



Basic Needs of Living Things

Outdoor Classroom Field Journal Activity Lesson Plans & Resources

Online Lesson Plans & Resources available on the Alabama Wildlife Federation website

Students will explore the basic needs of plants and animals and determine if a specific plant and/or animal's basic needs are met in the school's outdoor classroom or schoolyard habitat.

Materials: Copies of "Basic Needs of Living Things" Outdoor Classroom Field Journal Activity Page, Clipboards & Pencils (Optional Discovery Activity: Brainstorming Chart)

Duration: Introduction – 40 min. | Outdoor Exploration – 20 min. | Review – 20 min.

STEP 1: Engage through Discussion

The background information, charts, and example questions below can be used to help introduce the topic, engage the students, and build a foundation to discuss the topic:

Background Information [\(online as a PDF\)](#)

Patterns in the natural world can be observed and used as evidence when distinguishing between living and nonliving things and when determining the needs of living things. In order to survive, **all** living things need air, water, and food. Animals obtain their food from plants and other animals, which provides them with the energy they need to move and grow. An animal's home (habitat) must provide these basic needs (air, water and food) along with shelter from bad weather and predators. Plants also need air, water, and food, but they don't have mouths to breathe, drink or eat. Plants "breathe" air through tiny holes on the underside of their leaves. Plants "drink" water and "eat" their food (nutrients) from soil using their roots. They also make food in their leaves using sunlight and energy from the sun, which helps them grow.

Basic Needs Brainstorming Chart [\(online as a PDF\)](#)

Create a chart with one heading and two columns on your white board or flipchart, and then ask the students to help you fill in the chart with living characteristics in the first column and nonliving characteristics in the second column. Help the students look for patterns in their answers and how they fit in the broad needs listed.



What Does an Animal or Plant Need to Live?	
Needs of Animals	Needs of Plants
Air Water Nuts or Seeds → Food Plants like Grass or Leaves → Food Worms, Insects or other Animals → Food Protection from bad weather → Shelter Protection from predators → Shelter	Air Water Soil → Nutrients/Food Fertilizer like worm poop → Food Sun → Sunlight (nutrients via photosynthesis) Protection from bad weather → Shelter Place to live and grow → Shelter



Basic Needs Checklist/Chart [\(online as a PDF\)](#)

(If you don't have time for the Brainstorming Activity.)

You can also put the chart below on the Elmo or whiteboard, and read the informational text together with your students. This will help the students look for patterns as evidence.

What Does an Animal or Plant Need to Live?	
Needs of Animals	Needs of Plants
 Air Water Food Shelter	Air Water Nutrients Sunlight 

Example Discussion Questions & Answers [\(online as a PowerPoint or PDF\)](#)

Q: How do you know if something is a living thing?

A: *Living things move, grow and change over time. For example, an animal like a butterfly or a plant like a daisy are both living things.*

Q: What are other differences between living and nonliving things?

A: *A living thing needs to eat, drink & breathe, or it will die. A nonliving thing cannot die—it is not alive.*

Q: What types of living things could we see in our Outdoor Classroom and schoolyard wildlife habitat?

A: *We could see animals such as birds, chipmunks, bees, frogs, etc. We could also see plants like grass, trees, shrubs, flowers, etc. (Make sure they list native animals that they can see in your schoolyard habitat—for instance, not sharks or giraffes. Plants do not have to be listed by a specific name.)*

Q: What are the basic needs of animals? What do they need to survive?

A: *Animals need food to eat, water to drink, air to breathe, shelter to hide in, and places to raise their young.*

Q: What do animals eat? Why do animals need to eat?

A: *Animals eat plants and other animals. When an animal eats, its body converts the food into energy. Animals need energy to move and grow.*

Q: What are the basic needs of plants? What do they need to survive?

A: *Plants need water, food and nutrients, air and sunlight, and a home or place to live.*

Q: How does a plant get the air, water, and food that it needs to survive since it doesn't have a mouth?

A: *Plants breathe through tiny holes on the underside of their leaves. Plants "drink" water and food (nutrients) from soil using their roots. They also make their "food" in their leaves using sunlight from the sun.*

STEP 2: Explore with Literature

These books can be used to further explore the topic with your students:

- *What do Living Things Need?* by Elizabeth Austen (ISBN: 978-1480745230)
- *Basic Needs* by Jean Feldman (ISBN: 978-1615902132)



STEP 3: Explain using Technology

These videos can be used to further explain the topic to your students

- The Needs of Living Things (3:03 min. video @ <https://www.youtube.com/watch?v=xHjqaOx568o>)
The Needs of a Plant (1:02 min. video @ <https://www.youtube.com/watch?v=dUBIQ1fTRzI>) or use the link on the AWF Field Investigation Basic Needs of Living Things webpage

STEP 4: Elaborate with a Field Investigation in the Outdoor Classroom

The Outdoor Classroom Field Journal Activity Observation Page(s) allow students to apply what they have learned as they investigate and record their real-world observations in their field journals. Before you go outside, don't forget to review the activity instructions and your Outdoor Classroom Rules:

- Activity Instructions for the Basic Needs of Living Things observation page(s): Have students draw an animal and a plant that they find in your outdoor classroom, and then draw a picture of themselves. Mark an X next to the Basic Needs that the animal, the plant, and student **need** to survive (food, water, air, sun, and/or shelter). Then search for sources of these basic needs, and mark an X next to sources that the students can **find** in your outdoor classroom.
- Example Outdoor Classroom Rules: The outdoor classroom is not a playground, so do not run and do not climb on anything. Remember that the outdoor classroom provides habitat (a home) for local wildlife, and you should not damage the local wildlife habitat. Therefore, do not pick up wildlife, plants, flowers or rocks. Also, do not feed wildlife.

Outdoor Classroom Activity Tip: Have students build on their prior knowledge of living and non-living things. Have the students go into the outdoor classroom observe, identify and list two living things. Let the students pair and share to come up with ideas of what the living things need to live and survive. Have them bring their ideas into a discussion of the basic needs of plants and animals. *Optional Discovery Activity to have students come up with the list and provide additional reinforcement in the classroom.*

STEP 5: Review and Assess

Review and assess the students' observations and answers on their observation pages. You could also use the Brainstorming Chart or Checklist as an assessment tool.



Alabama Course of Study Standards for Kindergarten

Language Arts (2016)

- 9.) Actively engage in group reading activities with purpose and understanding.
- 10.) With prompting and support, ask and answer questions about key details in a text.
- 17.) With prompting and support, identify the reasons an author gives to support points in a text.
- 32.) Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- 35.) Add drawings or other visual displays to descriptions as desired to provide additional detail.
- 36.) Speak audibly and express thoughts, feelings, and ideas clearly.

Math (2016)

- 4.) Understand the relationship between numbers and quantities; connect counting to cardinality.
- 14.) Describe measurable attributes of objects like length, height, or weight.
- 15.) Directly compare two objects, with a measurable attribute in common, to see which object has "more of" or "less of" the attribute, and describe the difference.

Science (2015)

- 3.) Distinguish between living and nonliving things and verify what living things need to survive (e.g., animals needing food, water, and air; plants needing nutrients, water, sunlight, and air).

