Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_ **Astronomy Honors Questions**

\_\_\_\_\_ Final Score out of 30 Points Due: Friday September 12, 2014

Directions: Answer each question using **complete sentences on a separate sheet of paper**. I expect multiple sentences or pictures with labels to fully answer the questions. This will be a *formal grade*.

1. How does the sun produce energy? Be specific! How does it travel to earth? (2 points)

2. What protects Earth from dangerous solar winds, solar radiation, cosmic rays, X rays and some electromagnetic waves? Describe in full detail the two different types of protection and how they are different. (3 points)

3. Compare and contrast the meaning of Equinox and Solstice. (2 points)

4. Explain what causes seasons on Earth. Incorporate how the northern and southern hemispheres are affected differently by seasons. (3 points)

5. Is Earth’s orbit a perfect circle? Explain why or why not with scientific reasoning. (2 points)

6. By incorporating the Big Bang Theory, explain the hierarchy of the universe. Give 2 examples. (2 points)

7. Make two drawings to explain the *significant* difference between Rotation & Revolution. What is the relationship between these terms? (4 points)

8. Predict what earth would look like if the Rotation stopped all together? Briefly explain why. (2 pts)

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_ **Astronomy Honors Questions**

\_\_\_\_\_ Final Score out of 30 Points Due: Friday September 12, 2014

Directions: Answer each question using **complete sentences on a separate sheet of paper**. I expect multiple sentences or pictures with labels to fully answer the questions. This will be a *formal grade*.

1. How does the sun produce energy? Be specific! How does it travel to earth? (2 points)

2. What protects Earth from dangerous solar winds, solar radiation, cosmic rays, X rays and some electromagnetic waves? Describe in full detail the two different types of protection and how they are different. (3 points)

3. Compare and contrast the meaning of Equinox and Solstice. (2 points)

4. Explain what causes seasons on Earth. Incorporate how the northern and southern hemispheres are affected differently by seasons. (3 points)

5. Is Earth’s orbit a perfect circle? Explain why or why not with scientific reasoning. (2 points)

6. By incorporating the Big Bang Theory, explain the hierarchy of the universe. Give 2 examples. (2 points)

7. Make two drawings to explain the *significant* difference between Rotation & Revolution. What is the relationship between these terms? (4 points)

8. Predict what earth would look like if the Rotation stopped all together? Briefly explain why. (2 pts)