



LIVING THINGS AND THEIR NEEDS

Pre-assessment

Written by Nancy Moreno, Ph.D., Barbara Tharp, M.S., and Paula Cutler, B.A.

from *Living Things and Their Needs Teacher's Guide* and for *Tillena Lou's Day in the Sun*.

BioEdSM

Teacher Resources from the
Center for Educational Outreach at
Baylor College of Medicine

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The activities described in this book are intended for school-age children under direct supervision of adults. The authors, Baylor College of Medicine and the publisher cannot be responsible for any accidents or injuries that may result from conduct of the activities, from not specifically following directions, or from ignoring cautions contained in the text.

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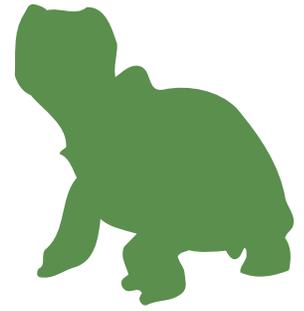


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Pre-assessment

This activity is designed to heighten student awareness and to help teacher estimate levels of student understanding.

Read the book, *Tillena Lou's Day in the Sun*, with students after completing this activity.



All living things require certain resources from the environment in order to live, grow and survive. While each type of organism may have individualized needs, all living things need a source of energy (food, for example), water, air and a place to be. The needs of human beings are similar to those of other organisms, especially animals. People need food, water, air and shelter to survive.

Young students may have difficulty identifying the difference between needs and wants. The activity, “Need or Want?” will help students distinguish between these two concepts.

This activity is designed to focus student attention and to help you, the teacher, gauge students’ existing knowledge about living things, including people, and their needs. Results of this activity can be saved and compared to the matching post-assessment to evaluate student learning over the course of the unit.

SETUP

Conduct discussion with entire class. Have students work individually.

PROCEDURE

1. Explain to students that they will be observing and learning about living things (also called organisms).
2. Distribute sheets of drawing paper and tell students to draw pictures of themselves. Have students create their artwork individually. Wait until later to conduct a class discussion so that you can use their drawings as a pre-assessment of knowledge.
3. After students have drawn their pictures, ask them to draw on their sheets all the basic things that they, as living things, might need to live, grow and survive.
4. As a whole group activity, encourage students to explain their drawings. Help students to conclude that they are living organisms with needs/wants.
5. Display or save students’ drawings in their portfolios. Explain to students that they will be learning more about living things during the coming days.

Note. The drawings can be used to estimate students’ knowledge or misconceptions about the needs of living organisms. Look for representations of basic needs, such as kinds of food, water (drinks), houses (shelter), etc., in their artwork to gain insight into their current levels of understanding.

CONCEPTS

- Living things have basic needs.
- Living things can survive only when their needs are met.

SKILLS

Science: Recording data, communicating, generalizing

Language Arts: Listening, communicating, using descriptive language, following directions

TIME

Set-up: 5 minutes

Class: 30 minutes

MATERIALS

Per student

- Crayons or markers
- White drawing paper



LIVING THINGS . . .

- Use food or sunlight for energy
- Need air
- Need water
- Grow and change over time
- Have offspring (reproduce)
- Sometimes can move on their own
- Can keep the conditions inside their bodies different from conditions outside
- Interact with other living things and with the nonliving environment





Using Cooperative Groups

Cooperative learning is a systematic way for students to work together in groups of two to four. Quite often, early primary students need to have their own materials, but can work in groups to share ideas and to learn from one another. Through such interactions, students are more likely to take responsibility for their own learning. The use of cooperative groups provides necessary support for reluctant learners, models community settings where cooperation is necessary, and enables the teacher to conduct hands-on investigations in a more manageable environment.

Students wear job badges that describe their duties. Tasks are rotated within each group for different activities so that each student has an opportunity to experience all roles. Teachers even may want to make class charts to coordinate job assignments within groups.

Once a cooperative model for learning has been established in the classroom, students are able to conduct science activities in an organized and effective manner. All students are aware of their responsibilities and are able to contribute to successful group efforts.

- Asks questions
- Asks others to help
- Asks others to help

fold here



Scientist Leader

- Gets the materials and returns materials
- Helps the leader

fold here



Materials Scientist

- Tells the teacher when group is finished
- Writes or draws results

fold here



Scientist Recorder

- Follows the safety rules
- Directs the cleanup

fold here



Safety Scientist





My Science Journal

Name _____

Date _____

Project Name _____

DRAWING

**KEY WORD
TO USE**

I OBSERVED . . .

