

### Lesson – Relative Dating

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1	INTELLIGENT
	UNDER 15 REQUIRES TEACHER ASSISTANCE
STRONG EARTH SCIENCE LANGUAGE, DETAILED DIAGRAMS, AND SUPER AWESOMENESS.	

- I can explain the difference between Relative & Absolute Dating
- I can describe original horizontality & law of superposition.
- I can differentiate between the intrusions & extrusions
- I can describe inclusions & veins

### Relative vs. Absolute Dating

**RELATIVE DATING**

- Determining the **AGE** of a rock or event by **COMPARING** it to the age of other rocks or events

**ABSOLUTE DATING**

- **ACTUAL AGE** of a rock or an event in years

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### Original Horizontality

- Sediments are **deposited** in **horizontal layers**, parallel to the surface of the earth

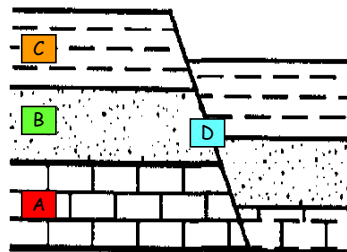
### Principle of Superposition

**YOUNGEST ROCK** is found on **TOP** & the rock age **INCREASES** with **DEPTH**

### Exceptions to Rule

- **FOLDED** rock layers & movement along **FAULTS** move older rock layers over younger layers

**YOUNGER** than the rocks in which they occur



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### INTRUSION

When **MAGMA** squeezes or melts into preexisting rocks & crystallizes

**CONTACT METAMORPHISM** has altered rock **ABOVE & BELOW** the igneous mass

**YOUNGER** than any rock it **CUTS THROUGH**

### EXTRUSION

Cooling & solidification of **LAVA** on Earth's surface

Rock layer **BENEATH** the igneous mass shows evidence of **CONTACT METAMORPHISM**

**YOUNGER** than any rock it **CUTS THROUGH**

The **symbol** for contact metamorphism is

**OLDEST**

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### INCLUSION

• Body of **OLDER** rock **WITHIN** an igneous rock and did not melt.

### VEINS

• **WATERY MINERAL SOLUTION** which fills a crack or permeable zone in rock

**TURQUOISE VEINS** within Sandstone

**YOUNGER** than the rock around it

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