

Exam 1

1. (15 pts. total) Fill in the blanks! Use one letter per blank and don't skip any blanks. Use the letters that I've included as clues. When you're done, the *first letters of each answer*, read downwards, will give you the answer to this question:

What's the full name of the Danish geophysicist who used seismic waves to discover the Earth's inner core?

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___ _ **H** _

___ _ _ _ _ **C** _ _ _ _ _

___ _ _ **M** _ _ _

___ **O**

The Mercalli scale measures the ___ of a quake.

Two words: A cloud of hot gas and ash that rolls rapidly down the side of a volcano

Cirques, horns, moraines, and U-shaped valleys are all created by ___.

The point on the Earth's surface that's directly above an earthquake's focus

Fine windblown dust

Rhyolite, andesite, and basalt are all ___.

Block of crust thrust upwards, often forming a mountain range in places like Death Valley

Boundary between the crust and the mantle

Mount Magazine is an elongated upward fold in the crust, also known as a/an ___.

Fault in which the footwall is pushed up relative to the hanging wall

Have you ever had a better Earth Science class than this, yes or no?

ANSWER: They've got to do with regular, gradual shifts in the Earth's orbit and revolution. Being a bit rushed right now, I think I'm just going to say "look it up!"

7. The Ruby Mountains of northern Nevada were covered with ice until recently. The Spring Mountains, outside Las Vegas, are equally tall and majestic, but they never were ice-covered. However, both are part of the Basin and Range topography of the western United States. Suppose that you could visit both of them. What would the two mountain ranges have in common? And how might they be different?

ANSWER: The Ruby Mountains would be expected to have U-shaped valleys, and possibly hanging valleys, glacial cirques, horns, and maybe moraines; the Spring Mts. wouldn't have those. But they're both big blocks of crust that have been uplifted and tilted (i.e. horsts).

SPECIAL SECRET BONUS QUESTION: What's the specific name for the bluish-brown variety of granite that can be seen alongside Interstate 530/US Highway 65-167, starting at mile marker 1 just south of Little Rock and continuing for a few miles southward?