

Focus on: Land Snails

This lesson is meant to support the unit on Structures and Functions of Living Organisms. It can be done to generate background knowledge prior to teaching the unit, during the unit to reinforce lessons, or as a follow up to the unit to increase the retention of information. How you guide your students will depend on the information you have already taught and the information you want to introduce. Please remember that many gardens run on a yearly cycle and it will be easier to find snails during the peak or near the end of the growing season.

Clarifying Objectives:

K.L.1.1 Compare different types of the same animal to determine individual differences within a particular type of animal.

K.L.1.2 Compare characteristics of living and nonliving things in terms of their:

- Structure
- Growth
- Changes
- Movement
- Basic needs

K.P.1.1 Compare the relative position of various objects observed in the classroom and outside using position words such as in front of, behind, between, on top of, under, above, below, and beside.

K.P.1.2 Give examples of different ways objects and organisms move (to include falling to the ground when dropped): zigzag, round and round, back and forth, fast and slow.

Key Vocabulary:

Definitions can be found at <http://learnersdictionary.com>

- Compare
- Individual Differences
- Characteristics
- Living Things
- Nonliving Things
- Structure
- Growth
- Changes
- Movement
- Basic Needs
- Position Words – in front, behind, between, on top of, etc
- Zigzag
- Round and Round
- Back and Forth
- Fast and Slow

Focus Question(s):

What are the different parts of a land snail?

How do land snails move?

Materials:

School Garden

Garden Gloves to wear while exploring the garden especially if touching plants, soil, lifting pots, etc.

Science Notebooks

Cups to hold the snails
Fence from the 2X2 kit

Activities:

1. Read the following Poem with your students. Be sure to cover up the title so they can guess what animal you are talking about.

Snail

He cannot fly.
He cannot hop.
He cannot run at all.
But you should see
The way he goes
Slowly up the wall.

He cannot skip
Or race about.
He has one way to go;
And as I watched him
I must say
He's good at going slow.

2. Tell students they are going to visit the school garden today to find land snails in their natural habitat. Where should we look in the garden?
3. Head to the garden to search for snails. Take a few cups to the garden to capture individual snails in them for observation.
4. Tips for finding garden snails:
 - Garden snails are nocturnal and hibernate during the winter, but they can be found during the day in spring, summer, or fall.
 - They can be found under pieces of rotting wood or wet boards that lie on the ground.
 - You can find them under piles of leaves and sticks that have been decomposing over winter.
 - If you move pots and stones, snails can be found underneath.
 - After a rain or in the morning dew, they can be found on plants or anything above the wet soil.
 - To increase your chances of finding garden snails, put a piece of wet cardboard in the garden a few days before you visit the garden. Do this in several different spots to create more than one viewing spot for students to see snails in their natural habitat.
5. If any snails are found, there will be a rush of other students who want to see it. Remind students to walk and take turns looking at it without pushing. We don't want to harm the people, the snails or the plants in the garden.
6. Once a few snails are found, give students a chance to observe them in their natural habitat before capturing them carefully in a cup.
7. Ask Guiding Questions to focus students on the snail's behavior and movement.

Guiding Questions:

- How do snails move?
- What do snails do when you place them in a cup?
- Do snails move up? Down? Sideways?
- Can snails travel upside down? Backward?
- What does the snail do when you pick it up by its shell?

- How can you tell where a snail has been? [mucus trail]
- What does the shell look like?
- Do snails have heads? Tails?
- What do you see sticking out from the head? [tentacles]
- How many tentacles do you see?
- Do snails have eyes? Ears? A nose? A mouth?
- How do snails breathe? [through an air hole on its underside, near the shell]
- Where is the foot of the snail?
- How does the foot move? [wavelike, ripple motions – visible as it travels up the side of a clear cup]
- What do snails eat in the garden?
- Do you think they help the garden or hurt the garden? Why?

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| <ol style="list-style-type: none">8. Hand out cardboard fence (from the Animals 2X2 Unit) and ask students to predict what the snails will do when they place the fence in the path of the land snails.9. Ask Guiding Questions to focus students on the snail's structures.10. Have students draw and label a diagram of a land snail in their science notebooks. If students need help with this step, you can return to the classroom to complete it by modeling it for them on chart paper, white board, or overhead.11. Here are a few video songs you may want to share with your class:
http://www.youtube.com/watch?v=9ldM4PLowDw
http://www.youtube.com/watch?v=u4QAnCFd4iw12. When you are finished with the snails, feel free to release them in a wooded area or meadow area near the garden. They are considered a garden pest. While in small numbers, their damage may be minimal, they do eat garden plants and can damage them. | |
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