**Mapping**

**Unit 2**

**Objectives:**

* Explain how latitude and longitude can be used to locate places on the Earth’s surface
* Using a map with latitude and longitude lines, find locations of various cities on Earth
* Express degrees of latitude and longitude into minutes and seconds
* Determine how a compass works and use it to find direction on Earth
* Recognize what great circles are and when they are used
* Explore how to create a map from a 3D curved object, such as the Earth
* Create a scale model of an island using a topographic map and its contour lines, complete with a compass rose, legend, and scale and calculate the relief of the map
* Analyze a weather map with isobars to determine the temperature in various cities
* Interpret other types of maps and hypothesize instances in which they may be used

**Next Generation Science Standards:**

**Common Core:**

(Focused on grades 11-12, as the 9-10 standards were the focus in Biology 1)

* RST.11-12.1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions that author makes and to any gaps or inconsistencies in the account
* RST.11-12.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms
* RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
* RST.11-12.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to *grades 11-12 texts and topics*.
* RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
* WHST.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
* WHST.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
  + Will be continued throughout the class