

QUIZ study guide: THE MOON, THE SEASONS

NAME KEY

PER \_\_\_\_\_

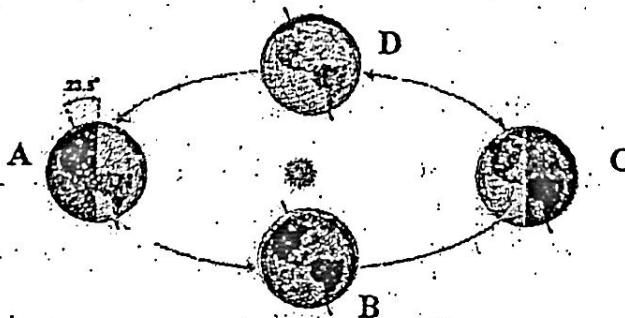
1. DIRECT is the angle of incoming solar radiation that will produce highly concentrated rays.
2. INDIRECT is the angle of incoming solar radiation that will cause the sun's rays to be spread out.
3. WINTER SOLSTICE is the day with the fewest hours of daylight.
4. SUMMER SOLSTICE is the day with the fewest hours of darkness.
5. SUMMER is the season we experience in the northern hemisphere when direct rays of the sun fall on the tropic of cancer.
6. WINTER is the season we experience in the northern hemisphere when direct rays of the sun fall on the tropic of capricorn.
7. AXIS is the imaginary line around which the earth rotates.
8. EQUATOR is the imaginary line that receives direct sunlight during spring and autumn.
9. WINTER is the season in which the Earth is closest to the sun
10. WINTER SOLSTICE is the first day of winter
11. VERNAL EQUINOX is the first day of spring
12. SUMMER SOLSTICE is the first day of summer
13. AUTUMNAL EQUINOX is the first day of autumn
14. NORTHERN is the hemisphere that we live in

15. BRIEFLY EXPLAIN THE 2 REASONS THAT THE EARTH EXPERIENCES SEASONS.

A) TILTED AXIS - ALWAYS IN SAME DIRECTION IN SPACE; SOMETIMES TOWARDS SUN, SOMETIMES AWAY

B) TOWARDS SUN = DIRECT SUNLIGHT = SUMMER; AWAY = INDIRECT = WINTER

16. STUDY THE DIAGRAM, THEN IN THE BLANKS THAT FOLLOW IDENTIFY THE SEASON EXPERIENCED IN THE NORTHERN HEMISPHERE WHEN THE EARTH IS IN POSITIONS A-D RELATIVE TO THE SUN.



A. WINTER

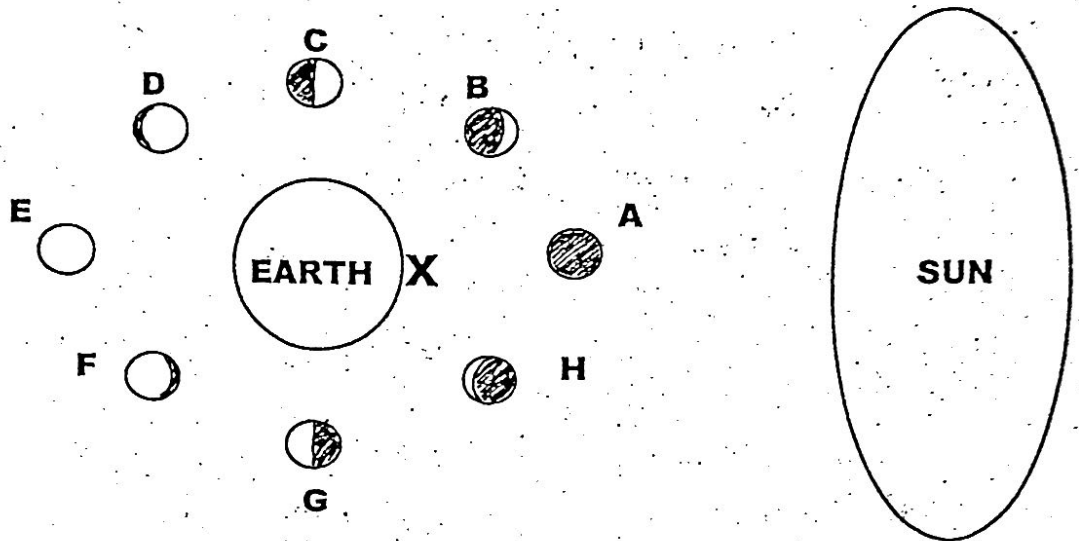
B. SPRING

C. SUMMER

D. FALL

26. INDICATE THE PHASE OF THE MOON IN THE BLANKS BELOW THE DIAGRAM. INCLUDE WAXING OR WANING WHERE APPROPRIATE.

27. SHADE IN EACH ILLUSTRATION OF THE MOON TO INDICATE HOW IT WOULD APPEAR ON EARTH WHEN VIEWED DURING THAT PARTICULAR PHASE.



- A. NEW MOON
- B. WAXING CRESCENT
- C. 1ST QUARTER
- D. WAXING GIBBOUS
- E. FULL MOON
- F. WANING GIBBOUS
- G. LAST QUARTER (or 3RD Q.)
- H. WANING CRESCENT

28. C, G which position(s) of the moon would produce low tides at position X?  
(PROVIDE LETTERS)

29. A, E which position(s) of the moon would produce high tides at position X?  
(PROVIDE LETTERS)

30. A (NEW) which PHASE(S) of the moon would produce A SOLAR ECLIPSE?

31. E (FULL) which PHASE(S) of the moon would produce A LUNAR ECLIPSE?

32. C, G (1/4 MOONS) which position(s) of the moon would produce NEAP tides?

33. A, E (NEW, FULL) which position(s) of the moon would produce SPRING tides?