

**Optional Structure for Elementary Curricula Unit Objectives and
Core Activities and Instructional Methods
(Sample Information from Honors Biology Curriculum)**

Goals:

- Scientific Methodology and Experimentation by use of Controlled Experiments
- Characteristics of Living Things

Objectives: Students will be able to: (Note: The number of objectives will vary depending on the goal.)

- Identify major themes in biology by describing the characteristics of living things and relating them to real-life examples (DOK 1)
- State the goals of science (DOK 1)

Core Activities for Nature of Science	Corresponding Instructional Methods
Describe the characteristics of living things.	<ul style="list-style-type: none"> ● Read from Module 1 in the Inspire Biology textbook, Lesson 1, pages 4 - 10, to explore the field of biology and identify eight unifying characteristics of living things and to understand big ideas in biology. Students should compare examples of each of the characteristics and be able to provide their own examples of each characteristic. ● Students should identify examples of each of the characteristics in nature.
Recall the goals of science and identify examples of observation, inference, hypothesis, principle, fact, scientific theory and scientific law	<ul style="list-style-type: none"> ● Read from Module 1 in the Inspire Biology textbook, Lesson 2, pages 11 - 16, which defines the nature of science, science methodology, careers in science, and factors that affect science and society. Expand on the reading by discussing the article on page 17 - "A Shot in the Arm." ● Complete a read-aloud, discussion, and/or assessment pertaining to historical examples of scientific experiments, (example: Redi's Investigation of Spontaneous Generation) to recall the steps of the scientific method. In doing so, students will gain a deeper understanding of what science is and how certain scientific investigations have helped pave the way for current thinking in science. ● Design and perform a lab where students are provided a treatment of caffeine or no caffeine to determine if there is a n effect on a physiological response, such as heart rate

Please refer to this sample AND the Honors Biology curriculum for guidance as you write the elementary curricula.