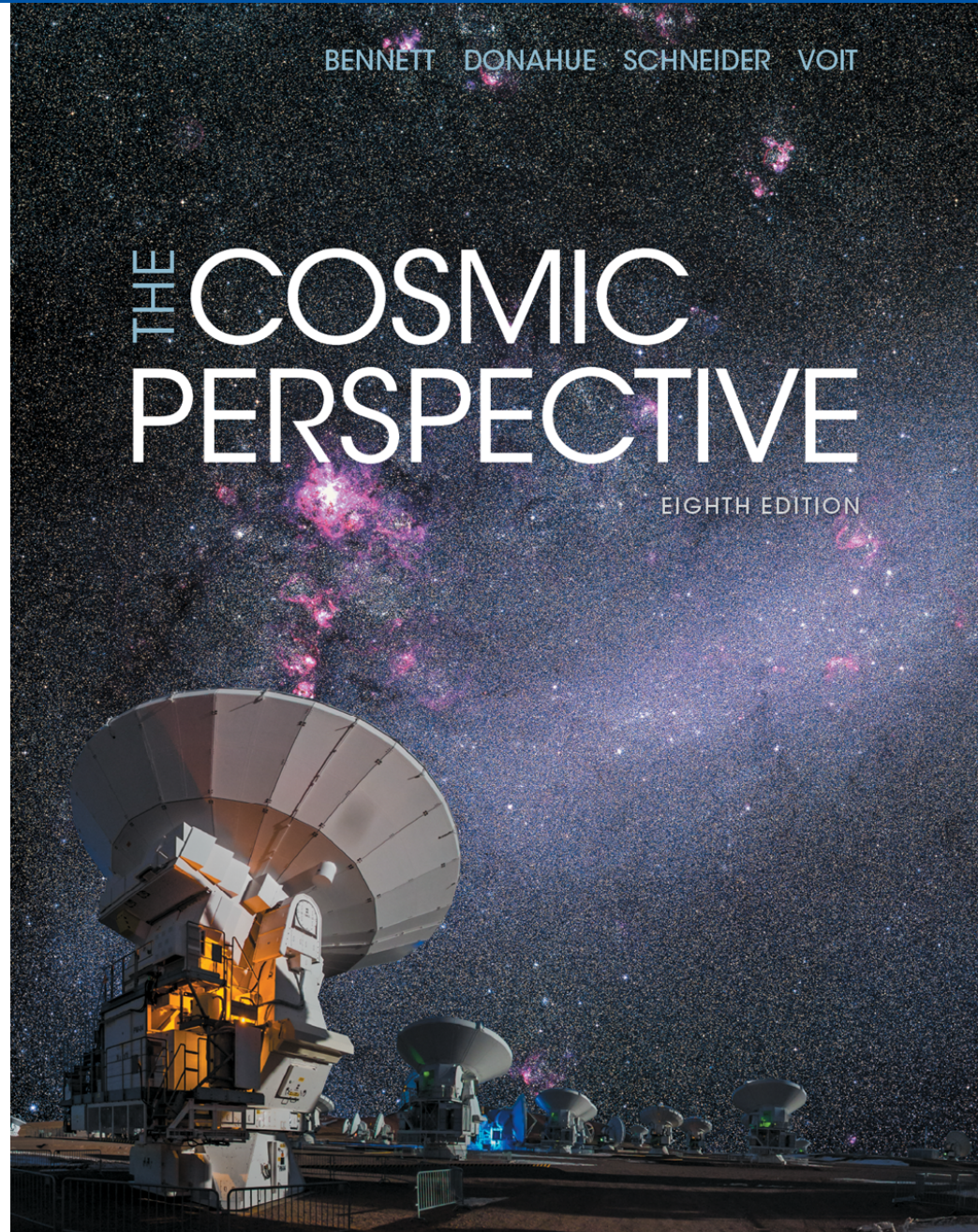


Chapter 1: A Modern View of the Universe



Put these objects in the correct order, from nearest to farthest from Earth:

- a) The Moon, Mars, the Sun, the nearest stars, Pluto
- b) The Moon, Mars, the Sun, Pluto, the nearest stars
- c) The Moon, the Sun, Mars, Pluto, the nearest stars
- d) Mars, the Moon, the Sun, the nearest stars, Pluto

Put these objects in the correct order, from nearest to farthest from Earth:

- a) The Moon, Mars, the Sun, the nearest stars, Pluto
- b) The Moon, Mars, the Sun, Pluto, the nearest stars**
- c) The Moon, the Sun, Mars, Pluto, the nearest stars
- d) Mars, the Moon, the Sun, the nearest stars, Pluto

