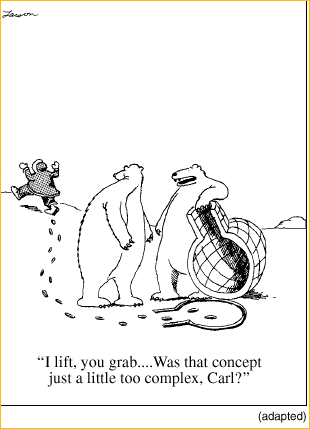
**Unit 1: Learning Goals for Energy in the Biosphere 1**

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| **Big Picture**: Students should understand how position of the Earth, climate, and factors such as latitude, elevation, or geography affect the biotic and abiotic factors in a given area. | | | |
| **Content Goals** | | **Skills Goals** | |
| Students will know how to:   * Identify biotic and abiotic factors in an ecosystem * Explain how the position of the Earth (tilt of the axis) affects the seasons / climate * Discuss the effect of: latitude, elevation, proximity to water, topography, humidity, and wind on climate * Determine most likely biome based on latitude and climate factors of an area * Predict type of climate for given biome * Identify common plants and animals in various biomes * Describe interactions between abiotic or biotic and factors in an ecosystem or biome * Identify parts of a microscope and describe their functions * Describe characteristics of organisms in each kingdom * Classify a variety of living organisms by kingdom | | Students will be able to:   * Support scientific explanation with a reliable source * Properly cite the reliable source * Write an APA bibliography for the source * Make wet mounts of micro-organisms and use microscope properly to view them * Make detailed sketches of organisms viewed under the microscope and label with appropriate scale | |
| **Assessment**: How will mastery of content and skills be assessed?   * Show understanding on quizzes and tests * Write a well-organized paragraph with properly cited sources (biome poster, organism report) * Write an APA – style bibliography (biome poster, organism report) * Complete detailed sketches of micro-organisms | | | |
| **Key Vocabulary:**  Abiotic  Biotic  Latitude  Climate  Elevation  Humidity  Ecosystem  Community  Population  Organism | Flora  Fauna  Biome  Tundra  Temperate Rain Forest  Tropical Rain Forest  Taiga  Grassland  Savannah  Desert  Chaparral | | Archaebacteria  Eubacteria  Plant  Animal  Protist  Fungi  Coarse focus  Fine focus  Stage  Objective lenses  Diaphragm |



“I lift, you grab … Was that concept just a little too complex, Hal?”