

What it is, What it isn't

Summary

This activity will help students to recognize characteristics of living and nonliving items within an environment.

Materials

Twelve to fifteen living and nonliving cards

- [Let's Classify](#)

Ten to fifteen varieties of dry beans

- [C.S.I. Mystery #1 & 2](#)

Overhead projector

Overhead sheet picture

Additional Resources

Books

- *Take Another Look*

, by Tana Hoban; 0-688-80298-2

- *Look Again!*

, by Tana Hoban; 0-02-744050-8

- *Just Look*

, by Tana Hoban; 0-688-14041-6 LE

Background for Teachers

Sorting is a common procedure in classification. Science has often used visual sorting as a system to first classify items in order to understand how they work the way they do. Students will be visually sorting and looking for common characteristics and differences starting with dry beans. This activity will aid the students to look for details in each bean and then transfer this type of sorting to recognize characteristics of living and nonliving items within an environment.

Intended Learning Outcomes

1. Use Scientific Process and Thinking Skills.
3. Understand Science Concepts and Principles.

Instructional Procedures

Invitation to Learn

The instructor will write on chalkboard or put up word strips, "Living" & "Nonliving." The instructor will also have picture cards of approximately 12 to 15 items. Instructor asks, "Can you students help to visually identify these items and place them into two groups? One group are living things, the second group are nonliving things. Where should I place this example?"

Instructional Procedures

Discuss "Who knows about living organisms? Can we identify living things by certain characteristics? What characteristics were you using to place the cards? Where would we place items such as a fire or a dead log?"

Ask students to suggest the characteristics of a living organism. Does it breathe, eat, move and reproduce? These are the main characteristics to write on the board.

Journals -- Make a "t" chart in your journal. Show an example of chart on the board. Instruct students to list on one side "Living" and on the other, "Nonliving." Ask students to visualize and list five items from the schoolyard for each side of the "t". When finished, ask students to share

one or two examples. The teacher could make a "t" chart on the board and list students' suggestions. Students could check their own journal work for correctness.

Give each student a copy of the [Let's Classify](#) worksheet and instruct him or her to look at each individual picture and respond to the question for each column.

Place students into groups. Give each group a bag of beans and hand out the [C.S.I. Mystery #1](#) page to be filled out by the group. Instruct students to compare, sort, and identify each bean and to fill out and complete the worksheet. Once completed, discuss in whole group their findings and list on the board some of the identifiers that were thought up. Collect pages to use as an assessment. Collect bag of beans.

Journals -- "How do you think we might apply our findings to compare, sort, and identify items in an environment?"

Instructor shows overhead picture and asks, "Can we classify items shown in this picture into living and nonliving things?" Hand out C.S.I. Mystery #2 page and instruct students to complete this page individually.

Extensions

Curriculum Extensions/Adaptations/ Integration

Students can look around the room and/or school. How many items can they find and list that are living and nonliving?

Journal entries-- Students can write a sentence in a simile form. Example: The rocks outside have shiny specs in them, like small stars. This would be a written form of comparing a small environment to a large one.

Students can be given a magazine and asked to find a picture that has examples of living and nonliving items showing. Students can list said items.

Family Connections

Students can make a list from home of items living and nonliving in their house, apartment, yard, or neighborhood playground.

Students can share the living criteria with family members on what makes an item living things.

Assessment Plan

Journal entries may be used.

Completed worksheets may be used.

Verbal responses: Allow students to work in teams. Take them outside and ask them to show the instructor an example of a living thing and a nonliving thing. What did they use to help them classify?

Bibliography

Research Basis

Newton, L.D. (June 2002). Questions that help children understand Elementary Science. *Investigating*, Volume 18 (Issue 2), Page 6-9

It is vital to any lesson taught that the learner comes away having learned the concept. Many teachers ask questions as a form of assessment and to guide them in how the lesson should proceed. Teachers need to ask the "right questions" to make a difference. Some questions are interesting, but are they worthwhile? If carefully tailored, questions can be a very effective strategy.

Authors

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