**Igneous Intrusions and Relative Dating**

**A Refresher on Plutons**

A **pluton** is created when magma rises up from the mantle, “invades” an area, and hardens into solid igneous rock.

 - The hardened magma (i.e. the pluton) is an example of an

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 - The surrounding rock material is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 and is generally \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than the pluton.

**Tips for Relative Dating**

When magma contacts the country rock, two things happen:

The county rock gets “baked” and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
This is useful for distinguishing a lava flow from a sill.

The magma in contact with the country rock cools faster, so the outside of the pluton has smaller crystals than the inside.