

LESSON: Unbelievably, Fantabulous, 10 Yard Hike

GRADE: 1

OBJECTIVES:

21st Century Skills

Employability Skills-

- **21.K-2.ES.1 Communicate and work appropriately with others to complete tasks.**
 - Work appropriately and productively with others.
 - Use different perspectives to increase innovation and the quality of work.

Science

Science as Inquiry-

S.K-2.SI.1 Ask questions about objects, organisms, and events in the environment.

- Students should answer their questions by seeking information from their own observations, investigations and from reliable sources of scientific.

S.K-2.SI.3 Use tools to gather data and extend the senses.

- Students use tools such as rulers, thermometers, watches, balances, spring scales, magnifiers and microscopes to extend their senses and their abilities to gather data.

Physical Education

- **P.E. Standard 3** - Participates regularly in physical activity.

MATERIALS & RESOURCES:

- One magnifying glass for each student
- Several bug boxes
- Small jars and/or vials for observation and possible collection
- Pencils and recording paper or notebook
- Simple field guides on insects, fungi, etc. (optional)

PRESENTATION:

Little classroom preparation is necessary. You may wish to discuss how to use magnifying glasses, but that can easily be done in the field. Tell students they are going on an adventure.

Choose beforehand the area or areas where you wish to work. Areas with long grass or deep litter and ones that offer a variety of habitats are usually best. You may want to try a couple different kinds of areas and compare them (field and forest, for example).

DIRECTIONS:

1. Distribute magnifying glasses.
2. Explain that you are going on a long hike, building up the need for stamina & persistence. It's a 'long' hike! If you have not already done so, explain how to use magnifying glasses and hand out jars or vials.
3. Proceed to the area you have chosen. Spread the group out, an arm's length apart, with you in the middle. Have everyone who is able (including you) get down on hands and knees. Tell them that the hike is "here to there" (approximately the distance of 10 yards) and that they are to try to discover every living thing (on or slightly below the ground) in that distance.
4. Magnifying glasses and fingers are their only tools. Crawl with them and make much of your own discoveries, sharing with others. Point out the change in perspective when one is sitting or crawling on the earth as compared to standing. As well, the difference in perspective between humans and the very small organisms. Sometimes, humans have very different perspectives because they see things from different views.
5. Help them figure out things they don't understand or recognize. Share in excitement.
6. You may wish to handout notebooks or perhaps field guides so students can draw their findings.
7. You may wish to collect a few things in jars and bug boxes for later observation and identification.
8. Gather the group at the end of the hike and review and list what was discovered.
9. Discuss the implications of such a miniature world.
10. You may want to try another hike along the schoolyard or safe area of the parking lot for comparison. See what miniature worlds can be discovered elsewhere.

TIME:

30-60 min.

**PROCESSING THROUGH THE SIX PILLARS:
WHAT HAPPENED?**

- What happened when you hiked on your hands and knees?
- How many creatures did you discover?
- What did you see that you would not have seen if you were hiking on your feet?

SO WHAT?

- What was it like to see the ground up close?
- Good citizens take care of the environment. How can you show take care of the environment?

NOW WHAT?

- What will you do differently when you take a hike now that you've taken one on your hands and knees?
- Take a hike on your hands and knees at home. Do you see anything that is the same as what you saw on your school hike? What is different?
- How can you take care of this environment?