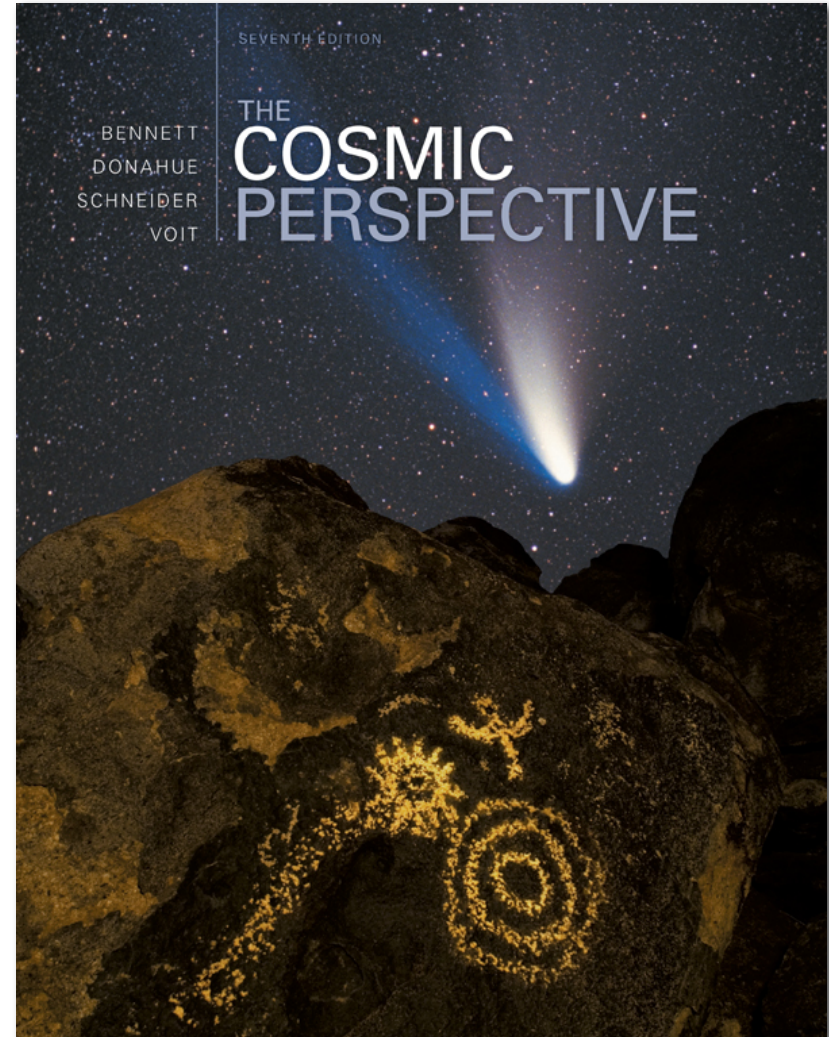


The Cosmic Perspective

Seventh Edition

Our Planetary System



Which planets have a rocky, relatively dense composition?

- a) Jupiter, Saturn, Earth, and Mars
- b) Uranus, Neptune, Earth, and Mars
- c) Jupiter, Saturn, Uranus, and Neptune
- d) Mercury, Venus, Earth, and Mars

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Most of the solar system's planets

- a) are made of rocks and minerals.
- b) are made of gas.
- c) orbit the Sun in the same direction.
- d) rotate in the same direction as they orbit the Sun.
- e) C and D

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Chapter 7

What patterns can be seen comparing the terrestrial planets (Mercury, Venus, Earth, Mars) to the Jovian planets (Jupiter, Saturn, Uranus, Neptune)?

- a) The jovian planets are much more massive.
- b) The terrestrial planets are much more dense.
- c) The terrestrial planets are rocky and the jovian planets are gaseous.
- d) All of the above
- e) A and C.

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Where do asteroids come from?

- a) There are the remains of a planet between Mars and Jupiter that broke up.
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- c) They are leftover planetesimals from the inner solar system.
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Where do asteroids orbit?

- a) between Mars and Jupiter
- b) in the same plane as the planets
- c) some in the plane of the planets, some at large angles to it
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How do comets differ from asteroids?

- a) They are mostly ices, not rock.
- b) Their orbits are usually much farther from the Sun.
- c) They are leftover pieces of a smashed planet.
- d) all of the above
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Chapter 7

According to the scale model of the solar system used in Chapter 1, the Sun is the size of a grapefruit. How far away from Earth is it?

- a) about an inch away
- b) about a foot away
- c) about 40 feet away
- d) about a block away
- e) about a mile away

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According to the scale model of the solar system used in Chapter 1, where does the asteroid belt lie?

- a) between Mars and Jupiter, around the National Air and Space Museum
- b) between Uranus and Neptune, around the Hirshorn Museum
- c) between Neptune and Pluto, around the Art and Industries Building
- d) beyond Neptune, but still within the Mall
- e) well beyond the orbits of the planets, and off the scale completely (i.e. in a different state)

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According to the scale model of the solar system used in Chapter 1, where does the Kuiper belt lie?

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According to the scale model of the solar system used in Chapter 1, where does the Oort cloud lie?

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What is the order in which the 4 types of exploratory spacecraft are likely to be sent to planets?

- a) flyby, orbiter, lander, sample return
- b) lander, orbiter, flyby, sample return
- c) sample return, flyby, lander, orbiter
- d) flyby, lander, sample return, orbiter
- e) sample return, orbiter, lander, flyby

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