

**Earth Science Lecture - Review for Test 1  
(Monday Sept 17th)**

**The Hydrologic Cycle**

hydrology, the Hydrologic Cycle, reservoirs, fluxes, precipitation, infiltration, runoff, evaporation, transpiration

- what are the major reservoirs in the Hydrologic Cycle?
- what are the major fluxes in the Hydrologic Cycle?
- what is the equation that 'balances' the Hydrologic cycle?

**Surface Water - Rivers and streams**

ultimate base level, runoff, mouth, drainage basin, channel, banks, lowland rivers, upland streams, load, bed load, suspended load, dissolved load, competence, capacity, intermittent stream, downcutting, V-shaped valleys, U-shaped valleys, perennial river, sidecutting, meander, floodplain, cut bank, point bar, oxbow lake

- what are the features associated with an upland stream?
- what are the features associated with a lowland river?
- how do meanders grow in size ?

**Groundwater**

groundwater, infiltration, water table, perched water table, unsaturated zone, saturated zone, permeability, porosity, artesian well, aquifer, aquitard, recharge area, karst topography, limestone, carbonic acid, caves, dripstone, stalactites, stalagmites, sinkholes, sinkhole lakes, geyser

- how does water flow underground?
- how does a perched water table form?
- how does an artesian well form?
- why is all natural surface water acidic ?
- how do you make a cave?
- how does karst topography form?
- how does a geyser form?

**Deserts and Dry Climates**

desert, steppe, subtropical desert, convection, rain shadow desert, polar desert, Basin and Range Topography, loess, sand dunes, ventifacts, desert deflation, flash flood, alluvial fans, playa lakes, playas, inselbergs, pediment

- how does wind affect: silt and clay particles; sand particles; gravels?
- where do the different types of deserts form?
- how does wind shape the land (topography) in a desert environment ?
- how does water shape the land in a desert environment ?
- what, eventually, will happen to all rain shadow deserts ?

**Shoreline Environment**

crest, trough, wavelength, wave base, wave break, surf, wave refraction, headland, bay, longshore currents, beach drift, beach, spit, baymouth bar, daily tides, high tide, low tide, monthly tides, spring tide, neap tide

- how is wave base and wave break water depth calculated
- know the processes of how wave refraction shapes the shoreline
- how to tell the direction of movement of longshore currents
- know what causes the daily tides
- know what causes the monthly tides and how they relate to the lunar phases