## **Open Book Test on Lunar Geology**

#### Based on the article: "Geologic Processes On The Moon"

[http://www.moonsociety.org/info/LunarGeology.pdf] [http://www.moonsociety.org/info/LunarGeology.html] [http://otterdad.dynip.com/als/page3.html]

NOTE: you may complete this Test as you read the article.

### **Ten Multiple Choice Questions**

CIRCLE letter of correct answer [A, B, or C]

## **1.** Craters result from meteorites that strike the lunar surface at velocities of:

- A. a few hundred feet per second
- B. tens of kilometers per second
- C. hundreds of kilometers per second

#### 2. Simple craters are:

- A. bowl shaped craters
- B. have central peaks and terraced rims
- C. are surrounded by multiple rings

## **3.** Central peaks in complex craters are most likely due to:

A. magma seeping up subsurface faults produced by the impact

B. rebound of the bedrock following compression from the impact

C. the flow of impact melt from the side walls of the crater

#### 4. The regolith was formed by:

A. massive impacts which deeply fractured the bedrock

B. spatter from lava flowing along rilles

C. a steady rain of micrometeorite impacts

## 5. Landslides on the moon are generally the result of:

A. shock waves from meteorite impacts

- B. tectonic plate movement
- C. the collapse of sinuous rilles

# 6. Lava beds most often occur in basins because:

A. basins produce local magnetic anomalies

B. basin impacts produced sufficient heat to produce local melts of lava

C. basin impacts deeply fracture the bedrock

# 7. Lunar lava often travels long distances before emplacing because:

- A. the lunar environment is so cold
- B. the lava is attains high velocities coming off
- steep sided lunar volcanoes
- C. lunar lava is thin and runny

# 8. Lunar domes (volcanoes) are characterized by:

A. having smooth, low slopes

B. being large structures, often spanning over 60 km in diameter

C. havixng large calderas (summit craters), often spanning 10 km in diameter

#### 9. Dark mantling areas most likely represent:

- A. shocked rock from impact events
- B. pooling in vast lava lakes
- C. the products of fire fountianing

# **10.** The majority of seismic activity on the moon is due to:

A. tidal forces generated by earth's gravitational field

B. shifting of small plates in the moon's polar region

C. the rapid ascent of lava along basin created conduits

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