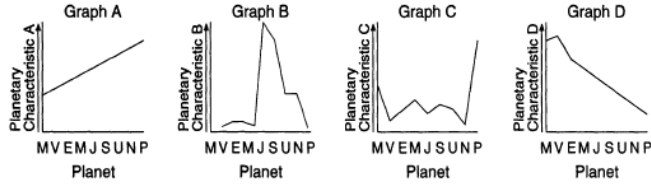


The Solar System Review

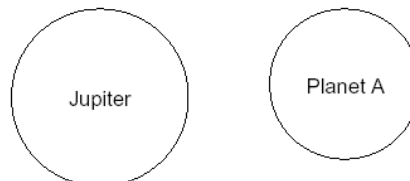
Base your answers to **questions 1 and 2** on the four graphs below, which represent trends for four characteristics of the planets in Earth's Solar System. The planets are indicated in order of increasing distance from the Sun.



- Which graph best illustrates the surface temperatures of the planets?
 - A
 - B
 - C
 - D
- Which graph best represents the amount of time it takes each planet to orbit the Sun once?
 - A
 - B
 - C
 - D
- An astronomical unit (A.U.) is another unit of measurement that scientists use to indicate distances between planets in our Solar System. 1 A.U. is equal to the average distance between the Earth and the Sun (149.6 million km). Which planet is approximately 30 A.U. from the Sun?
 - Jupiter
 - Saturn
 - Uranus
 - Neptune
- A person observes that a bright object streaks across the nighttime sky in a few seconds. What is this object most likely to be?
 - a comet
 - a meteor
 - an asteroid
 - an orbiting satellite
- Compared to other stars, the Sun is
 - among the hottest stars
 - among the smallest stars
 - very unique
 - about average in all respects
- Three planets known as gas giants because of their large size and low density are
 - Venus, Neptune, and Jupiter
 - Jupiter, Saturn, and Venus
 - Jupiter, Saturn, and Uranus
 - Venus, Uranus, and Jupiter
- The density of the Sun is closest to the density of
 - Earth
 - Jupiter
 - Earth's Moon
 - Saturn

The diagram below represents two planets in our solar system drawn to scale, Jupiter and planet A.

- Planet A most likely represents
 - Earth
 - Venus
 - Saturn
 - Uranus



9. Compared to the Jovian planets, the terrestrial planets are
- (1) smaller and have lower densities
 - (2) smaller and have greater densities
 - (3) larger and have lower densities
 - (4) larger and have greater densities

Base your answers to **questions 10 and 11** on the data table below, which shows information about the four largest asteroids found in our Solar System.

10. The asteroids shown in the data table are located between the orbits of
- (1) Venus and Earth
 - (2) Earth and Mars
 - (3) Mars and Jupiter
 - (4) Jupiter and Saturn

Data Table

Name	Average Diameter (kilometers)	Period of Revolution (years)
Ceres	848.4	4.60
Pallas	498.1	4.61
Juno	247.0	4.36
Vesta	468.3	3.63

11. Compared to the diameter of Earth's Moon, the diameter of Ceres is about
- (1) one-fourth of the Moon's diameter
 - (2) one-half of the Moon's diameter
 - (3) twice the diameter of the Moon
 - (4) four times the diameter of the Moon

Base your answers to **questions 12 and 13** on the data table below. The data table provides information about the Moon, based on current scientific theories.

Information About the Moon

Subject	Current Scientific Theories
Origin of the Moon	Formed from material thrown from a still-liquid Earth following the impact of a giant object 4.5 billion years ago
Craters	Largest craters resulted from an intense bombardment by rock objects around 3.9 billion years ago
Presence of water	Mostly dry, but water brought in by the impact of comets may be trapped in very cold places at the poles
Age of rocks in terrae highlands	Most are older than 4.1 billion years; highland anorthosites (igneous rocks composed almost totally of feldspar) are dated at 4.4 billion years
Age of rocks in maria plains	Varies widely from 2 billion to 4.3 billion years
Composition of terrae highlands	Wide variety of rock types, but all contain more aluminum than rocks of maria plains
Composition of maria plains	Wide variety of basalts
Composition of mantle	Varying amounts of mostly olivine and pyroxene

12. Which statement is supported by the information in the table?
- (1) The Moon was once a comet.
 - (2) The Moon once had saltwater oceans.
 - (3) Earth is 4.5 billion years older than the Moon.
 - (4) Earth was liquid rock when the Moon was formed.
13. Which Moon feature is formed by meteorite impacts?
- (1) crater
 - (2) maria plain
 - (3) terrae highland
 - (4) mantle