Put these objects in the correct order, from nearest to farthest from Earth:

- a) The Sun, the center of the Milky Way, Alpha Centauri, Pluto, the Andromeda galaxy
- b) The Sun, Alpha Centauri, Pluto, the Andromeda galaxy, the center of the Milky Way
- c) The Sun, Pluto, Alpha Centauri, the center of the Milky Way, the Andromeda galaxy
- d) Pluto, the Sun, Alpha Centauri, the center of the Milky Way, the Andromeda galaxy

Put these objects in the correct order, from nearest to farthest from Earth:

- a) The Sun, the center of the Milky Way, Alpha Centauri, Pluto, the Andromeda galaxy
- b) The Sun, Alpha Centauri, Pluto, the Andromeda galaxy, the center of the Milky Way
- c) The Sun, Pluto, Alpha Centauri, the center of the Milky Way, the Andromeda galaxy**
- d) Pluto, the Sun, Alpha Centauri, the center of the Milky Way, the Andromeda galaxy

Which is farther, the distance from San Francisco to Los Angeles, or the distance from you to the space shuttle if the shuttle passes directly overhead?

- a) San Francisco to Los Angeles is farther.
- b) The space shuttle is farther.

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- a) **San Francisco to Los Angeles is farther.**
- b) The space shuttle is farther.

What is the effect of the expansion of the universe?

- a) The distant galaxies are getting farther apart from each other.
- b) Each galaxy is getting larger.
- c) The solar system is getting larger.
- d) all of the above

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Does the expansion of the universe cause you to expand?

a) Yes

b) No

Does the expansion of the universe cause you to expand?

a) Yes

b) No

Which of the following is NOT a way in which we move through the universe?

- a) The Milky Way orbits the center of the universe.
- b) Our solar system orbits the center of our galaxy.
- c) The Earth orbits the Sun.
- d) The Earth is spinning on its axis.

Which of the following is NOT a way in which we move through the universe?

- a) The Milky Way orbits the center of the universe.**
- b) Our solar system orbits the center of our galaxy.
- c) The Earth orbits the Sun.
- d) The Earth is spinning on its axis.

In a scale model solar system that used a grapefruit to represent the Sun, how large would Earth be?

- a) the size of an orange
- b) the size of a marble
- c) the size of the point of a ballpoint pen
- d) the size of a bacterium

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- a) the size of an orange
- b) the size of a marble
- c) the size of the point of a ballpoint pen**
- d) the size of a bacterium

In a scale model solar system that used a grapefruit to represent the Sun, how far away would Earth be?

- a) 6 inches
- b) 1 foot
- c) 5 feet
- d) 50 feet
- e) 1 mile

In a scale model solar system that used a grapefruit to represent the Sun, how far away would Earth be?

- a) 6 inches
- b) 1 foot
- c) 5 feet
- d) 50 feet**
- e) 1 mile

In a scale model solar system that used a grapefruit to represent the Sun, how far away would Pluto be?

- a) 100 feet
- b) 200 feet
- c) 2000 feet
- d) 10 miles

In a scale model solar system that used a grapefruit to represent the Sun, how far away would Pluto be?

- a) 100 feet
- b) 200 feet
- c) 2000 feet**
- d) 10 miles

In a scale model solar system that used a grapefruit to represent the Sun, how far away should you put another grapefruit to represent Alpha Centauri, the next nearest star?

- a) 10 feet
- b) 1000 feet
- c) 1 mile
- d) 10 miles
- e) 2000 miles

In a scale model solar system that used a grapefruit to represent the Sun, how far away should you put another grapefruit to represent Alpha Centauri, the next nearest star?

- a) 10 feet
- b) 1000 feet
- c) 1 mile
- d) 10 miles
- e) 2000 miles**

At the *speed of light*, how long would it take to go from Earth to the Sun?

- a) about a second
- b) about a minute
- c) about 8 minutes
- d) about a day
- e) about a year

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At the *speed of light*, how long would it take to reach the nearest star, Alpha Centauri?

- a) about a month
- b) about a year
- c) about 4 years
- d) about 1,000 years
- e) about 1,000,000 years

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- a) about a month
- b) about a year
- c) about 4 years**
- d) about 1,000 years
- e) about 1,000,000 years

About how old is Earth?

- a) 6000 years
- b) 1 million years
- c) 1 billion years
- d) 5 billion years
- e) 14 billion years

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- b) 1 million years
- c) 1 billion years
- d) 5 billion years**
- e) 14 billion years