

Fables of Fresh Air Grades 1 to 3

Stories of the Real World - Post

Assessment Cross-curricular rubric

Big Ideas

- Living things grow, take in food to create energy, make waste, and reproduce
- Different kinds of living things behave in different ways.
- Plants have distinct characteristics.

Learning Goals

• By observing a small natural space we can observe influences on that space and changes to and by the life forms within it.

Specific Expectations

Grade 1 Needs and Characteristics of Living Things 3.4 describe the characteristics of a healthy environment 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

Grade 1 Daily and Seasonal Changes 3.5 describe changes in the appearance or behaviour of living things that are adaptations to seasonal changes

Grade 2 Air and Water in the Environment 2.5 investigate water in the natural environment Grade 3 Growth and Changes in Plants 2.4 investigate ways in which a variety of plants adapt and/or react to their environment, including changes in their environment, using a variety of methods

Description

This **post activity** is designed to go along with the **Fables of Fresh Air** (Grade 1-3) school program. It reinforces the concepts established in that lesson by letting the student see how "stories" unfold in even just a small area of natural space. This lesson sets the activity, which can last from several days to several months.

Materials

Camera for students that do not own one. Measuring tape (to measure a square of space, if necessary)

Spray paint and/or pegs and string (optional)

Copies of handout

Safety Notes

Introduction

Recap

- In the school program "Fables of Fresh Air" you created a landscape and came up with a story for it. You discussed human impact, invasive species, and extreme weather (flooding, drought).
- Real landscapes also have stories to tell!
- Can you think of some examples?
 - o E.g. an animal living in a place. Affected by one of the events listed above.
- We often walk by the world around us without paying much attention. If we take careful observations however we may surprise ourselves how many changes and events we can see.

Let's do this! We will each choose a spot that we will observe for a time period (teacher may choose whatever time period works best. We recommend at least a few weeks to see some larger changes taking place. However, even a few days can be interesting).

Discussion

- What can you observe in a real area of nature?
 - What lives there (plants and animals)
 - Human impact (for example foot marks, garage, but also positive things, such as new plants that were planted)
 - o Impact due to weather (what happens after rain, what happens if it doesn't rain for a long time?)
 - O You may also see the impact of invasive species, depending on the area you choose to observe. A good example is dandelions or ornamental plants that have spread.
- How can you observe nature?
 - o By taking notes
 - o Taking photos or videos
 - o Comparing notes and photos as time goes on
 - o Doing research on what you observed

Action

Observing Nature – Getting Started

- You can pick locations in the school yard or from the student's home. May depend on whether you have enough good locations in your school yard.
- Students can work in small groups or on their own.
- Discuss: What makes a good location?
 - Has some variety of things in it (not just gravel, or just lawn ideally for example)
 - Has plants in it!
 - Can easily be monitored (e.g. at the base of a tree trunk rather than a branch 2 meters off the ground)
 - o Its borders are easy to define. Either because it's a clearly distinct area, such as a tree stump, a bush etc. Or because you can mark the area off easily.
 - o Easy to get observe:
 - Can see the whole area from one spot

- Small enough that you can look at individual life forms in it. E.g. a square of about 20 cm to 40 cm on a side could work well.
- Send students out to pick their locations. This can either be a homework assignment (if their locations are outside school property or a part of this lesson).
 - o If possible, have students mark their locations with spray paint, pegs and string, etc. Use a measuring tape if necessary to select an area of the right size.

Observing Nature – Taking Data (use a copy of attached worksheet each observation day)

- General description:
 - O Take a careful look that allows you to see the whole area at once. How would you describe it? What is in the area? What human impacts can you see? Can you spot any weather influences (e.g. dried up plants, a puddle, etc.).
 - Write down your observations
 - o Take a picture or video
- Detailed observations:
 - Now have a closer look. What kinds of plants do you see? Which ones dominate? Are there some that you can count? (If so, count them)
 - o Do you see any animals? Snails, ants, worms, insects, maybe even a larger animal.
 - o Write down your observations.
- The story:
 - What do you think the story of this patch of nature might be? Describe what you imagine. For example, that children walked through here regularly for the last little while, that a squirrel dropped some seeds here, that a tree has been growing here for a long time.

Ongoing Observations

- Every few days (as instructed by teacher) go out and repeat your general and detailed observations.
- Fill in a worksheet and attach an image. Having images will make it easier to spot changes as you go along with this project.
 - o NOTE: instead of printing an image each day, students can keep a digital copy of their images as well.
- Based on any changes you see write down what your best guess for the story between today and the last time you took observations might be (it could be that nothing much happened).

Consolidation/Extension

Final Discussion

Wrap up class discussion. You can also have students hand in a summary report instead or in addition to this discussion (use attached rubric to score).

- What did you notice?
- Did humans have an impact on the area you studied?
- What effect did the weather have?
- Did you find that there is more going on than you normally notice?

Extension/Alternative

Instead of having students write a summary report you can ask them to draw the area they studied and illustrate how it changed. They could do it in the form of a comic strip or on a poster for example. The main thing is to get them to reflect on how careful observations reveal many small and sometimes large changes in the landscape around us.