

Name \_\_\_\_\_

Date \_\_\_\_\_

Astronomy Test Study Guide

Block \_\_\_\_\_

**Intro to Astronomy**

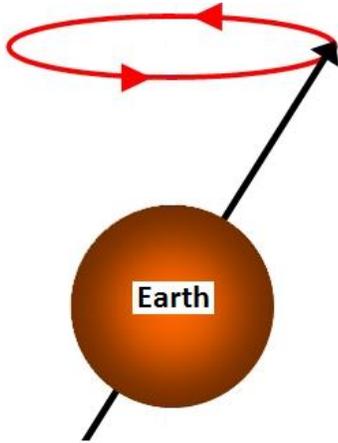
1. The theory of how the Universe was formed is called \_\_\_\_\_.
2. The Universe was formed about \_\_\_\_\_ years ago.
3. The best form of evidence to support the Big Bang Theory is known as \_\_\_\_\_.
4. Explain what a red shift means.
  
5. Objects that are moving AWAY from us give off a \_\_\_\_\_ light, and objects that are moving TOWARD us give off a \_\_\_\_\_ light.
6. The Earth is part of what galaxy? \_\_\_\_\_
7. How did our solar system form? (HINT- it was NOT the Big bang Theory)
  
8. What are Kepler's three Laws of Planetary Motion? Explain them in YOUR OWN WORDS!!
  - 1.)
  - 2.)
  - 3.)
9. List the following three terms in order from LARGEST to SMALLEST – galaxy, universe, solar system  
\_\_\_\_\_
10. When the Earth is closer to the Sun it moves \_\_\_\_\_, and when the Earth is farther from the Sun it moves \_\_\_\_\_.
11. Why? (refer to question #10) \_\_\_\_\_
12. How does the Sun (and all other stars) produce their energy? \_\_\_\_\_
13. What are the 3 ways the Earth moves?
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_

14. List the planets IN ORDER starting at the Sun

15. The Earth \_\_\_\_\_ on it's axis, which is tilted at an angle of \_\_\_\_\_.

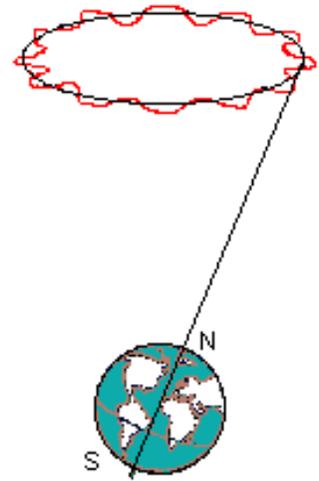
16. We have \_\_\_\_\_ and \_\_\_\_\_ because of the Earth's rotation.

17. The Earth takes \_\_\_\_\_ days to revolve around the Sun.



18. The picture to the left represents \_\_\_\_\_.

Explain what precession means.

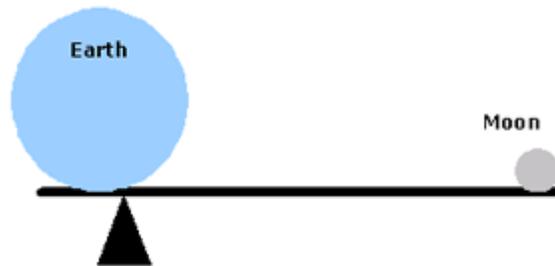


19. The picture to the right represents \_\_\_\_\_.

Explain what nutation means.

20. The triangle in the picture below shows the \_\_\_\_\_, the place between two objects where they balance each other out.

Explain what barycenter means.



