**Metamorphic Rocks**

**How Metamorphic Rock Forms**

When enough heat and pressure is applied to a “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” rock, the rock becomes semi-molten or “putty-like”, allowing the   
  
molecules to move around and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, even   
  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Metamorphic rocks are often sorted into two categories:  
  
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  
  
**Foliation**  
 - When pressure is applied from just two opposite directions  
  
 (called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_), crystals and grains will   
  
 orient themselves \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the stress.

The heat and pressure for metamorphism can be caused in different ways…

**Regional Metamorphism**  
 - Heat and pressure are caused by the movement of  
  
 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and affect a large region.

e.g. The Rocky Mountains, the Alps

**Contact Metamorphism**

-Heat and pressure occur on a much smaller scale.

Metamorphic grade is a description of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is applied during metamorphism.  
**Examples:**

|  |  |
| --- | --- |
| **Parent Rock** | **Metamorphic Rock(s)** |
|  |  |
|  |  |
|  |  |
|  |  |

A problem: What do you think the geology of this area is like below the surface