

Snails

1 snail mansion (without snails)
6 snail houses
30 round snail trays
26 D-shaped snail trays
30 water cups and droppers
30 magnifiers
30 rulers
18 sponges
30 popsicle/craft sticks
20 squares each of shiny paper, black vinyl, white vinyl, burlap
30 rope/yarn pieces
10 long, cardstock strips
7 snail racing circles
20 copper strips
cornmeal
twine

Snails

Open-ended questioning and observation techniques are focal points for this activity, as students build their own learning environment and reflect on their own findings. In addition to understanding the inquiry process and learning cycle, they will also learn about creature appreciation and discuss snail facts.

Preparation

Snails are not provided with this kit, so you'll need to collect them on your own or have your students collect them at home. Garden Snails are nocturnal, so the best times to find them out are at dawn and dusk. During the day, you can find them hiding in dark, damp places such as under short bushes, logs, chunks of wood, and leaves. Gently pick them straight up without crushing their shells; if they stick very hard to the ground, coax them into your hand with fresh fruits and veggies. Place the snails in the snail mansion and make sure the lid stays on or your snails might escape.

Fresh items such as apples and lettuce are also not provided with this kit.

Introduction

Open with a simple introduction, explaining that this will be an activity focused on the inquiry process. They will observe snails for about 30 minutes and write down their observations. Do not be tempted to cut this activity short! Allow students time to develop their own ideas and questions.

Ask students if they've ever watched or played with a snail in their own backyard or in a park. Ask them if they think they know all there is to know about snails, or if they have some questions about snails that they've always wondered about. Ask students to share a few of their questions and tell them that by the end of the day, they might just find the answers they are looking for!

Explain that this activity is not only to learn a lot of interesting things about snails, but also to learn about how scientists get their answers and find things out when they are doing an experiment or a study.

Tell students that starting now, they are officially scientists for the day, and that means that they are going to think and act like scientists by using something called the inquiry process. Explain that while they study the snails and find answers to their questions, this may lead them to even more questions, and that is all a part of the inquiry process.

Set Up

Set up each table with journals and all the materials except for the snail facts page and foods.

Suggestion for materials: Use the round trays to put the snails on and use the D-shaped trays to put tools on such as cornmeal, sponges, etc. The snail houses are useful as containers if students collect the snails themselves.

Procedure

- 1) As students are exploring, facilitate by walking among them, asking open-ended questions such as “What’s your snail doing?”, “I noticed you gave it water, why did you decide that?” etc. You can list questions they come up with on the board while they are doing their first round of observations.
- 2) After 10-15 minutes of observation, pass out cornmeal, fruit, and lettuce for more experimentation.
- 3) Students continue observing and journaling. Facilitator continues to encourage and question.

Share Observations

- 1) For discussion, ask students to conclude observations and set materials out of reach.
- 2) Ask group, “What did you notice?”
- 3) Write down responses of the group. People often talk only about appearance at first. Ask, “What else besides that?” Sometimes you can add, “Did anyone else notice...”
- 4) Show students the snail fact sheet and compare it to their observation.
- 5) Ask, “What questions do you still have about snails?” “How might you investigate them?”

Journal Reflection

Now that they have practiced observation skills and engaged in the process of generating questions, have them explore these ideas:

- How was this experience different from or similar to science experiences you have had before in school? (common answers: got own materials, lots of choices, self-directed, could share information and see what others are doing, able to discover on my own)
- Ask students to put on a “teacher hat” and think about what the facilitator was doing when introducing materials: asking questions, being actively involved, not drawing conclusions, challenging assumptions, debriefing, etc. and discuss how this facilitation was different.
- In journals, have students write down questions to which they want to find answers. Have students write next steps for an experiment they would design to find the answers.