Field Guide Assignment

Rubric
Complete assignment submitted 3 pts
Images used to help explain ideas 2 pts
Assignment submitted as a low resolution pdf 1pt

Geology

Guiding Question: Why does the Coast range and the Cascade range run from North to South?

Geology (in 'Cascade/Olympic Natural History' pages 515–536, including sections in boxes)

Cascade Volcanoes

The Formation of Igneous Rock

1. What is plate tectonics and what are the different plate boundaries called? Describe the interactions going on at each type of plate boundary.
2. What type of plate boundary caused the formation of the Cascade Range?
   a. How was the coast range formed?
   b. How was the High Plateau formed?
3. All the rocks of the world are divided into three main categories. For each category describe how the rocks are created.
4. What is the difference between intrusive and extrusive igneous rocks both in how they are formed and how they look?
5. Igneous rock are further divided into three groups depending on the amount of silica found in the rock. Create a visual to identify what you would call a rock depending on two factors: % silica and intrusive or extrusive. (There are six names in total.)
3. What is viscosity?
   a. How does the silica content in lava change the viscosity?
   b. How does viscosity change the way a volcano looks?
6. Describe the 5 types of volcanoes from the text and give examples of each found in Oregon. Be sure to explain why they look the way they do. For example, why do Shield volcanoes have gently sloping sides?