

Homework #9  
AS101 Summer 2006  
Dr. Withers

GRADE SHEET

Assigned: 2006.06.13  
Due: 2006.06.14, start of class

1) Read Chapter 9

2) Purpose: Understand why different planets have different geological histories.  
The most important factor that affects a planet's geological history is:

- A) Thickness of its atmosphere
- B) Number of moons
- C) Distance from the Sun
- D) Planetary size

D) Planetary size

3) Purpose: Think about the four major geological processes

Which of the four major geological processes discussed in class is actually a collection of different, but related, processes?

Erosion

4) Purpose: Understand how the effects of volcanism differ between the planets  
The surfaces of which of these bodies show evidence for past volcanic activity?  
(Moon, Mercury, Mars, Venus, Earth)

All of them. Maria, or volcanic plains, on the Moon. Volcanic plains on Mercury.  
Olympus Mons on Mars. Lava flows on Venus. Volcanoes (eg Mt St Helens) on Earth

5) Purpose: Understand plate tectonics.

Which of the following is not a consequence of plate tectonics?

- A) Similarities between fossils, rock types, and shorelines in Africa and South America
- B) Chemical differences between seafloor crust and continental crust
- C) The Grand Canyon in Arizona
- D) Earth is the only planet where stratovolcanoes are common

C) The Grand Canyon in Arizona