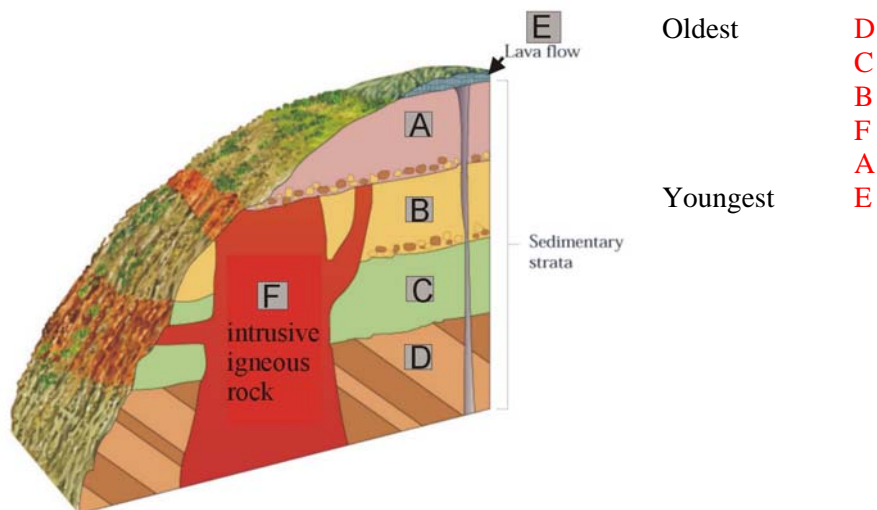


Geology and Art
Quiz 1

Name _____

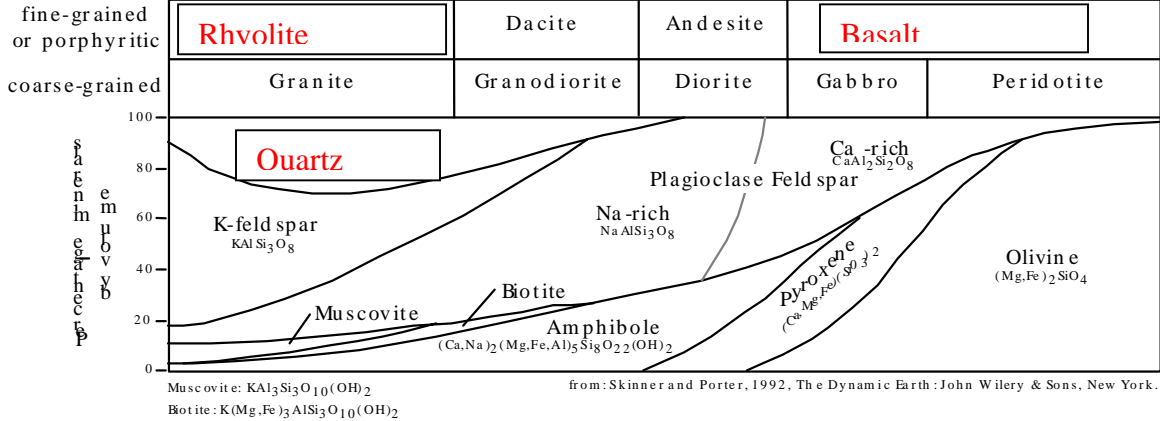
This quiz covers the lecture topics, field trips, and labs that we have had to date. The multiple-choice questions can have anywhere between 0 and 4 correct answers.

1. (3 pts) Put the labeled geologic units in order based on relative age (from oldest to most recent).



2. (2 pts) Name and describe one type of **unconformity**.
Disconformity: missing time
Angular Unconformity: tilted strata
Nonconformity: strata on crystalline rock
3. (2 pts) Which of the following can be used to determine the **relative** age of geologic units:
- (a) principle of stratigraphic superposition
 - (b) fossils
 - (c) radioactive decay
 - (d) cross-cutting features
4. (2 pts) Intrusive igneous rocks generally have:
- (a) aphanitic texture
 - (b) porphyritic texture
 - (c) phaneritic texture
 - (d) pyroclastic texture
5. (2 pts) Name and describe one type of **concordant** pluton.
Sill
Lacolith

6. (3 pts) Fill in the three missing terms (rocks and mineral) in the following diagram:



7. (2 pts) Andesitic magma can form from the partial (5-10%) melt of:

- (a) the mantle
- (b) granite
- (c) **basalt**
- (d) andesite

8. (2 pts) Chemical differentiation by fractional crystallization will cause a magma to:

- (a) **become increasingly rich in silica**
- (b) become increasingly depleted in silica
- (c) become increasingly rich in olivine
- (d) will not change the composition of the magma

9. (2 pts) What family of minerals are the most common in the Earth's crust?

Feldspar

10. (4 pts) Name a mineral and write its chemical composition.

11. (2pts) What property is used primarily to classify **clastic** sedimentary rocks?

Size of particles

12. (2 pts) What transport mechanism results in very poorly sorted clastic sedimentary rocks?

Glaciers

13. (2 pts) Approximately how long ago did the Missoula floods occur?

15,000 years ago

14. (2 pts) Geologists use the term "clay" in two ways, what are they?

Size fraction (clay size)

Mineral family