

Study Review for Exam #1

Focus on the following ideas and concepts:

Lecture 1:

Earth Layers
Energy Sources
Heat Transfer (process of heat transfer)
Conduction
Convection
Radiation
Hypothesis vs. Theory
Plate Boundaries (location and age or materials)
Convergent
Divergent
Transform
Potential Energy
Principle of Uniformitarianism

Lecture 2:

Atomic Structure
Bonding (strengths and weakness)
Covalent
Ionic
Metallic
Van
der Waals
Chemical Composition
Common Minerals (definition and occurrence)
Mohs Hardness Scale (values and comparisons)
Physical Properties
Cleavage
Density
Fracture
Hardness
Luster
Specific
Gravity
Streak
Polymorphs

Lecture 3:

Lithification
Rock Types (distinguish and define)
Sedimentary
Igneous
Metamorphic
Rock Cycle

Lecture 4

Explosivity (causes and examples)
Igneous processes (formation of magma and factors controlling)
Intrusive Bodies
Igneous rocks (types, formation, identification, plate boundary locations of common igneous rocks)

Magma Evolution (differentiation, fractional crystallization, partial melting, assimilation, magma mixing)
Texture and Composition (SiO₂ concentrations, texture types and differences)
Volcano Types (composite, cinder cone, shield)