

Chapter 22 Origin of Modern Astronomy

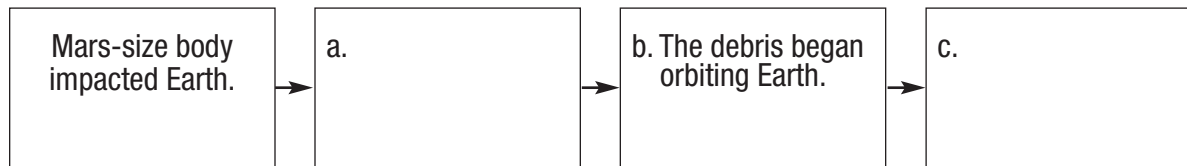
Section 22.3 Earth's Moon

(pages 630–634)

This section describes the moon's structure, surface, and ideas about its origin.

Reading Strategy (page 630)

Sequencing As you read, complete the flowchart showing the stages leading to the formation of the moon. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.



1. The density of the moon is comparable to that of mantle rocks on _____ . Circle the correct answer.
- the sun Mars Earth

The Lunar Surface (page 631)

Match each description with its moon feature.

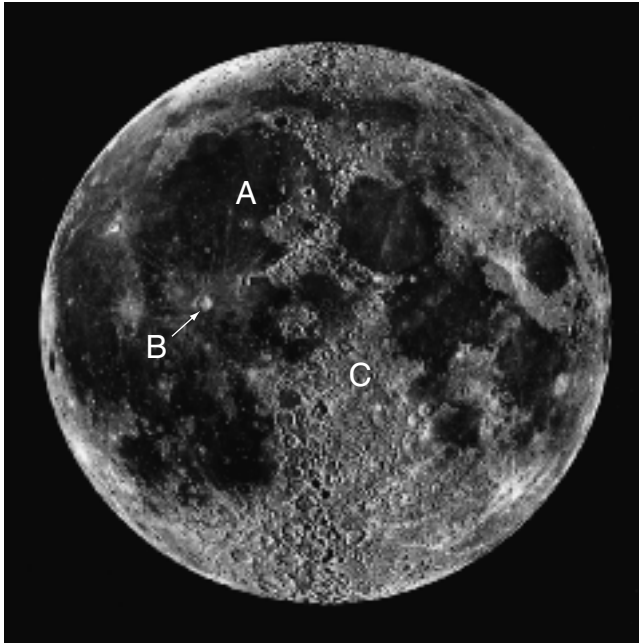
Description	Moon Feature
_____ 2. densely pitted, light-colored areas containing mountain ranges	a. regolith
_____ 3. dark, relatively smooth areas made of ancient beds of basaltic lava	b. maria
_____ 4. splash marks that radiate outward for hundreds of kilometers	c. craters
_____ 5. long channels similar to valleys or trenches	d. rays
_____ 6. soil-like layer of igneous rock, glass beads, and fine lunar dust	e. highlands
_____ 7. round depressions produced by the impact of rapidly moving debris or meteoroids	f. rilles
8. The maria on the moon's surface formed when asteroids punctured the lunar surface, letting _____ "bleed" out.	

regolith	magma	rays
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Chapter 22 Origin of Modern Astronomy

9. Select the appropriate letter in the figure that identifies each of the following moon features.

_____ crater _____ highland _____ mare



Lunar History (page 633)

10.  Is the following statement true or false? The most widely accepted theory of the moon's origin states that when the solar system was forming, a body the size of Mars hit Earth. _____
11. The greater the density of craters on the moon, the _____ the surface must be.
12. Number the three phases in which the moon evolved in order from oldest to youngest.
_____ a. maria basins
_____ b. rayed craters
_____ c. original crust (highlands)
13. Is the following sentence true or false? Lava flows on the moon sometimes overlap highlands, showing that maria deposits are younger than highlands. _____

Chapter 22 Origin of Modern Astronomy

WordWise

Use the terms and clues below to identify vocabulary terms from Chapter 22. Write the terms, putting one letter in each blank. Use the circled letters to find the hidden word.

Clues

1. apparent westward drift of a planet as seen from Earth
2. an oval-shaped path
3. average distance between Earth and the sun
4. spinning of a body on its axis
5. motion of a body along a path around some point in space
6. point at which Earth is farthest from the sun
7. point at which the moon is farthest from Earth
8. cycle of changes in the amount of the moon that appears lit
9. splash mark radiating outward from a crater

ellipse
 ray
 rotation
 phases of the moon
 retrograde motion
 astronomical unit
 aphelion
 revolution
 apogee

Vocabulary Terms

1. _ _ _ _ _ o _ _ _ _ _
2. _ _ _ _ _ o _
3. _ _ o _ _ _ _ _
4. o _ _ _ _ _
5. _ _ _ _ o _ _ _ _ _
6. _ _ _ _ _ _ _ o
7. _ _ o _ _ _ _
8. _ _ _ _ _ _ _ _ _ _ o _ _ _ _
9. _ _ o

Hidden Word: _ _ _ _ _

Definition: _____