

Earth in Space Review

1. Define rotation and revolution.
2. What do rotation and revolution cause on Earth?
3. What things cause the seasons to occur on the Earth?
4. In what general direction does the Earth rotate, as seen from the North pole?
5. What is the tilt of the Earth's axis?
6. Explain what the Tropic of Cancer, the Tropic of Capricorn and the equator have to do with the seasons.
7. If it is winter in Carrollton, what season is Australia experiencing? Why?
8. Does our distance from the Sun affect the seasons in any way? Why or why not? In which season are we actually closest to the Sun?
9. Define the following: Summer Solstice, Winter Solstice, Fall Equinox, Spring Equinox.
10. In what general direction does the Earth orbit the Sun (as seen from the North Pole)?
11. Draw a diagram of the Earth, Moon and Sun showing the Moon phases during full revolution of the Moon. Make sure to draw the shadow on both the Earth and the Moon, and label all Moon phases.
12. Does the moon rotate? How does this affect how we see the moon?
13. How long does the Moon take to revolve around the Earth? How long does the Moon take to travel from Full moon to Full moon? Are these numbers different? If they are, why?
14. During which phase would the Earth receive the most reflected light from the Sun?
15. If a New moon occurred on January 14th, on which date would you expect to see a 3rd Quarter moon? Waning crescent?
16. What is a tide? What generally causes tides?
17. How often do high and low tides happen on Earth?
18. What are Spring Tides and Neap tides?
19. How often do Spring Tides happen on Earth? Neap Tides?
20. What happens to the daily tides as the Moon changes from New moon to 1st Quarter? From 1st Quarter to Full moon?

NOTE: Can you draw the Sun, Earth, Moon relationships with phases and tides?