Earth Science Cheat Sheet

by Eunicornz via cheatography.com/33171/cs/10321/

Relative Age Dating

Principle of Superposition: comparison of dates

Principle of Lateral Continuity all rock formations thin out at the ends to have a lenticular shape

Relative Age:Uncomformities

Non-comfo-rmity	the boundary between igneous/m-etamorphic and sedimentary
Angular	part of the formation is tilted but it is covered by a flat deposit
discom formity	there is a gap in time between sedimentary layers

There are three types of unconf-ormities that you can observe in rock formations

Minerals vs Non-Minerals

Is it inorganic?	inorganic: not made of living things or the remains of living things
Does it occur naturally	naturally: forms and exists in nature
Is it a Crystalline Solid	A crystalline solid is whe its atoms are arranged inan orderly way
Consistent chem. comp.	for each atom of this, there are atom of this

If yes to all 4 questions, it is a mineral. Otherwise, it is not a mineral.

Silicates and Non-Silicates

Silicates

Silicone + Oxygen + fledspar, potassium, or sodium is a silicate

Feldspar is the most common case of silicates

96% of the Earth's crust is composed of Silicates	50% of the silicates are Feldspar and quartz

Non-silicates

non-silicates are basically the rest of the minerals that are not silicates

They make up the rest 4% of the Earth's crust

They are split into 6 groups

Carbonates	CO 3
Halides	Cl or F + Na,K, or Ca
Native elements	uncombined
Oxides	O + anything but Si
Sulfates	SO 4
Sulfides	S + I + anything else

Earthquakes

How earthq-uakes start:	stress builds up at fault to the point where it is *locked* when pressure gets too great, the rocks slip and create the earthquake
Elastic rebound	like a slinky, it deforms then settles back to its original spot

Seismic Waves

Earthquakes (cont)

Body Wave	travels through the middle of the bodies
P-waves	can go through solids, liquids, and gases and faster than S-waves
S-waves	can only go through solids and slower than P-waves
Surface Wave	travels along the surface of the body
Rayleigh Waves	elliptical rolling motions
Love Waves	side-to-side
Shadow zones	Parts of the Earth where body waves can't reach