

All About the Sun

Geology

Mr. Traeger

Name: _____ Period: _____ Date: _____

Part 1: Drawing the Sun

1. **Draw** the sun with its component layers as seen in the diagram on page 573 in your textbook. Draw it to SCALE with the data given. Label all of the temperatures for each layer. Do this in the space below.

How do we know that the Sun has layers? Any ideas???

Part 2: Describing Each Layer of the Sun

Write a description of each layer of the sun below. Consult your packet and the textbook page 573.

1. The Core:

2. The Radiative Zone:

3. The Convection Layer (Zone):

4. The Photosphere:

5. The Chromosphere:

6. The Corona

Part 3: Additional Questions

1. How was the sun and the solar system formed? See pages 70-71 in your book for details about the Nebular Hypothesis.

2. How big is the sun in terms of radius, mass and volume? Compare these values to the Earth's.

Body	Radius (r)	Mass	Volume ($\frac{4}{3}\pi r^3$)
Sun			
Earth			

3. How far away (average) from Earth is the sun in kilometers?

4. What is an astronomical unit? How does it compare to the value found in number 3?

5. What gases is the sun made from?

6. How old is the sun?

7. How does the sun generate its energy? Describe the process of nuclear fusion.

8. What is the constant balance being maintained in the sun? In other words, why doesn't the sun grow larger or become smaller over time?

