Introduction and Plate Terms
- Hypothesis
- Theory
- External heat engine
- Internal heat engine
- Radioactive decay
- Thermonuclear fusion
- Subduction
- Convection
- Divergent boundary
- Convergent boundary

Atoms & Elements Terms
- Proton
- Neutron
- Electron
- Atomic weight
- Atomic number
- Mass Number
- Cation
- Anion
- Valence
- Isotope
- Fusion
- Fission
- Chondrule
- Siderophile
- Atmophile
- Chalcophile
- Lithophile

Mineral & Rock Terms
- Mineral
- Crystal
- Hardness
- Luster
- Habit
- Density
- Isomorph
- Polymorph
- Isotope
- Fusion
- Fission
- Chondrule
- Siderophile
- Atmophile
- Chalcophile
- Lithophile

Intrusive Igneous Rock Terms
- Polymerization
- Magma
- Pegmatitie
- Igneous Fractionation
- Partial melting
- Fractional Crystallization
- Ultramafic
- Mafic
- Intermediate
- Silicic
- Peridotite
- Gabbro
- Diorite
- Granite
- Pluton
- Stock
- Batholith
- Dike
- Sill

Volcanic Terms
- Ultramafic
- Mafic
- Intermediate
- Silicic
- Basalt
- Andesite
- Magma
- Lava
- Aa
- Pahoehoe
- Pillow Lava
- Shield
- Composite Cone
- Cinder Cone
- Caldera
- Pyroclastic
- Nuee Ardeye
- Air Fall
- Ash Flow
- Tuff
- Obsidian
- Vitrophyre
- Pumice
- Resurgent dome
- Hot Spring
- Geyser
- Rhyolite

Sedimentary Terms
- Boulder (>256mm)
- Cobble (64-256mm)
- Pebble(2-64mm)
- Sand (.06-2 mm)
- Silt (4 – 60 μm)
- Clay (<4 μm)
- Conglomerate
- Breccia
- Arkose
- Sandstone
- Siltstone
- Shale
- Limestone
- Evaporite
- Reef
- Lithification
- Cross bedding
- Ripple marks
- Alluvial
- Fluvial
- Eolian
Sample Essays

• What is a mineral and how does it differ from a rock?

• What are protons, neutrons, electrons, isotopes and elements and how are they formed?

Sample Essays

• What is igneous fractionation and how does it account for the differences between mantle, oceanic crust and continental crust?

• What is the scientific method and how is it used to draw conclusions about the origin and age of the Earth?

Sample Essays

• What are the two major energy sources that drive Earth processes and which processes does each primarily control?

• How do the weathering rates of the different minerals in granite give rise to different grain sizes of the weathering products?

Sample Essays

• How does the transport of sediments (weathering products) by wind and water result in the different sedimentary rocks having different compositions?

• The pure mineral quartz has a melting point about 500°C higher than any igneous rock. How then can pure quartz sandstone be derived from igneous granite?