

Energy – Open vs. closed systems
 Free vs. Bounded
 Dynamic/ Steady state/ Potential

Weathering - Solution - Lava Cooling
 Volcanism / Diastrophism = open
 (Erosion of hillside & sedimentary transport in H2O)

Geoid tend to Equilibrium
 Isostasy vs. Eustasy

Energy balance in systems
 Humans use 40% of Earth Productivity
 (wind, tides, geothermal heat)
 26% of Evapotranspiration

Processing Rock, Cement, Placers, Diatomaceous, Earth
 Radioactive Power Plants

Power – Rate of doing work
 (Energy overtime) = kwh or horse power

Albedo refers to sunlight reflected from a surface
 30% reflected

Absorbed
 Evaporated

S R = 3000, Energy source on earth
 Heat, gravity, acceleration

Extraneous Energy – meteor / Asteroid etc.)

Humans concentrate energy

Solar Constant - Radiant Energy – Atmosphere – Greenhouse and Blanket Effect

Terrestrial gradients – latitude -Season - Grid

Altitude – 3.0 vs. 5.5/1000

Mt. Barrier & Deserts

Diurnal Variation

Blanket/ Greenhouse – Fog – Dew - Frost

Hydrologic cycle

Glacial Storage (180 – 250)

(20,000 yago) 425-450 ft lower.

(Saltation, Suspension, & Solution)

Gravity & Tides vs. Equilibrium

Coreolis Effect

Geothermal heat flow – 1 degree/69 mi (20 – 30 km)

Heat release, volcanoes, geysers, hot springs

Volcanism / Rock cycle

Mountain Building – Thermal & density energy