

ROCKS & MINERALS

B DIVISION

A. Minerals

1. Definition
 - a. Naturally occurring
 - b. Inorganic
 - c. Solid
 - d. Narrow range of composition
 - e. Definite crystal structure
2. Organization
 - a. By composition
 - b. By crystal structure
3. Properties
 - a. Physical
 1. color
 2. luster
 3. cleavage
 4. fracture
 5. crystal form
 6. specific gravity
 7. hardness
 8. streak
 9. fluorescence
 10. tenacity
 11. other (optical, magnetic, taste, smell, feel)
 - b. Chemical
 1. Reaction with HCl
 2. Chemical weathering
4. Origins
5. Economic uses
 - a. Ores
 - b. Gems and art
 - c. Construction
 - d. Other

B. Rocks

1. Definition
2. Rock cycle
3. Igneous rocks
 - a. Origins
 1. Plutonic (intrusive)
 2. Volcanic (extrusive)
 - b. Occurrence
 - c. Melts
 - d. Texture
 - e. Composition
 - f. Large scale features
 1. Batholiths
 2. Stocks
 3. Sills
 4. Dikes
 5. Laccoliths

- 4. Sedimentary rocks
 - a. Origins
 - b. Occurrence
 - c. Clastic
 - 1. Formation of clastic rocks
 - a. Weathering
 - b. Erosion
 - c. Transport
 - d. Deposition
 - e. Lithification
 - 2. Texture
 - a. Rounding
 - b. Sorting
 - c. Grain size
 - 3. Sedimentary structures
 - a. Large scale
 - b. Small scale
 - d. Chemical
 - 1. Evaporites
 - 2. Travertine
 - e. Organic
 - 1. Bioclastics
 - 2. Coal
- 5. Metamorphic rocks
 - a. Origins
 - b. Occurrence
 - c. Types of metamorphism
 - 1. Regional
 - 2. Contact
 - 3. Hydrothermal
 - d. Textures
 - 1. Foliated
 - 2. Non-foliated
 - e. Parent rocks
- 6. Past Environments
- 7. Economic uses
 - a. Construction
 - b. Ornamental
 - c. Fuel
 - d. Other