Applicable High School Essential Content Standards and Expectations (HSCE)

Below is a list of content standards and expectations applicable to the program “Maple Syrup Science.”

Grade Levels 9-12: Biological Science

- **Standard B1: Inquiry, Reflection, and Social Implication**
  - **B1.1: Scientific Inquiry**
    - B1.1A Generate new questions that can be investigated in the laboratory or field.
    - B1.1C Conduct scientific investigations using appropriate tools and techniques (e.g., selecting an instrument that measures the desired quantity—length, volume, weight, time interval, temperature—with the appropriate level of precision).
    - B1.1E Describe a reason for a given conclusion using evidence from an investigation.
    - B1.1g Use empirical evidence to explain and critique the reasoning used to draw a scientific conclusion or explanation

- **Standard B3: Interdependence of Living Systems and the Environment**
  - L3.p1: **Populations, Communities, and Ecosystems** (prerequisite)
    - L3.p1A Provide examples of a population, community, and ecosystem. (prerequisite)
  - L3.p3: **Factors Influencing Ecosystems** (prerequisite)
    - L3.p3B Distinguish between the living (biotic) and nonliving (abiotic) components of an ecosystem. (prerequisite)
  - B3.1: **Photosynthesis and Respiration**
    - B3.1A Describe how organisms acquire energy directly or indirectly from sunlight.