

Lesson 1: Checkup Time – Give Your Monarch a Physical!
Georgia Biology (Grades 9-12) Standards Correlations

Benchmarks for Science Literacy High School Science Descriptions

Life Sciences

Interdependence of Life

The concept of an ecosystem should bring coherence to the complex array of relationships among organisms and environments that students have encountered. Students' growing understanding of systems in general can suggest and reinforce characteristics of ecosystems-interdependence of parts, feedback, oscillation, inputs, and outputs. Stability and change in ecosystems can be considered in terms of variables such as population size, number and kinds of species, and productivity.

Standards Addressed:

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

- a. Follow correct procedures for use of scientific apparatus.
- b. Demonstrate appropriate technique in all laboratory situations.

SCSh3. Students will identify and investigate problems scientifically.

- c. Collect, organize and record appropriate data.
- e. Develop reasonable conclusions based on data collected.

SCSh6. Students will communicate scientific investigations and information clearly.

- a. Use data as evidence to support scientific arguments and claims in written or oral presentations.

Related Standards:

SCSh1. Students will evaluate the importance of curiosity, honesty, openness, and skepticism in science.

- a. Exhibit the above traits in their own scientific activities.

SCSh8. Students will understand important features of the process of scientific inquiry.

Students will apply the following to inquiry learning practices:

- a. Scientific investigators control the conditions of their experiments in order to produce valuable data.
- b. Scientific researchers are expected to critically assess the quality of data including possible sources of bias in their investigations' hypotheses, observations, data analyses, and interpretations.

SB4. Students will assess the dependence of all organisms on one another and the flow to energy and matter within their ecosystems.

- a. Investigate the relationships among organisms, populations, communities, ecosystems, and biomes.
- f. Relate animal adaptations, including behaviors, to the ability to survive stressful environmental conditions.