

**Virginia Essentialized Standards of Learning (VESOL)
Instruction Resource
Science Sample Activities**

Grade HS (Life at the Molecular/Cellular and Systems/Organisms Levels)

VESOL Code	VESOL Reporting Category	VESOL Text	Complexity Continuum
S-HS 1	Life at the Molecular/Cellular and Systems/Organisms Levels (LMCSOL)	Recognize that humans and animals need oxygen to breathe, water to drink, and food to eat in order to grow and obtain energy.	Using simple pictures, diagrams, or representations, concepts could range from: <ul style="list-style-type: none"> • recognizing the difference between air/oxygen, water, and food, and that humans and animals need these to survive and grow <i>to</i> • recognizing that air/oxygen, water, and food help provide energy to humans and animals <i>to</i> • recognizing that energy and growth may change based on the type, amount, or availability of air/oxygen, water, and food.

Instructional Example

Objective:

Students will recognize that humans and animals need oxygen to breathe, water to drink, and food to eat in order to grow and obtain energy.

Vocabulary:

food, mammal, air, oxygen, water, shelter, space, survive, living, animal, human, light, grow, energy

Materials: *Sample activities range across a continuum of complexity and may include materials such as: real objects, experiential activities and manipulates that provide sensory awareness, visuals, graphic organizers, science rubrics, science notebooks, charts, graphs for documenting change and problem solving*

Procedures for Instruction:

These instructional activities can be used at various points on the complexity continuum, depending upon student ability. Many possibilities exist for lesson creation between the examples presented here. It is important to start instruction where the student is currently functioning and implement the appropriate instructional strategy with them. Once data indicate that the student is ready for the next level of instruction, proceed to it after reviewing the level the student has mastered. Let the data be your guide.

Sample Activity 1

Teacher will provide hands-on exploration during meal and snack opportunities to identify foods, drinks and environments needed to survive and grow. The students will identify through orientation, essential survival needs for themselves, including food and drink.

Sample Activity 2

Teacher will provide hands-on exploration during meal and snack opportunities to identify foods, drinks and environments needed to survive and grow. The student, using visuals will identify the difference between water, food and air/oxygen and that humans and animals need them to survive and grow.

Sample Activity 3

The teacher will provide examples and non-examples of items that provide energy to humans and animals to help grow and survive. The student will use a T-Chart to sort examples and non-examples of items that provide humans and animals with energy.

Sample Activity 4

The teacher will provide examples and non-examples of items that provide energy to humans and animals to help grow and survive. Using words and pictures, the student will chart the expected growth of humans and/or animals when given variables to survive (food, water and air).

Additional Resources:

SOL Science Enhanced Scope and Sequence-

https://www.doe.virginia.gov/testing/sol/standards_docs/science/2010/lesson_plans/index.shtml

Communication:

- [36 Location Universal Core Board](#)
- Core Vocabulary and Science: Core words that can be modeled and targeted during lessons:
 - Eat/Drink
 - More
 - Go/Stop
 - Not
 - Need