

Geology 101, Fall 2007

Name:

**Assignment 1: Identifying minerals and reading maps**

*Due Monday, October 1 at noon in class*

**Define/distinguish** the following terms:

topographic map versus geologic map

the Quaternary Period versus the Tertiary Period

a contact between rock formations versus a fault

What is plate tectonics (note the spelling!)?

the lithosphere versus the asthenosphere

the crust versus the mantle

What is the second law of thermodynamics and what does it have to do with plate tectonics?

an intraplate hotspot versus a plate tectonic boundary

a subduction zone versus a spreading ridge (center)

a mineral versus a rock

a mineral's cleavage versus its crystal habit

Look up the **atomic symbol** for the following elements (for instance, the element carbon is symbolized by the letter "C"):

aluminum

argon

calcium

gold

hydrogen

iron

lead

magnesium

nickel

oxygen

potassium

sodium

silicon

silver

sulfur

titanium

uranium

Write the **name** of the ion next to its symbol and complete the symbol by showing the ion's **electrical charge**.

$\text{SiO}_4$

$\text{CO}_3$

S

O