

Earth-Moon-Sun System Test Review Worksheet

Mr. Trulsson (January 28, 2008)

This worksheet will be checked for a formative grade about midway through class on January 29, 2008. Hint: Most of the answers to these questions are contained in the Earth Seasons Quiz and Earth-Moon System Quiz.

1. On what day is the Earth closest to the Sun? _____
2. On what day is the Earth farthest from the Sun? _____
3. What is the approximate average distance from the Earth to the Sun? _____
4. What is the approximate diameter of the Earth? _____
5. What is the Earth doing when it revolves? _____
6. What is the Earth doing when it rotates? _____
7. What is the Earth's period of rotation? _____
8. What is the Earth's period of revolution? _____
9. In what direction, when viewed from the North Pole, does the Earth rotate? _____
10. In what direction, when viewed from the North Pole, does the Earth revolve? _____
11. Why does the Earth have seasons? _____

12. What is the tilt of the Earth's axis (as compared to the Sun's axis)? _____
13. What is the latitude of the Tropic of Cancer? _____
14. What is the latitude of the Tropic of Capricorn? _____
15. What is the imaginary line around which the Earth spins called? _____
16. State the dates when spring, summer, fall and winter officially begin in the Northern Hemisphere:
Spring: _____ Summer: _____ Fall: _____ Winter: _____
17. On what days of the year is the Sun directly over the Equator? _____
18. On what day of the year is the Sun directly over the Tropic of Cancer? _____
19. When does the summer solstice occur in the Northern Hemisphere? _____
20. When does the winter solstice occur in the Northern Hemisphere? _____
21. In the Northern Hemisphere, what day has the shortest period of daylight and longest period of darkness? _____
22. In the Northern Hemisphere, what day has the longest period of daylight and shortest period of darkness? _____
23. When are there 12 hours of daylight and 12 hours of darkness everywhere on Earth (except the poles)? _____
24. In Dallas, in what direction does the Sun rise on March 21st? _____
25. In Dallas, in what direction does the Sun rise on June 21st? _____
26. In Dallas, in what direction does the Sun rise on December 21st? _____
27. Where on Earth is there the greatest difference in daylight hours between summer and winter?

28. Where on Earth is there the least difference in daylight hours between summer and winter?

29. How long does it take for the Moon to complete one cycle of lunar phases, from one New Moon to the next? _____
30. How long does it take for the Moon to revolve once around the Earth? _____
31. How long does it take for the Moon to rotate once on its axis? _____
32. As viewed from above the North Pole, in what direction does the Moon rotate and revolve?

33. What kind of eclipse occurs when the moon casts a shadow on the Earth? _____
34. What kind of eclipse occurs when the Earth casts a shadow on the Moon? _____
35. What is the area of total eclipse called? _____
36. What is the area of partial eclipse called? _____
37. During what years did U.S. astronauts actually walk on the Moon? _____
38. What is the primary cause of ocean tides? _____
39. Which kind of tide has the biggest range between high and low tides? _____
40. Which kind of tide has the smallest range between high and low tides? _____
41. What kind of tide occurs during a 1st Quarter and 3rd Quarter Moon? _____
42. What kind of tide occurs during a Full Moon and New Moon? _____
43. List each of the eight moon phases in order, and complete a flow map diagram of each, shading the shadow areas and leaving the lit areas white. Indicate the location of the Sun. Bonus: State the rising time for each of the Moon Phases in the inner blanks.

