.3.8B, 4.3.8C

Activities and Procedures:

Part 1. Ask class about some of the constellations they have heard about.

Part 2. Share some constellations stories from different cultures such as Ancient Greece, Japan, etc. Pass out constellation handout as well as constellation worksheet.

Part 3. Have students plot some points on a constellation worksheet.

Part 4. Have students connect the points on the worksheet to create a constellation. Ask students to create a story to explain the mythological origin of their constellation.

Part 5. Have students share their constellations with other students and discuss their different stories.

Accommodations:

SLD

- Students have option to work in groups
- Check up on students as they work
- Offer help to students as they work

ELL

- Students will be allowed to work with bilingual students
- Offer translations if possible
- Use words and ideas that are easier to understand in place of more complicated vocabulary

Assessment:

- Monitor students as they work to make sure everyone is doing the assignment
- Have students share their work with others upon completion
- Students will be given homework, which will then be evaluated.

Follow-up:

Students will be reminded of this activity before their trip to the Newark Museum.

Name: \_\_\_\_\_

Date \_\_\_/\_\_\_/\_\_\_

### Stories and Constellations

Imagine that you belong to an ancient culture that watches and charts the stars in the sky. One night, you discover a new group of stars in the sky that no one has ever charted before. You are very excited about this, but afraid that someone else will find this star grouping and take all of the credit for your discovery. You decide to make up a good story about where these stars came from so everyone will remember your story and give you the credit for finding these stars.

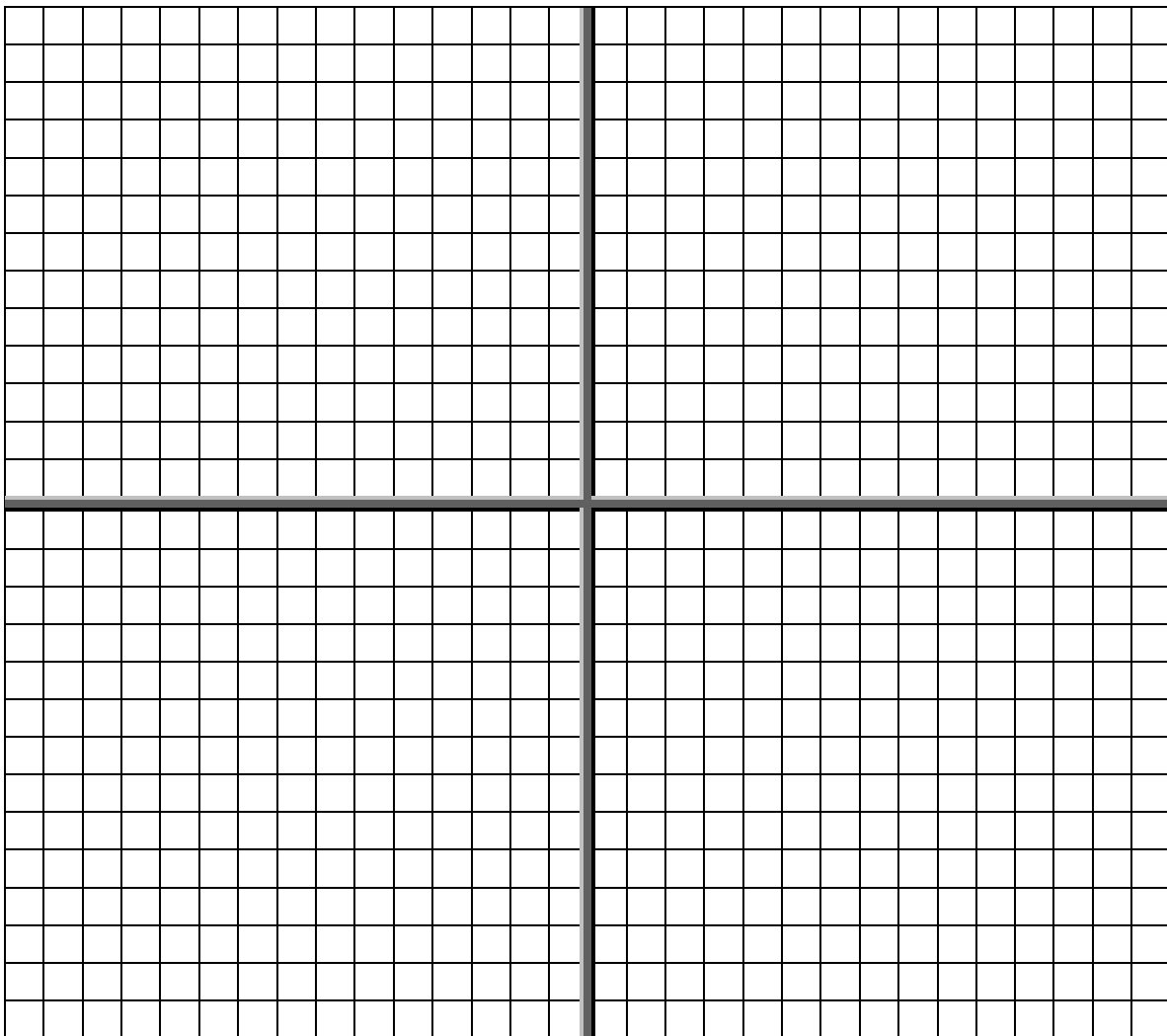
Procedure:

1. Let's plot some stars! Use the table below to find out where to plot your points on the star chart.

<b>X Axis Coordinates</b>	<b>Y Axis Coordinates</b>	<b>Ordered Pairs ( X, Y )</b>
The number of your birthday's month.  X= _____	Your age.  Y= _____	
The number of planets in the Solar System.  X= _____	The number of moons that Mars has.  Y= _____	
The number of weeks it takes for the moon to revolve around the Earth divided by -1.  X= _____	The number of total constellations divided by the number of planets in the solar system.  Y= _____	
The number of radios on the Mars Rover multiplied by -3  X= _____	The number of planets in the solar system divided by -2.  Y= _____	
The number of months in a year.  X= _____	The number of moons that Pluto has.  Y= _____	
The number of Gas Giants in the solar system.  X= _____	Your favorite one digit negative number.  Y= _____	
The answer to this problem: $8 - 9 =$ _____  X= _____	The number of people in your favorite band.  Y= _____	

2. Take the points you found in the table above and plot them in the star chart below.
3. Once the points are plotted, connect the points to form your constellation.
4. Look at the figure appears once you are finished connecting the points. Do you see your constellation? Draw it, using the points as a guide.
5. On the back of this sheet, tell your constellation's story in a few sentences and share this story with a neighbor. You can even draw a picture of what your constellation looks like!

**Star Chart**



**Homework:** Ask a member of your family if they have a favorite constellation story. Write a small paragraph of five sentences about the constellation and then share with the class.