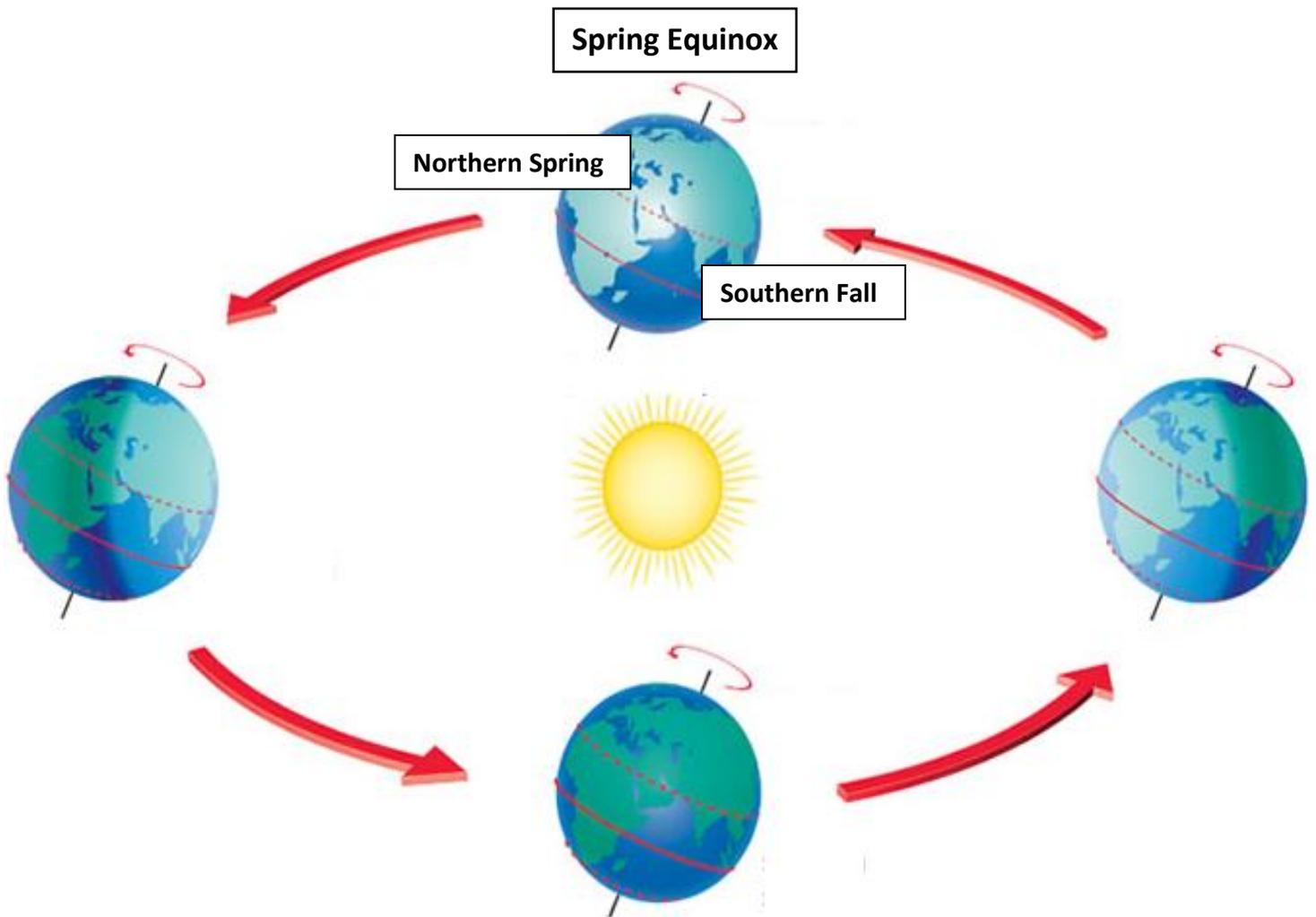
21. \_\_\_\_\_ puts things TOGETHER, while \_\_\_\_\_ breaks things APART.

## Reasons for the Seasons

1. Does the distance from the Sun determine the season? \_\_\_\_\_
2. In the space below draw and label the Earth and Sun in **APHELION** and **PERIHELION**

3. What are the 2 reasons for the seasons? \_\_\_\_\_ and \_\_\_\_\_

4. On the diagram of the Earth in orbit label EACH globe with its season title AND tell the season in the northern hemisphere AND the southern hemisphere. **The top globe is done for you AS AN EXAMPLE!!**



## The Sun

1. The \_\_\_\_\_ of the Sun's rays determine their intensity.
2. The closer to the EQUATOR the more \_\_\_\_\_ the heat, the closer to the POLES the less \_\_\_\_\_ the heat.
3. What are the 3 global climate zones?
4. What two things does the climate of the region determine about it?
5. What two things determine what kinds of crops will grow in an area?
6. What two parts of the water cycle would stop without the Sun?
7. What are the two steps in how ozone is created?
  1. \_\_\_\_\_
  2. \_\_\_\_\_
8. Without an ozone layer we are more likely to suffer from what three things?
9. What is photosynthesis?
10. What two things does photosynthesis provide for us? \_\_\_\_\_ and \_\_\_\_\_
11. Every living thing needs \_\_\_\_\_ to survive.
12. What is the difference between a **PRODUCER** and a **CONSUMER**? **GIVE 2 EXAMPLES OF EACH!!**
13. The Sun contains \_\_\_\_\_ of all matter in our solar system.
14. What is the relationship between an objects size and its gravitational pull?