

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

Grade HS (Interactions of Life Forms and Ecosystem Dynamics)

VESOL Code	VESOL Reporting Category	VESOL Text	Complexity Continuum
S-HS 7	Interactions of Life Forms and Ecosystem Dynamics	Recognize ways in which living organisms' traits help them adapt to and survive their environment.	Using simple pictures, diagrams, or representations, concepts could range from: <ul style="list-style-type: none"> • recognizing simple traits (i.e., body parts, behaviors) of humans, animals, and plants that involve survival to • identifying the function of the traits of humans, animals, and plants that involve survival to • identifying a simple trait based on the function or purpose of the trait (e.g., rabbits use their ears to detect predators, ducks use their webbed feet to swim).

Instructional Example

Objective:

Students will identify ways in which living organisms' traits help them adapt to and survive their environment.

Vocabulary:

animals, humans, plants, food, shelter, water, oxygen/air, behavior, adaptation, defend, predator, prey, habitat, survival

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, manipulatives, 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

The teacher will provide hands-on exploration opportunities to look for humans, animals and plants and using real objects, models identifying humans, animals and plants, and their food, shelter and water sources. Students respond to teacher modeling and identify through orientation, essential survival needs for themselves, including food and water.

Sample Activity 2

The teacher will facilitate an exploration of the students' environment to locate humans, animals and plants. Using visuals with pictures of basic needs (oxygen/air, food, water, shelter) for humans, animals and plants, the student will sort pictures of simple traits that involve survival, linking the trait to its function. (e.g. The shape of a bird's beak enables it to eat.)

Sample Activity 3

The teacher will facilitate an exploration of the students' environment to locate humans, animals and plants. Using visuals with pictures of basic needs (oxygen/air, food, water, shelter) for humans, animals and plants, the student will sort pictures onto a chart according to animals/humans/plants, what it needs to eat, where it needs to live, and its predators.

Sample Activity 4

The teacher will facilitate an exploration of the students' environment to locate humans, animals and plants. Using visuals with pictures of basic needs (oxygen/air, food, water, shelter) for humans, animals and plants, the student will complete a graphic organizer according to animals/humans/plants, what it needs to eat, where it needs to live, and its predators. In addition, the student will identify the function and purpose of one simple trait of each.

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:

- Need
- Look/See
- Eat/Drink
- Same/Different
- What do?
- It