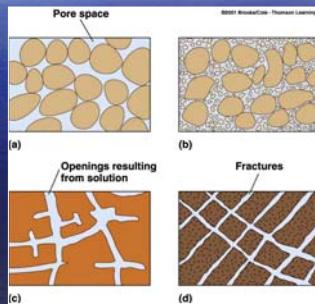


What Properties of Earth's Materials Allow Them to Absorb Water?

Porosity

- the percentage of a material's volume that is pore space



Permeability

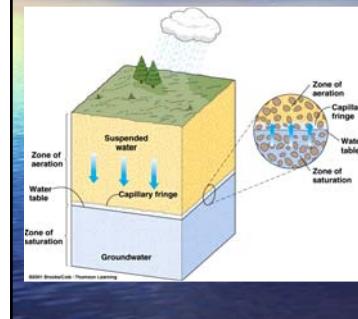
- the measure of the interconnectedness of pore spaces

Aquifer

- permeable layer that transports water

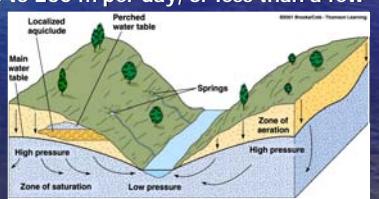
What is the Water Table?

- Zone of aeration**
 - pore spaces contain mostly air
- Zone of saturation**
 - pore spaces contain mostly water
- Water table**
 - the top of the zone of saturation



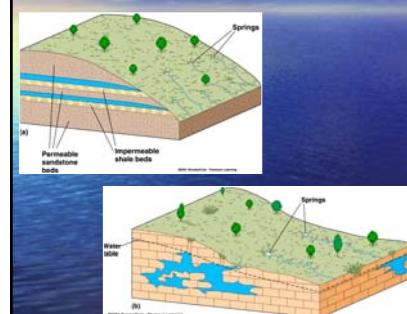
How Does Groundwater Move?

- Gravity moves groundwater, just as it does water in channels**
 - moves from areas of high pressure to areas of low pressure
 - may move up to 250 m per day, or less than a few cm/day



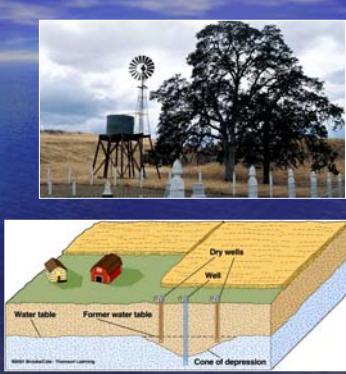
What Are Springs?

- Places where groundwater flows or seeps out of the ground**
 - when percolating water reaches the water table or impermeable layer, it flows laterally and may intersect the surface



What Are Water Wells?

- Water percolates into a drilled or dug hole when the zone of saturation is penetrated
 - pumping can create a cone of depression
 - lowering of the water table is a major problem in some areas



High Plains Aquifer

