Mechanical/Physical Weathering- when rock is broken down but isn't changing into something new. The rock is just breaking into smaller pieces

- Abrasion: when rock is being rubbed or bumped, corners falls off
- Exfoliation: where rock is relieving pressure by flaking off
- freeze/thaw: where water freezes in a crack in the rock, breaks rock, then melts
- Animal action: when animals dig in rocks, breaking them up

Chemical Weathering: Where a chem. Reaction happens that causes rock to change and break down.

-living organisms: plants weakening rocks at roots due to chemicals being released -rust: when oxygen reacts with iron

- -acid rain: weakens rocks
- water: weakens rocks
- Weathering= breaking down
- Erosion= moving, carrying, shifting
- (caused by wind, water, waves, ice)
- Deposition = dropped off, drops,
- deposits
- Add heat and pressure= metamorphic (goldilocks)
- Melting and cooling= igneous
- Intrusive igneous= formed inside crust (big crystals)
- Extrusive igneous= formed outside crust (small crystals)
- sedimentary= made of smaller rock pieces, made of sediments, cementation, compaction

SOIL= organic material 5%, rock materials 45%, water 25%, air 25%

decomposers= worms, fungi, bacteria

humus= dark organic matter that is good for the soil

Worms mix up most of the soil

Chemical

1)Acid Rain- water that is less than 7 pH falls and weakens rock

2)(Oxidation) Rust- Oxygen reacts with Iron, turns rock red, starts to break down and weathers easily

3) Living Organisms- plant roots release chemical enzymes that break down rock4) Water 5) Carbonic Acid

5 props. Of soil

- 1) Color how dark or light the soil is. The darker the soil, the more humus.
- Texture how the soil feels, determined by particle size. Gravel is biggest, then sand, then silt then clay. Clay is the smallest. Directly relates to moisture content.
- pH- how acidic or basic the soil is.
 1-6 acidic, 8-13 basic (alkaline) 7 is neutral.
- 4) Moisture how much water is in soil, determined by particle size.
 Gravel-least moisture, clay- most moisture.
- Fertility- how well the soil can support life (plants, animals, people, societies)

Plants won't grow in soils that are mostly clay bc too much water and not enough humus or air.

