

1.8 Shhhhh! Do You Hear What I Hear?

Story Extension for This Lesson:

This lesson can be used at the beginning of the story when Alex and Sam are curious about what is in the forest. Both children are aware of the trees in the forest but have yet to be exposed to the animals that live in the forest. This lesson will help students discover what animals live in the forest and how the health of the forest affects their quality of life.

Grade: 1

Strand: NEEDS AND CHARACTERISTICS OF LIVING THINGS

Big Ideas:

- Living things grow, take in food to create energy, make waste, and reproduce. (Overall expectations 2 and 3)
- Living things have basic needs (air, water, food, and shelter) that are met from the environment. (Overall expectations 1, 2, and 3)
- All living things are important and should be treated with care and respect. (Overall expectations 1, 2, and 3)

Overall Expectation:

1. assess the role of humans in maintaining a healthy environment
2. investigate needs and characteristics of plants and animals, including humans
3. demonstrate an understanding of the basic needs and characteristics of plants and animals, including humans

Specific Expectations covered:

- 1.2** describe changes or problems that could result from the loss of some kinds of living things that are part of everyday life, taking different points of view into consideration
- 2.6** use appropriate science and technology vocabulary, including investigation, explore, needs, space, and food, in oral and written communication
- 3.2** identify the physical characteristics of a variety of plants and animals
- 3.4** describe the characteristics of a healthy environment, including clean air and water and nutritious food, and explain why it is important for all living things to have a healthy environment
- 3.5** describe how showing care and respect for all living things helps to maintain a healthy environment
- 3.6** identify what living things provide for other living things
- 3.7** describe how the things plants and animals use to meet their needs are changed by their use and are returned to the environment in different forms

Inquiry Skills :

Inferring, Hypothesizing, Analyzing Discussing

Instructions:

This is a creative activity where students create their own animals that could live in the forest. Refer to The Animal that Lives in the Forest. The task is to have them list what their animals need (food, water, shelter) to survive in the wild. Their animal could be something they know (e.g., a fox) or it could be made up (e.g., a tribble). Students will be assessed based on their ability to show the basic needs of their animal.

Part 3:

Students can create a diorama of their animal in the forest.

Materials List:

- pencils
- crayons
- pencil crayons
- markers

Diorama materials:

- shoebox
- various colours of construction paper
- plasticine
- scissors
- white glue
- etc.

Connections:

This lesson can be used in conjunction with the Language and the Arts curriculum. To complete this activity, students are required to: (1) comprehend and make inferences from the story; and (2) use the elements of design to create their diorama. The extension activity can be used in the Arts Curriculum.

Subject Area:

English, Art

Connects to:

Grade 2

Assessment Strategy:

It is recommended you focus your assessment on process skills. To help get you started on this path, a series of charts have been provided for you.

Assessment Files

- Process-Skill-Infering-5
- Process-Skill-Hypothesizing-1
- Process-Skill-Analyzing-8
- Process-Skill-Discussing-5

Handouts:

- The Animal that Lives in the Forest

The Animal that Lives in the Forest

Hello. My name is _____. I live in the forest near Alex and Sam's house. I eat _____ that are found in the forest. I get my water from _____. I sleep in a _____ made out of _____. I like living in the forest because _____.

The plants and the animals that live in the forest are my friends. The plants help me by _____.

The animals help me too by _____. I am sad my friends are not happy because something is making them sick. I think they are sick because _____.

Draw a picture of your animal living in the forest near Alex and Sam's house. Remember to show the foods your animal eats and where in the forest it lives in.

