

ROCKS & MINERALS

C 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. Crystal structure
 7. Specific gravity
 8. Hardness
 9. Streak
 10. Fluorescence
 11. Tenacity
 12. 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
 - g. Bowen's reaction series

- 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