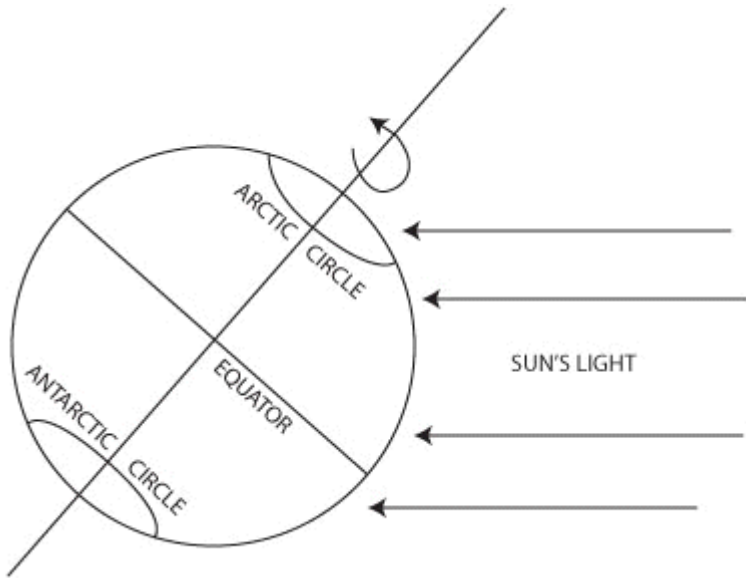


Ch-27 Practice Test

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 1. The phase of the Moon that immediately precedes the new Moon is the ____.
- a. waxing crescent
 - b. first quarter
 - c. waning crescent
 - d. third quarter
- ___ 2. Dark-colored, relatively flat regions of the Moon's surface that were formed when interior lava filled large basins are called ____.
- a. craters
 - b. volcanoes
 - c. maria
 - d. sedimentary rocks
- ___ 3. A ____ occurs when the Moon moves directly between the Sun and Earth and throws a shadow on Earth.
- a. solar eclipse
 - b. lunar eclipse
 - c. waning gibbous
 - d. waxing gibbous
- ___ 4. The Sun's rays strike Earth at their northernmost and southernmost positions during ____.
- a. winter and summer solstices
 - b. spring and fall equinoxes
 - c. lunar eclipses
 - d. solar eclipses
- ___ 5. The yearly orbit of Earth around the Sun is called its ____.
- a. rotation
 - b. ellipse
 - c. revolution
 - d. tilt
- ___ 6. The presence of maria on the Moon indicates that ____.
- a. the Moon contains lava beneath its surface
 - b. many meteorites have hit the Moon recently
 - c. few meteorites have hit the Moon
 - d. the Moon has a dense atmosphere
- ___ 7. Summer occurs on the hemisphere of Earth that is ____.
- a. turned away from the Sun
 - b. tilted toward the Sun
 - c. tilted away from the Sun
 - d. turned toward the Sun
- ___ 8. At the time indicated in this diagram, what season is it in the Southern hemisphere?



- | | |
|-----------|-----------|
| a. spring | c. fall |
| b. summer | d. winter |

- ___ 9. Earth's tilt in combination with its orbit around the Sun cause the ____.
- | | |
|--------------|--------------------|
| a. tides | c. seasons |
| b. full moon | d. Coriolis effect |
- ___ 10. The sequential changes in the appearance of the Moon are called ____.
- | | |
|-------------------|--------------------|
| a. lunar eclipses | c. lunar tides |
| b. lunar phases | d. lunar positions |
- ___ 11. People who see a partial solar eclipse are located in the ____ portion of the Moon's shadow.
- | | |
|-------------|------------|
| a. umbra | c. apogee |
| b. penumbra | d. perigee |

Matching

Match each term with the correct description below.

- | | |
|---------------|--------------------|
| a. sphere | f. equinox |
| b. axis | g. winter solstice |
| c. rotation | h. Moon phases |
| d. revolution | i. waxing |
| e. ellipse | j. new Moon |

- ___ 12. Earth's yearly orbit around the Sun
- ___ 13. changing appearances of the Moon from Earth
- ___ 14. round, three-dimensional object and model of Earth
- ___ 15. Moon phase in which none of the lighted surface of the Moon can be seen from Earth
- ___ 16. when the Sun's rays strike Earth directly at the equator
- ___ 17. turning of Earth on its axis

- ___ 18. Moon phases in which the amount of lighted surface seen on Earth increases
- ___ 19. December 21 or 22
- ___ 20. imaginary line extending between the poles around which Earth spins
- ___ 21. shape of Earth's orbit around the Sun

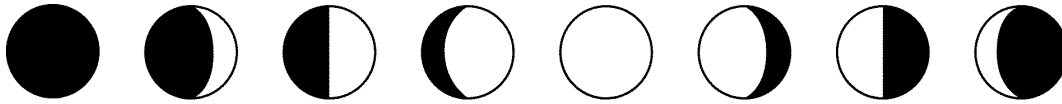


Figure 23-1

Match each description with the correct term below.

