

**Phases of the Moon**

1. Draw what the phases of the moon look like from each perspective.

<b>Phase of the Moon</b>	<b>Viewed from Earth</b>	<b>Viewed from Space (above north pole)</b>	<b>With respect to the Sun</b>
New Moon			
Waxing Crescent			
First Quarter			
Waxing Gibbous			
Full Moon			
Waning Gibbous			
Third Quarter			
Waning Crescent			

**Tides**

2. Complete the table

Name of tide	Position of Earth/Moon/Sun	Phases of Moon during which tide occurs	Height of tide

3. What causes tides? Be sure to include the following: spring tide, neap tide, related lunar angles, related moon phases, water level.

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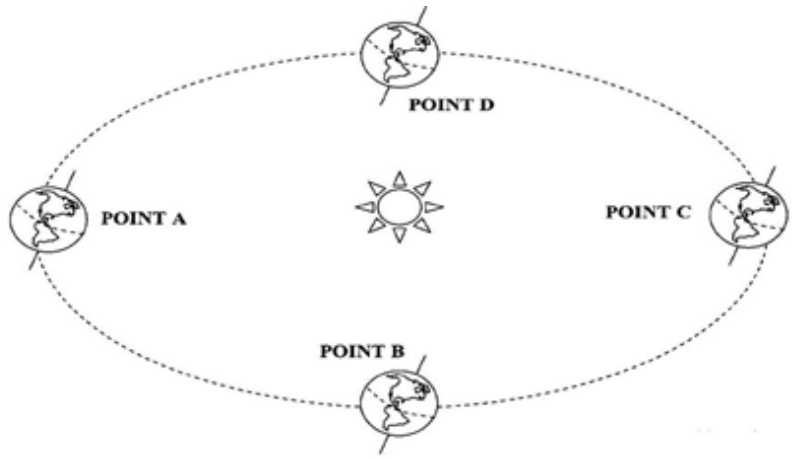
**Eclipses**

4. Complete the table.

Type of Eclipse	Draw where Earth, Sun, and Moon in space during this eclipse	What does the moon look like during this eclipse?

5. Important terms to know: penumbra, umbra

Seasons:



6. Complete the table:

Point	What season is it?	Why is it that season? Be specific!
A		
B		
C		
D		

7. Describe how the tilt of the Earth affects the amount of sunlight received at the poles and equator during both solstices and both equinoxes.

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8. Why was Galileo important to the study of astronomy?

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## Semester 2 Study Guide

9. Discuss the arrangement of objects in the universe from least complex to most complex.

Planet \_\_\_\_\_

Star \_\_\_\_\_

Solar system \_\_\_\_\_

Nebula \_\_\_\_\_

Galaxy \_\_\_\_\_

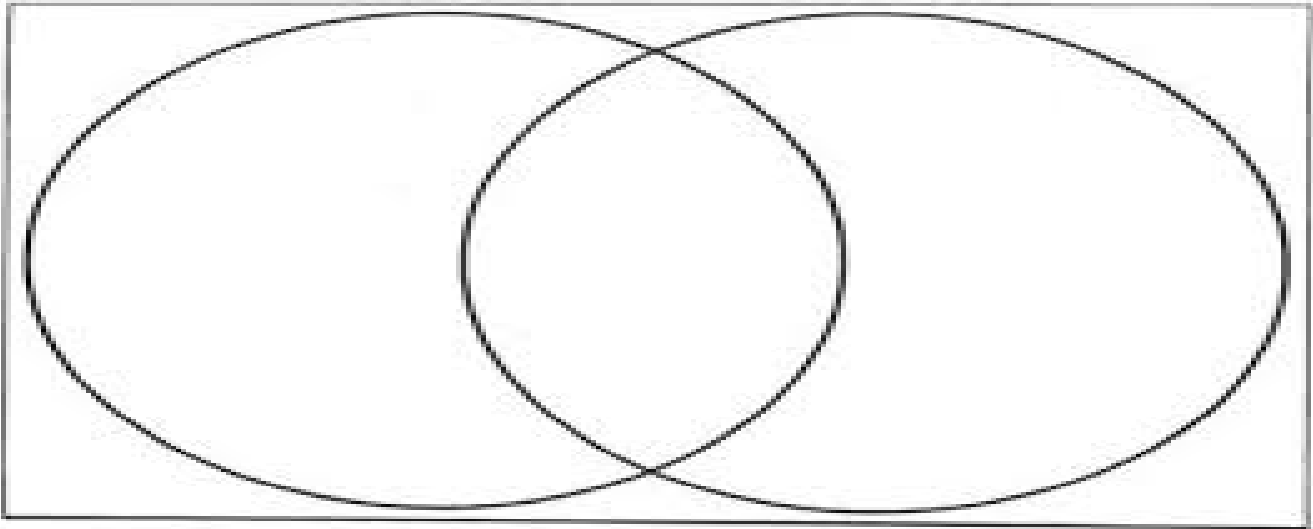
Universe \_\_\_\_\_

### **Constellations**

10. Complete the table.

Constellation Name	Draw the constellation	What season(s) can we see this constellation in the northern hemisphere?
Ursa Major		
Orion		
Cygnus		
Scorpius		
Cassiopeia		

**Ecology**



11. Compare and contrast a food chain and food web in this Venn diagram:

12. Describe how competition, predator/prey relationships, limiting factors, niches, and carrying capacity affect ecosystems. How do they affect each other?

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13. Identify and explain an example of a native and non-native species in Arizona. Describe the effects of the invasive species in the ecosystem.

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14. What actions can reduce soil erosion?

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**Semester 2 Study Guide**

15. How does urbanization affect the environment?

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16. What was the book *Silent Spring* by Rachel Carson about and why was it important?

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