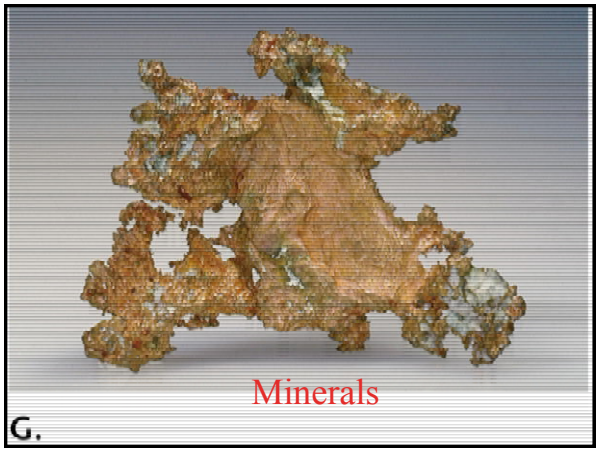
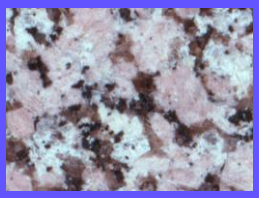


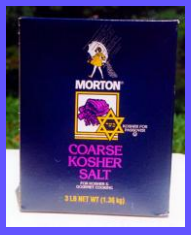
Rock vs. mineral

- Rock
  - Aggregate of minerals



Compounds

- Combinations of one or more elements



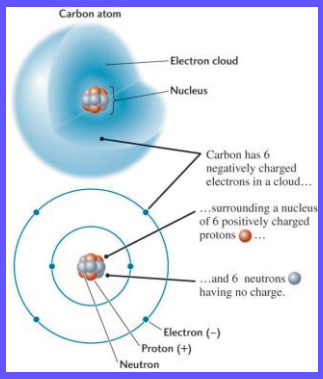
"Layperson" = salt

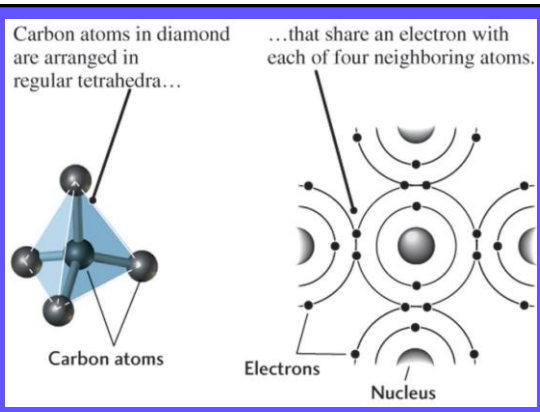
Chemist = NaCl (sodium chloride)

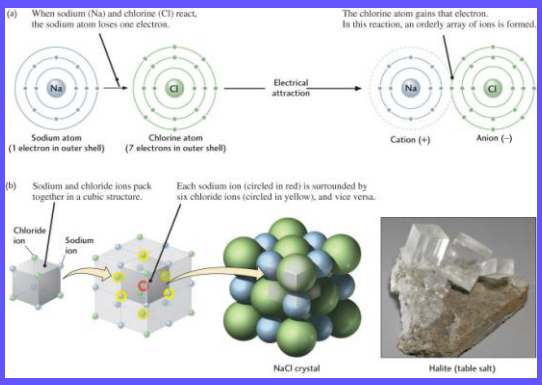
Geologist = Halite (mineral)

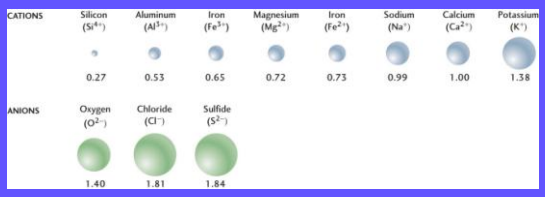
So what is a mineral?

- Solid
- Inorganic
- Natural
- Chemical composition
- Atoms ordered
  - Crystal lattice



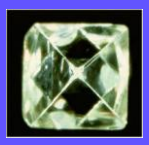




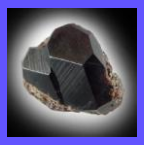


Crystals

Halite



Diamond

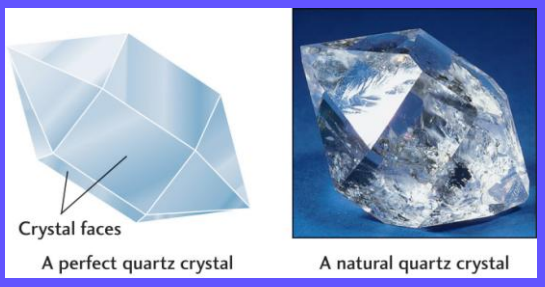


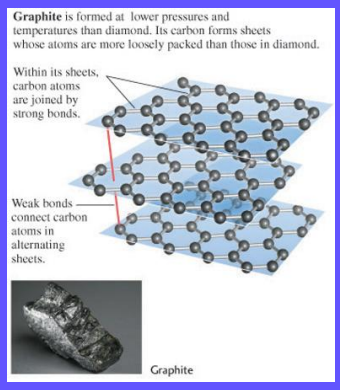
Staurolite

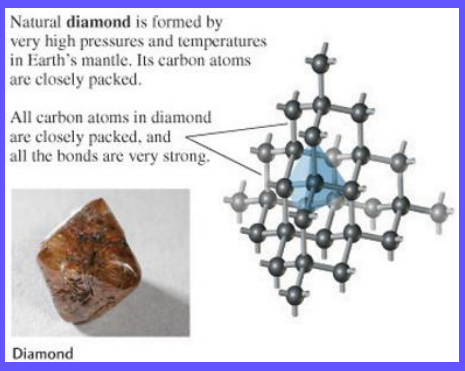
Quartz

Crystal power?

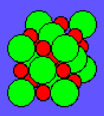
The Crystalline Crapper







Crystal structure

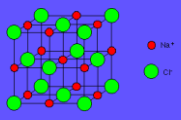


Na+

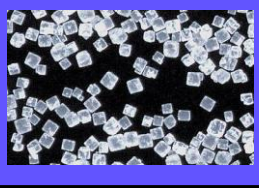
Cl-

Determined by the way the atoms are packed

Atoms pack as a cube…



So halite is cubic



What makes up minerals?

Abundant elements in continental crust

1) Silicon (Si)
2) Oxygen (O)
3) Aluminum (Al)
4) Iron (Fe)
5) Calcium (Ca)