Introduction to Relative Dating

What is Relative Dating?

**Absolute** Dating

 - Determining the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an event
 (i.e. when it took place).

**Relative** Dating:

 - Determining the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of a series of events.

 (what happened first, second, third, etc.)

 - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Definitions:**

 (plural: )

 - A section of sedimentary rock that is the *same throughout*.

 (e.g. a layer of sandstone).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 - A piece of older stratum embedded in a younger stratum.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 - The boundary between neighboring strata.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 - A missing amount of strata in a cross-section. Due to…

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Types of Unconformity**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Non-parallel layers above/below a contact
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
An erosional surface cut into a pluton
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Missing material between parallel layers.
Hard to detect – need to check for missing fossils.

**Principle of Original Horizontality**

**Principle of Superposition**

**Principle of Cross-cutting**

**Principle of Inclusion**