Process Skill – Inferring

Process Skill	Students	Teachers	What This Skill Should Lead To
Inferring	□ deducing information from incomplete evidence using reasoning or logic. The information does not need to be factual or correct. (For example, “The grass is wet in the morning, so I infer that it rained overnight.” This is a valid inference, but not necessarily a correct one— the wet grass could be from morning dew or a sprinkler system.) □ clarifying observations as evidence □ making a connection between what is known and what is unknown □ creating a tentative understanding of the situation without knowing or being given the “answer”	□ guiding students to make logical connections from available evidence □ encouraging students to consider alternative inferences □ scaffolded and deliberate □ using a modified K-W-L chart to show the process of making an inference: replace “What I know,” “What I want to learn,” and “What I learned” with “What I know,” “What I observed,” and “What I infer”	□ improved observation and deduction skills □ the ability to identify and analyze available evidence □ improved literacy skills as inferencing skills are applied to make meaning of written texts

Teachers notes:

Things to Look for When Making a Hypothesis in Grade 1

Process Skills	Students	Teachers	What This Skill Should Lead To
Hypothesizing	☐ detailing the support for a prediction ☐ using the word “because” (e.g., The penny will float because....) ☐ usually done prior to conducting investigations	☐ emphasizing the link between research, models, and theories to make reasoned predictions ☐ a creative process where students develop an understanding of how the world works ☐ guiding students to independently develop their own logic and reasoning	Hypotheses help set the methodology of a scientific inquiry by providing a proposed relationship between the variables being tested. Hypotheses also need to be addressed when reporting results and conclusions. Developing this skill will help students connect their inquiries with past research and theories, and possibly lead to further inquiry.

Task Specific Descriptors:

Level 1 - Beginning/Exploring	Level 2 - Emerging	Level 3 - Competent	Level 4 - Proficient
unclear, many mistakes or misunderstandings, little to no supporting details	simplistic, omission of key information, some errors, some supporting details	few omission of key information, few errors, accurate, supporting details	no omission of key information, minor errors, explicit, clear, thorough, many supporting details

Teacher Note:

Process Skill – Analyzing

Process Skill	Students	Teachers	What This Skill Should Lead To
Analyzing	☐ reviewing the investigation—what happened and why/how ☐ working with the data to identify trends, do calculations if necessary, and draw conclusions ☐ interpreting the data in different ways ☐ developing next steps based on questions that arise during the investigation ☐ searching for patterns, concrete and abstract, that represent what actually occurred ☐ getting unexpected results in an inquiry, and examining or assessing why those results occurred	☐ expecting and accepting varying results. The results of similar investigations can be very different depending on the many decisions students make in the course of conducting the investigation. ☐ prompting students to reflect on the investigation and giving them adequate time to do so: Did they get the results they expected? Can the results be explained? Where could the experimental method be improved? Are there any possible sources of error? ☐ giving students an opportunity to see other students' work, using strategies such as gallery walks, and to analyze the findings of the class ☐ taking the opportunity to assess students' learning, as reflected in their analysis	Analyzing data leads students to evaluate the validity of their findings and to check their results against their cognitive schema (i.e., Do the results make sense to me, and can I explain them?). Once the analysis is completed, students can communicate their findings in various ways to others.

Teacher Notes:

Process Skill - Discussing

Process Skill	Students	Teachers	What This Skill Should Lead To
Discussing	☐ sharing and interpreting collected data to make sense of it; analyzing whether the data supports or disproves their hypothesis ☐ listening carefully to what others say ☐ talking about problems that may have influenced the results and possible ways to correct them in the future ☐ making connections between their results, previous research, and existing theories ☐ debating or exchanging views about a concept ☐ evaluating the impact of the results and their applications in the real world ☐ generating new questions that may lead to further investigation	☐ prompting students to be clear and precise, and to use the appropriate scientific vocabulary ☐ prompting students to choose the best facts to support their ideas ☐ ensuring that discussions in written form (e.g., comments on blogs or social networks such as Ning) have structure and flow	Discussion allows students to expand their knowledge about a topic and understand different points of view. They learn to express themselves precisely and to explain their reasoning (e.g., how they arrived at their conclusion). Debate is a healthy part of the scientific enterprise, and discussions are an effective way to explore opposition and skepticism.

Teacher Notes: