

# **Exam Title: 2001310 Earth Space Science**

## **Courses Assessed by this Exam: Earth Space Science**

**Key Vocabulary:** Big Bang, satellite, Sun, nebula, Moon, asteroid, gravity, energy, coalesce, stellar evolution, photosphere, geomagnetic storm, solar eclipse, luminosity, hydrosphere, lithosphere, lithospheric plate, strike-slip fault, continental rift, subduction zone, divergent boundary, landslide, earthquake, river erosion, plate tectonics, rift valley, divergent boundaries, plateau, metamorphosis, lagoon, sinkhole, barrier island, stratified, compaction, cementation, sediments, tectonic plates, steep-sided valleys, abyssal plain, transpiration, photosynthesis, water reservoirs, geological hotspots, geosphere, atmosphere, combustion, biosphere, geosphere, hydrosphere, cryosphere, barometer, latitude, carbon neutrality, relative humidity, fortification, rip currents, transitional organisms, paleontologist, evolutionary history, Jean-Baptiste Lamarck, Darwin, scientific theory, scientific law, Wegener, fault line, constellation, sunspot radiation, Bohr Model, conduction, convection, dissipation, radiation, nuclear, electromagnetic energy, PET scan, Storm cell, gravitational force, strong/weak nuclear force, electromagnetic force, limestone, granite, basalt, gneiss

### **Student Tasks:**

- Be able to identify possible effects of the Big Bang Theory.
- Define satellite and give examples.
- Understand the relationship between gravity and energy and how it relates to the Universe.
- Understand the concept of stellar evolution rate and the factors related to it.
- Identify the different layers of the Sun and Earth and their characteristics.
- Understand geomagnetic storm and events associated with it.
- Be able to decipher the effects of the NASA Space program on Florida economy.
- Identify how volcanoes form.
- Define strike-slip fault, continental rift, subduction zone, divergent boundary,
- Understand how geological processes contribute in the making of natural landmarks and landform.
- Be able to explain how continents move.
- Explain how landforms are formed.
- Identify the composition of the different landmasses (i.e. bedrock, limestone, etc..)
- Define subduction and how it relates to the formation of oceans.
- Identify and explain the different ocean features and how they form.
- Be able to identify the interactions between the different earth's systems.
- Explain the process of combustion.
- Understand the interactions between air-pressure systems in Florida.
- Understand how a barometer works and what information can be derived from it.

- Be able to explain the different types of thunderstorms and their causes.
- Explain how hurricanes form in relation to latitude.
- Define carbon neutrality.
- Be able to identify the relationship of relative humidity to weather conditions.
- Explain possible preventative methods for reducing rip currents.
- Be familiar with environmental protection agencies and their causes.
- Explain evidence of evolution and the relationship of transitional organisms to the process.
- Explain the contributions of Darwin, Jeanr Baptiste Lamarck, Alfred Wegener to evolution.
- Differentiate between a scientific law and a scientific theory and the relationship between the two.
- Define and be able to give examples of conduction, convection, dissipation, and radiation.
- Be able to explain and rank the different forces of nature from strongest to weakest.
- Be familiar with the different types of energies, applications, and wavelengths.
- Be able to explain the relationship between gravity as it relates to two objects.
- Know Florida's geologic formations/ composition
- Be able to explain how oceans are formed