Directions: Carefully read over the checklist of items that you need to know for the “Geologic Time” test. Be sure to attend extra help if you have any questions.

EARLY EVOLUTION

☐ Term to Know: outgassing
☐ Earth Science Reference Tables: Geologic History of New York State
☐ Earth is 4.6 billion years old
☐ Earth separated into its layers according to density
☐ The Cambrian Explosion [Burgess Shale] began the great diversity of life on Earth

RELATIVE DATING

☐ Terms to Know: uniformitarianism, relative dating, original horizontality, correlation, fossil
☐ Superposition states that the oldest layer is usually the oldest and youngest is on the top
☐ Intrusions are an exception to superposition and are younger than the rock they crosscut
☐ Contact Metamorphism in younger than the rock they crosscut
☐ Faults in younger than the rock they crosscut
☐ Folds are an exception to superposition
☐ Index Fossils are used to identify a geologic period and used to correlate
☐ To be considered a good index fossil it needs to meet two criteria:
  1. The organism existed over a large geographic area
  2. The organism existed over a short time
☐ Geologic Time Markers represent a specific date in a rock sequence [volcanic eruptions]
☐ Know how to interpret a rock cross-section and sequence rock formation and events

ABSOLUTE DATING

☐ Terms to Know: absolute dating, radioactive decay, isotope
☐ Half-life is the time required for half of a radioactive product to decay to a stable product
☐ Nothing can change half-life… NOTHING!
☐ Earth Science Reference Tables: Radioactive Decay Data
☐ Carbon-14 [C-14] is used to date recent organic remains
☐ Carbon-14 can only accurately date to 50,000 years
☐ Uranium-238 [Ur-238 is used to date really old rocks