

Name: \_\_\_\_\_

Date: \_\_\_\_\_  
7.1 | The Earth's Role in the Solar System

● The universe is made of \_\_\_\_\_ which are made of many \_\_\_\_\_. Some stars have planetary systems similar to our solar system. Earth is a \_\_\_\_\_ planet of one particular star (our sun)

● Three ways in which the Earth moves:

● The Earth:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

● Rotates = \_\_\_\_\_.

● The earth makes \_\_\_\_\_.

● The Earth's axis is tilted at \_\_\_\_\_ degrees

● This axis always points toward the \_\_\_\_\_.

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

● Draw a picture below of the Earth tilted on its axis:

● The Earth also \_\_\_\_\_ around the sun in an \_\_\_\_\_ orbit.

● The earth makes \_\_\_\_\_ around the sun every \_\_\_\_\_.

● 365 days = 1 year

Word	Definition	Drawing	How would you act it out?
Kepler's First Law of Planetary Motion			
Kepler's Second Law of Planetary Motion			

Kepler's Third Law of Planetary Motion			
Precession			
Nutation			
Barycenter			

**Application and Critical Thinking**

1. In degrees, what is the tilt of the Earth?
2. Summarize and explain all 3 of Kepler's laws of planetary motion into one or two sentences.
3. How does precession affect the Earth's rotation and revolution?
4. Explain in your own words what nutation is.
5. Based on the concept of barycenter, explain the evolutionary relationship between the sun and earth.