

- _____ 1. Identify the phase of the moon for the following scenarios: (A) the moon is directly in line and between the Earth and Sun, (B) the Earth is directly in line and between the moon and Sun (hint: draw a sketch of each before answering)

- _____ 2. Given that 1m = 100 cm, 1 in = 2.54 cm, 1 mi = 5280 ft, calculate the no. of centimeters in 5.2 miles. Show all of your math work and unit algebra here, place answer in space to left:

- _____ 3. The inner group of planets in our solar system are referred to as the (----) planets, while the outer ones are referred to as (----).

- _____ 4. The source of the Sun's energy is a chemical process termed (----)

- _____ 5. The distance from the earth to the sun on average is A) 93,000,000 miles, B) 2 light years C) 6,000,000,000 miles D) 93,000 miles, E) None of the above.

- _____ 6. The four gas giant planets are A) denser than the inner planets and composed of gases, B) less dense than the inner planets and composed of rock, C) the same density as the inner planets and composed of gas and ice, D) denser and larger than the inner planets, E) none of the above.

- _____ 7. True or False: The Earth rotates counterclockwise when looking at the south pole.

- _____ 8. The speed of a light wave is equal to the _____ times the _____.

- _____ 9. The speed at which electromagnetic radiation travels is _____ meters per second.

- _____ 10. List three types of electromagnetic radiation, in order of increasing wavelength.

- _____ 11. The hottest planet with a very thick atmosphere and evidence of volcanic activity is ____.

12. The spectrum of electromagnetic radiation is emitted from the north star, Polaris, which portion of the spectrum will reach the Earth first: A) infrared B) gamma C) red D) radio E) none of the above.

13. The distance from the earth to the sun on average is A) 93,000,000 miles, B) 2 light years, C) 6,000,000,000 miles D) 93,000 miles, E) None of the above.

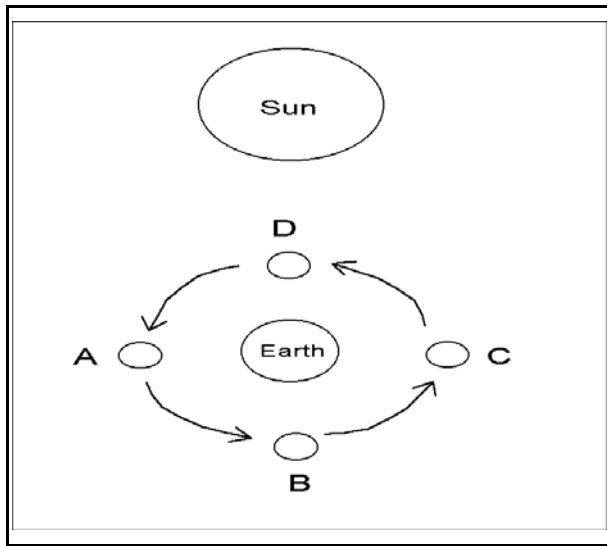


Figure 1.

Matching (questions 14, 15, 16). Match the term on the right to the question on the left. These questions refer to the diagram of the lunar cycle shown in Fig. 1 above.

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| 14. Lunar Position D | A. Full Moon |
| 15. Lunar Position B | B. Third Quarter |
| 16. Lunar Position A | C. New Moon |
| | D. First Quarter |

17. Blue light is composed of A) shorter wavelengths than red light, B) longer wavelengths than red light, C) the same wavelengths as red light, D) this is an unknown relationship to spectral scientists, E) Amalgamated and reflected white light.

18. The order of the planets from closest to farthest from the sun is A) Mercury, Venus, Mars, Earth, Saturn, Jupiter, Neptune, Uranus, Pluto; B) Venus, Mercury, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto; C) Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune, Pluto; D) Mercury, Mars, Venus, Earth, Jupiter, Uranus, Saturn, Neptune, Pluto.

19. The four terrestrial planets are A) denser than the other planets and composed mostly of gases, B) less dense than the other planets and composed of rock, C) the same density as the other planets and composed of gas and ice, D) denser and larger diameter than the other planets, E) none of the above.

20. A planet close to the earth with a severe greenhouse effect, temperatures to 500 degrees C, and a thick atmosphere is A) Mercury, B) Jupiter, C) Venus, D) Pluto, E) Mars

21. The Earth distance from the sun is constant throughout the year. A) True B) False

22. How long does it take for the moon to make one complete orbit about the earth? A) 24 hours, B) 28 days, C) 365 days, D) 88 days.

23. The Earth rotates counterclockwise when looking at the north pole. A) True B) False

24. How many years does it take light to travel from a star that is 1000 light years away? A) 500, B) 326, C) 3.26, D) 2000, E) none of the above.

25. The orbital period of the Earth's moon around the sun is:
A. 28 days B. 6 Months C. 365 Days D. 1 Earth Year E. C and D above

26. A full lunar cycle and rotational period of the moon are equal, approximately 28 days.
A) True B) False