

Class 6a: Introduction to landforms  
or  
What goes up must come down

# Landform processes

- “The summit of Mt. Everest is marine limestone”  
(McPhee)
- Tectonic forces (uplift)
- Gradational processes

# Landform processes

- *Geomorphology*
- What?
- Where?
- Why?
- So what?

How old is the Earth?

# Earth's layers: crust

- “Earth scientists are like dermatologists”

# Earth's layers: mantle

# Earth's layers: core

# Rock cycle

- What's a rock?
- What's a *mineral*?



# Igneous rocks

- “Made from fire”
- *Extrusive*:
- *Intrusive*: from cooled *magma*

# Sedimentary rocks

- Formed from sediment

# Metamorphic rocks

- Formed from igneous or sedimentary rocks

# Plate tectonics

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# Continental shields

- *Shields*: continental cores that haven't changed much

# Motion of the plates

- *Divergence*: plates moving apart
- *Transform*: slip-strike



# Motion of the plates

- *Convergence*: plates moving together
- Ocean-ocean
- Land-land collisions

# Motion of the plates

- Land-ocean

# Terranes

- *Terranes*: Bits of continents or islands "docking" with each other