

# Finding Out About Asteroids

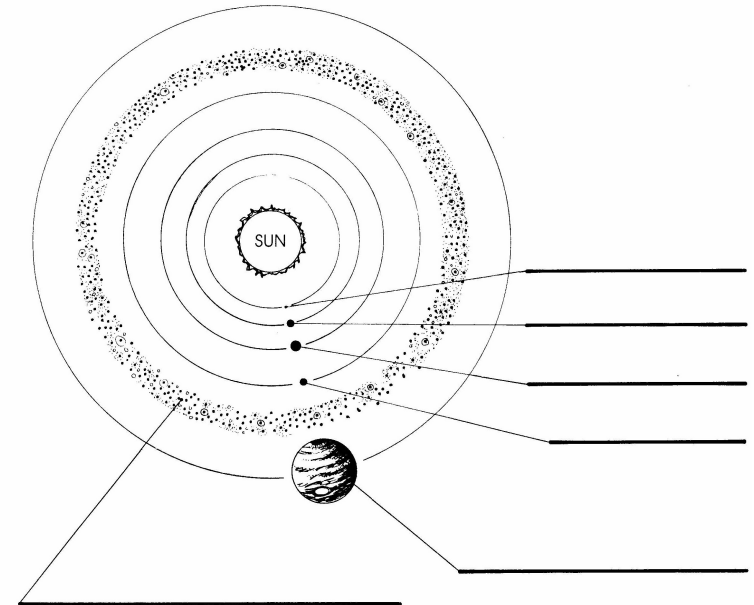
## Engage

**BEFORE** this lesson on asteroids, check what you and your partner know by answering these questions. When you are finished with the lesson answer them again and see what you knew and what you have learned from the lesson.

Questions	What I know before the lesson	What I know after the lesson
1. What do they look like?		
2. What are they made of?		
3. How big are they?		
4. Where can you find them?		
5. Do they travel in a group or by themselves?		

## Explore

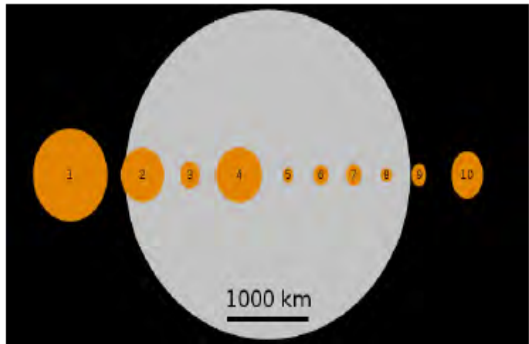
1. Look at the diagram below.
2. From what you already know about the Solar System, label the four inner planets – Mercury, Venus, Earth and Mars.
3. Label the large planet Jupiter.
4. Label the ring of rocks Asteroid Belt.





Explore page 2

Below you see the size of the first ten asteroids that were discovered back in the 1800s compared to our moon.



Size of the first 10 asteroids discovered compared to Earth's Moon

Number of Discovery	Name	Radius (km)	Discoverer	Date
4	Vesta	262.5	H. Olbers	1807
243	Ida	58 x 23	J. Palisa	1884
253	Mathilde	28.5 x 25	J. Palisa	1885
433	Eros	17.5 x 6.5	G. Witt	1893
951	Gaspra	17 x 10	Neujmin	1916

You may notice that some of the asteroids have 2 numbers for their radius. This means they are not round. They have more of an oblong shape – like a potato- and so their radius is expressed for the long side and the short side.

Answer the following questions using the picture and the chart.

- 1. Which asteroid in this list was found first? \_\_\_\_\_
- 2. In what year was it found? \_\_\_\_\_
- 3. Who discovered more than one asteroid? \_\_\_\_\_
- 4. Why does Vesta have only 1 number for its radius?

\_\_\_\_\_

5. Why do you think the number one asteroid in the picture was found first? \_\_\_\_\_

Explain



PHYSICAL PROPERTIES

LOCATION

MOVEMENT



Elaborate

- 1. View the pictures of asteroids on the Asteroids power point from [www.missdoctorbailer.com](http://www.missdoctorbailer.com)
- 2. Draw what the asteroids look like in the boxes.
- 3. Write the radius and what each is made of in the boxes.

Be sure to show the radius of each of the asteroids.

Eros	Gaspra
Radius	Radius
Composition	Composition
Ida	Mathilde
Radius	Radius
Composition	Composition
Vesta	Draw and name your own asteroid.
Radius	Radius
Composition	Composition

NOW fill in the front page with facts you know about asteroids.



Evaluate

Name \_\_\_\_\_ period \_\_\_\_\_

EXIT TICKET

Finding out About Asteroids

- 1. Where are most asteroids found?
  - A. Orbiting a planet
  - B. In the asteroid belt
  - C. On a collision course with Earth
- 2. Where do asteroids come from?
  - A. outside the solar system
  - B. leftover from the formation of the solar system
  - C. the sun
- 3. Why do some asteroids have two numbers for their radius?
  - A. They are perfectly round
  - B. They are square
  - C. They are oblong like a potato
- 4. Most asteroids are made of -
  - A. Only metals
  - B. Both rocks and metals
  - C. Only rocks
- 5. The movement of the asteroid belt is –
  - A. Around the Sun
  - B. Around the Galaxy
  - C. Around Jupiter