- | | |
|------------------|------------------|
| a. first quarter | f. lunar eclipse |
| b. full moon | g. maria |
| c. new moon | h. craters |
| d. third quarter | i. 27.3 days |
| e. solar eclipse | |
- ___ 22. occurrence caused by Earth's coming between the Sun and the Moon and casting its shadow on the Moon
 - ___ 23. Moon phase in which none of the lighted surface of the Moon can be seen from Earth
 - ___ 24. amount of time of the Moon's revolution and rotation
 - ___ 25. depressions on the Moon caused by the impact of meteorites
 - ___ 26. waxing Moon phase in which one half of the Moon's lighted surface can be seen from Earth
 - ___ 27. occurrence caused by the Moon's being between the Sun and Earth and casting its shadow on Earth
 - ___ 28. dark-colored, relatively flat regions of the Moon formed from lava filling large basins
 - ___ 29. phase in which all of the lighted side of the Moon can be seen from Earth
 - ___ 30. waning Moon phase in which one half of the lighted side of the Moon can be seen from Earth

Match each item with the correct phrase below.

- | | |
|------------------------------|-------------------------|
| a. electromagnetic radiation | j. Foucault pendulum |
| b. refracting telescope | k. ecliptic |
| c. reflecting telescope | l. vernal equinox |
| d. interferometry | m. synchronous rotation |
| e. spinoffs | n. solar eclipse |
| f. maria | o. umbra |
| g. ejecta | p. penumbra |
| h. rilles | q. lunar eclipse |
| i. regolith | |
- ___ 31. Plane of the Earth's orbit about the Sun
 - ___ 32. Material blasted out of impact craters on the Moon that falls back to the surface
 - ___ 33. Electric and magnetic disturbances, or waves, that travel through space
 - ___ 34. The Moon's state, in which its rotational and orbital periods are equal

- ___ 35. Dark, smooth plains on the Moon's surface
- ___ 36. Hanging-weight system that helps demonstrate the rotation of Earth
- ___ 37. Valley-like structures on the Moon's surface
- ___ 38. Loose, ground-up rock on the Moon's surface
- ___ 39. Telescope that uses lenses to bring visible light to a focus
- ___ 40. Process of linking many separate telescopes together to act as one
- ___ 41. Occurs when the Moon passes directly between the Sun and Earth
- ___ 42. Outer portion of the Moon's shadow on Earth during a solar eclipse
- ___ 43. Inner portion of the Moon's shadow on Earth during a solar eclipse
- ___ 44. Telescope that uses mirrors to bring visible light to a focus
- ___ 45. Spring day characterized by day and night of equal lengths
- ___ 46. Occurs when the Moon passes through Earth's shadow
- ___ 47. NASA technologies that have been passed on to commercial industries for common usage

Short Answer

- 48. How would conditions on Earth be different if Earth were not tilted on its axis? Explain your answer.
- 49. Compare the length of the Moon's rotational period and the length of the Moon's orbital period.

Modified True/False

Indicate whether the statement is true or false. If false, change the identified word or phrase to make the statement true.

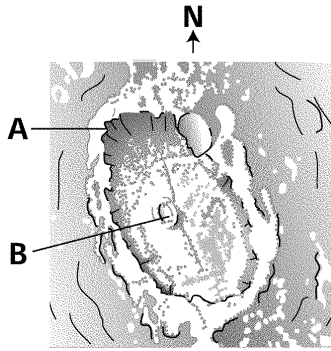
- ___ 50. Albedo is the material blasted out of the Moon's surface as a result of space-object impacts.

- ___ 51. The daily rising and setting of heavenly objects like the Sun is caused by the orbit of Earth.

- ___ 52. One reason different seasons occur on Earth is because Earth's orbit is tilted 23.5° relative to the ecliptic.

- ___ 53. When the Moon waxes during its lunar cycle, the amount of its sunlight portion that we see appears to increase in size. _____
- ___ 54. A lunar eclipse can only occur during the phase of the new moon. _____

Problem



55. Of craters A and B in the illustration above, which is older? How do you know?

**Ch-27 Practice Test
Answer Section**

MULTIPLE CHOICE

1. C
2. C
3. A
4. A
5. C
6. A
7. B
8. D
9. C
10. B
11. D

MATCHING

12. D
13. H
14. A
15. I
16. F
17. C
18. J
19. G
20. B
21. E

22. F
23. C
24. I
25. H
26. A
27. E
28. G
29. B
30. D

31. K
32. G
33. A
34. M
35. F

- 36. J
- 37. H
- 38. I
- 39. B
- 40. D
- 41. N
- 42. P
- 43. O
- 44. C
- 45. L
- 46. Q
- 47. E

SHORT ANSWER

- 48. If Earth were not tilted on its axis, there would be no seasonal changes. The climate at any given location would be much the same year-round because neither hemisphere would lean more or less toward the Sun any time of the year.
- 49. The Moon's orbital period and the Moon's rotational period are equal.

MODIFIED TRUE/FALSE

- 50. F, Ejecta
- 51. F, rotation
- 52. F, axis
- 53. T
- 54. F, full moon

PROBLEM

- 55. Crater A is older than crater B. The impact of crater B is on top of crater A. Because of its larger size, if crater A was younger, it would cover up crater B.