

CISD Grade 6 Science Unit 08

Some questions (c) 2012 by CSCOPE.

Using the following data table for the next two questions.

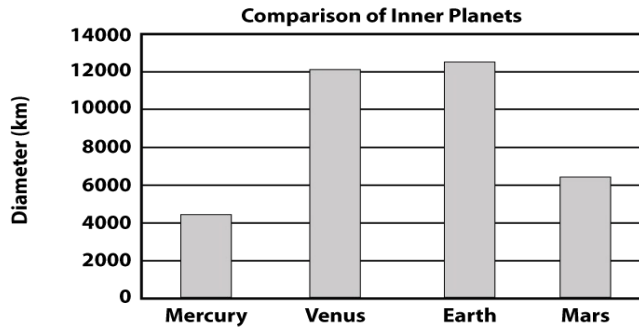
Solar System Information

Planet	Diameter (km)	Period of Rotation	Period of Revolution
Mercury	4878	59 days	87.97 days
Venus	12104	243 days	224.7 days
Earth	12756	24 hours	365.26 days
Mars	6794	24.6 hours	686.98 days
Jupiter	147960	10 hours	11.86 years
Saturn	120660	10.6 hours	29.46 years
Uranus	51118	17.2 hours	84.04 years
Neptune	49528	16 hours	164.79 years

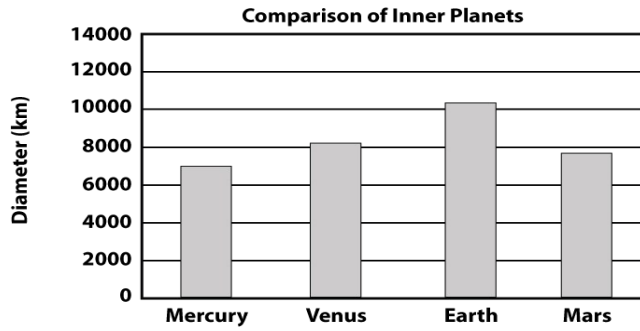
- 1** Why does it take Neptune so long to revolve around the Sun?
- A** The Sun is applying large amounts of gravity on the planet, slowing it down.
 - B** Neptune has a large diameter causing the planet to be less aerodynamic, slowing it down.
 - C** Neptune is such a long distance away that it has a large orbital path.
 - D** Neptune is rotating fast for its size, and the energy of its orbit is being transferred into rotational speed.

2 Which graph illustrates the diameter of the inner planets?

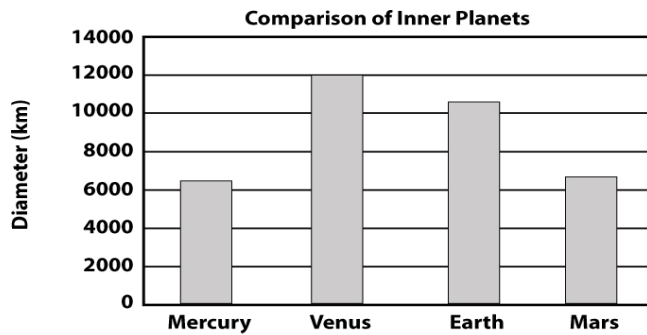
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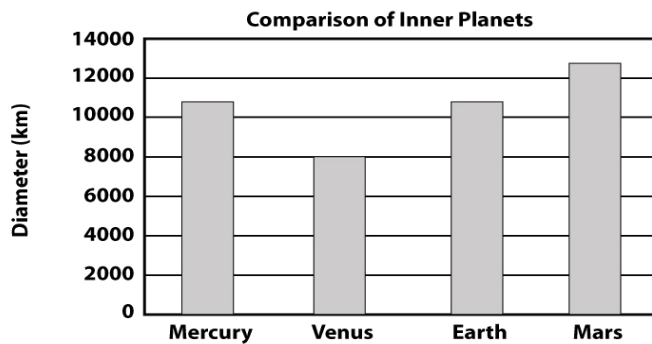
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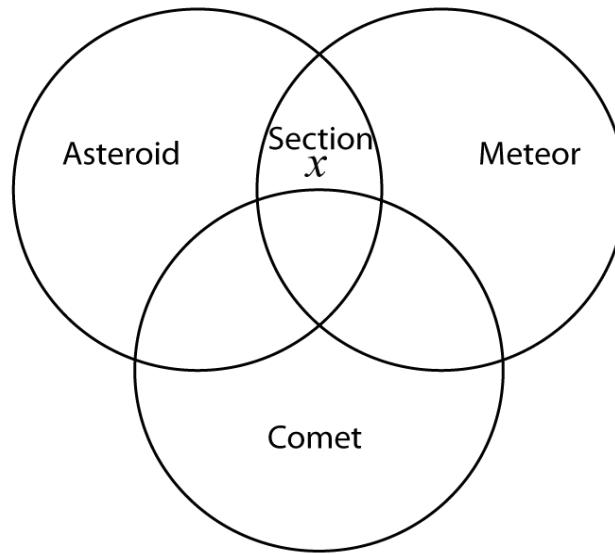
J



- 3** A rocky object that measures 50 miles across is observed in space. It rotates once every 18 hours. The object is three times farther from the Sun than Earth. The rocky object is MOST likely —
- A** Venus
 - B** the Moon
 - C** Mars
 - D** an asteroid
- 4** Mars is very similar to the Earth. Which of these is a property of the Earth, but NOT a property of Mars?
- F** Mars has an abundance of water.
 - G** Mars has moons that orbit it.
 - H** Mars is constantly in motion.
 - J** Mars has a predictable path.
- 5** A probe is a vehicle designed to carry instruments, but not crew. To which of the following places would we MOST LIKELY send a probe?
- A** the International Space Station
 - B** inside the Sun
 - C** mountain top
 - D** Saturn
- 6** The Sun is the center of our solar system and creates a large amount of gravitational force. If this system lost the Sun, what would happen to the planets?
- F** The planets would explode.
 - G** The planets would stop moving.
 - H** The planets would travel in a straight line.
 - J** The planets would continue on their same path.
- 7** All of the planets in our solar system have about the same —
- A** mass
 - B** diameter
 - C** shape
 - D** composition
- 8** Over time, NASA has developed many different vehicles to carry men and women into space. These craft have changed to allow longer stays in space, carry more astronauts, and conduct more investigations. Until recently, the U.S. has used the space shuttle. The space shuttle differed from previous space vehicles because it —
- F** was reusable
 - G** could carry more than one person
 - H** could travel beyond Earth's orbit
 - J** was airtight

- 9 Which of the following is the description for the orbit paths of most planets in our solar system?
- A Its movement is in a perfect circle.
 - B Its movement is in an ellipse, but looks almost circular.
 - C Its movement is in a large elliptical shape.
 - D Its movement varies greatly from planet to planet.
- 10 Which of the following represents characteristics of the four planets closest to the Sun? **(Bubble all the correct answers.)**
- F smaller planets
 - G larger planets
 - H gassy planets
 - J rocky planets
 - K 4 or more moons
 - L 3 or less moons
 - M all of the above

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Made mostly of ice, fits best under which heading in the Venn diagram?

- A Asteroid
- B Meteor
- C Comet
- D Section X

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Planet	Distance from the Sun (kilometers)
Mercury	58,000,000
Venus	110,000,000
Earth	150,000,000
Mars	230,000,000
Jupiter	780,000,000
Saturn	1,400,000,000
Uranus	2,900,000,000

Identify the planet on the chart above that would MOST LIKELY be the coldest. Explain your answer.