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Motion Quiz

- 1. Planets follow an approximate orbit called the ..?
- a) Equator
- b) Eccentric
- c) Ecliptic
- 2. True or False? Planets exactly follow the ecliptic.
- a) True
- b) False

3. The Astronomical Unit measures the mean distance of Earth to the Sun. What approximate value is this..?

- a) 150,000,000 km
- b) 140,000 km
- c) 13,000 km

4. Which of these describes when the Earth is NEAREST the Sun ..?

- a) Aphelion
- b) Perihelion
- c) Astronomical Unit
- 5. When a planet appears to move backwards in the sky it is said to be in what state?
- a) Direct Motion
- b) Stationary Point
- c) Retrograde
- 6. Inferior Planets are nearer the Sun than Earth. Which of these are inferior planets?
- a) Mars and Mercury
- b) Mercury and Venus
- c) Venus and Mars

7. Superior Planets are planets outside Earth's orbit. Which of these are superior planets?

a) Mercury and Mars

b) Venus and Mars

c) Mars and Jupiter

8. When the Earth is between the Sun and a superior planet, the superior planet is said to be at..?

a) Conjunction

- b) Opposition
- c) Occultation

9. When a planet is on the opposite side of the Sun from the Earth, the planet is said to be at..?

a) Conjunction

b) Opposition

c) Occultation

10. The angle at which an inferior planet can be seen best is when it is at right angles to the Sun and Earth. The angle is called the angle of..?

- a) Elongation
- b) Opposition
- c) Conjunction

11. When an inferior planet passes in front of the Sun when seen from Earth it is said to be in..?

- a) Conjunction
- b) Occultation
- c) Transit

12. When a body such as the Moon or a planet orbits in front of another planet or star it is said to be doing what..?

a) Transiting

b) Occulting

c) Opposing

- 13. Copernicus published what theory ..?
- a) Big Bang
- b) Evolution
- c) Heliocentric

14. The Heliocentric Theory is the system where all objects orbit what body?

- a) The Sun
- b) The Earth
- c) The Solar System

15. Which of these was not observed by Galileo?

- a) Jupiter's Moons
- b) Phases of Venus
- c) Uranus
- d) Mountains and craters on the Moon

16. True or False? Galileo invented the telescope.

- a) True
- b) False

17. Kepler's First Law says that all body's orbit each other in what kind of orbits?

- a) Circular
- b) Curved
- c) Elliptical

18. Kepler's second law states...

- a) Planets move faster the nearer they are to the Sun
- b) There is a relationship between the distance of a planet and the time it takes to orbit the Sun
- c) Planets move in elliptical orbits around the Sun.

19. Kepler's third law states...

- a) There is a relationship between the distance of a planet and the time it takes to orbit the Sun
- b) Planets move faster the nearer they are to the Sun.
- c) Planets move in elliptical orbits around the Sun.

20. Using the inverse square law, if planet A is twice as far away from the Sun as Planet B, how much less light does it receive?

a) Twice

b) Four times

c) Eight times

21. Precession is ..?

- a) A fancy waltz on Strictly Come Dancing
- b) When the economy isn't good
- c) The effect of a wobble in the Earth's axis

22. How does precession effect astronomy observations?

- a) The celestial pole moves.
- b) Stars right ascension and declination have to be replotted every 50 years.
- c) Ancient monuments pointing to fixed stars may become out of date.

23. A circle of precession is approximately how long?

- a) 3,000 years
- b) 12,500 years
- c) 26,000 years

24. Which of these contribute to changes on Earth's axial tilt?

- a) The Earth has an elliptical orbit?
- b) Earth is not a perfect sphere and is an oblate spheroid, it is slightly wider at the equator
- c) The Sun and Moon have a gravitational influence on Earth

Answers

- 1. (c)
- 2. (b)
- 3. (a)
- 4. (b)
- 5. (c)
- 6. (b)
- 7. (c)
- 8. (b)
- 9. (a)
- 10. (a)
- 11. (c)
- 12. (a)
- 13. (c)
- 14. (a)
- 15. (c)
- 16. (b)
- 17. (c)
- 18. (a)
- 19. (a)
- 20. (b)
- 21. (c)
- 22. (a) (b) (c)
- 23. (c)
- 24. (a) (b) (c)