

PTYS/ASTR 206 – Section 3 – In-Class Activity 1 – Assigned 2/10/09

NAME: _____ (PRINT CLEARLY)

Question 1: Sketch a shield volcano and a stratovolcano side by side at the same scale.

Question 2: Heat within the Earth is currently being generated by (circle one):

- a) Radioactivity
- b) Burning of buried oil and gas
- c) Nuclear fusion of hydrogen atoms
- d) There's no new heat being generated within the Earth

Question 3: A geologist digs a large trench through a volcano and sees alternating layers of ash and volcanic rock. What kind of volcano is this? What does that mean for the composition of the volcanic rock?

Question 4: We don't have any seismic instruments on Mars, why are we pretty sure that the core is completely (or almost completely) solid? Why has Mars cooled off so much more than the Earth?

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Question 5: (Save this for the last 5 minutes) – Fast forward the Earth a few more billion years into the future, what will happen to the core? What effects will that have at the surface?