

May 25, 2020

1) Other objects in the Solar System

Warm-up:

Most comets are thought to have a nucleus that measures about _____ kilometers or less across. Some comas can reach diameters of nearly 1 million miles (1.6 million kilometers). Some tails extend to distances of 100 million miles (160 million kilometers).

16 km

Asteroid Belt

The asteroid belt is located between the orbits of Mars and Jupiter. The asteroid belt is the region of the Solar System located roughly between the orbits of the planets Mars and Jupiter. It is occupied by numerous irregularly shaped bodies called **asteroids** or minor planets.

Complete the following questions and then check your answers in the following slides

Other Objects in the Solar System

Use the internet to find the following:

1. What is believed to have caused the extinction of the dinosaurs and many other species?
2. How did the fast moving object from outer space affect the Earth?
3. What are satellites?
4. Describe two characteristics of Earth's moon?
5. What contributed to the finding of other moons in the solar system?
6. What has been used to investigate the moons of other planets besides Earth?
7. Which two planets have the most moons according to Table 1 on page 430?
8. How does studying about planetary moons in the solar system help us?
9. Name a use that moons could have to humans on Earth.
10. What are asteroids?
11. What is the asteroid belt?
12. Why do scientists think that the asteroid belt didn't form into a planet?
13. Name two asteroids?
14. What use could asteroids have to humans on Earth?
15. What is a meteoroid?
16. What is a meteor?
17. What is a meteorite?
18. What is a comet?
19. Give an example of a comet. How does it take for Halley Comet to orbit the Sun?
20. What probe was sent to investigate minor bodies? Why did scientists want to do this?

Other objects in the Solar System

1. A fast moving object from outer space crashed into Earth, sending material flying into the atmosphere.
2. This material reduced the amount of sunlight reaching the Earth's surface, causing the climate to change and numerous life forms to die out.
3. Large natural objects that revolve around planets.
4. The Moon has no atmosphere and its surface is filled with hills and valleys.
5. The telescope.
6. Space probes.
7. Saturn and Uranus.
8. It helps us understand more about the origin and evolution of the solar system.
9. Humans can mine moons one day for minerals.
10. Small rocky objects.

Other objects in the Solar System

11. The ring of asteroids between Mars and Jupiter.
12. Scientist believe that the asteroid belt may have formed into a planet if the gravitational force of Jupiter had not been so strong.
13. Hermes and Apollo.
14. Asteroids are rich in minerals which humans could mine.
15. A lump of rock or metal that is trapped by Earth's gravity and pulled down through Earth's atmosphere.
16. As the rock falls, it rubs against the air molecules. The friction causes the rock to become hot and vaporize. This produces a bright streak of light.
17. If the rock hits the ground before vaporizing, it is called a meteorite.
18. A chunk of frozen matter that travels in a very long orbit around the sun.
19. Halley's comet or Hyakutake. Halley orbits every 76 years.
20. Deep Space 1, they wanted to study asteroids.

Further investigation:

<https://www.youtube.com/watch?v=zjqUS9CXVac>

<https://www.youtube.com/watch?v=rfi3w9Bzwik>

<https://www.youtube.com/watch?v=hIFwtQuDA7s>

Attachments

Uranus student response(4).avi

student response no tilt.avi