



LIVING THINGS AND THEIR NEEDS

Post-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

© 2013 Baylor College of Medicine. This activity is part of the Living Things and Their Needs unit. The *Living Things and Their Needs Teacher's Guide* may be used alone or with integrated unit components. The Needs unit is comprised of the guide, *Tillena Lou's Day in the Sun* (storybook), and two supplements: *The Reading Link* and *The Math Link*. For more information on this and other educational programs, contact the Center for Educational Outreach at 713-798-8200, 800-798-8244, or visit www.bcm.edu/edoutreach.

© 2013 by Baylor College of Medicine
All rights reserved.
Printed in the United States of America.

ISBN: 978-1-888997-66-8

BioEdSM

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

The mark “BioEd” is a service mark of Baylor College of Medicine. The mark “My World and Me” is a registered trademark of Baylor College of Medicine. No part of this book may be reproduced by any mechanical, photographic or electronic process, or in the form of an audio recording, nor may it be stored in a retrieval system, transmitted, or otherwise copied for public or private use without prior written permission of the publisher. Black-line masters reproduced for classroom use are excepted.

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.

Development of My World and Me[®] educational materials was supported, in part, by the National Institutes of Health, National Center for Research Resources, grant number RR25 RR13454, and National Institute of Environmental Health Sciences, grant number R25 ES10698. The opinions, findings and conclusions expressed in this publication are solely those of the authors and do not necessarily reflect the views of Baylor College of Medicine or the funding agencies.

Authors: Nancy P. Moreno, Ph.D., Barbara Z. Tharp, M.S., and Paula Cutler, B.A.

Editor: James P. Denk, M.A.

Design: Martha S. Young, B.F.A.

The My World and Me project at Baylor College of Medicine has benefited from the vision and knowledge of scientists and educators from a wide range of specialties. Our heartfelt appreciation goes to William A. Thomson, Ph.D., Professor of Family and Community Medicine and Director, Center for Educational Outreach, who has lent his support and expertise to the project.

Special acknowledgment is due to our partner in this project, the American Physiological Society (APS). We especially thank Marsha Lakes Matyas, Ph.D., and Katie Frampton of APS, for their invaluable reviews of draft materials and direction of field tests, focus groups, and dissemination activities in the Washington, DC area.

Special thanks go to the National Center for Research Resources of the National Institutes of Health (NIH) for its support of the My World and Me Project, and to the National Institute of Environmental Health Sciences, NIH, for its support of classroom implementation of My World and Me materials in the Houston area.

We are grateful to the many classroom teachers in Washington, D.C., and Houston, Texas, who participated in the field tests of these materials and provided invaluable feedback. We especially thank Rachel J. Cunningham, Wanda J. de Vries and Nannette M. Schultz at Whidby Elementary School in Houston for their contributions and suggestions.



Center for Educational Outreach
Baylor College of Medicine
One Baylor Plaza, BCM411
Houston, Texas 77030
713-798-8200 | 800-798-8244
www.bioedonline.org | www.bcm.edu/edoutreach



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

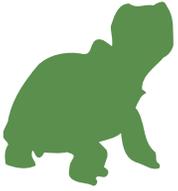
○ fold here ○

○ ○



Safety Scientist





My Science Journal

Name _____

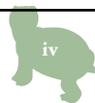
Date _____

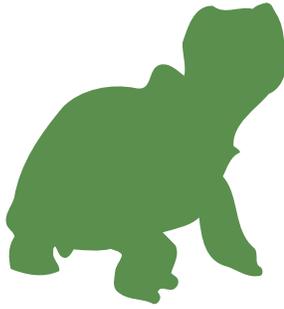
Project Name _____

DRAWING

**KEY WORD
TO USE**

I OBSERVED . . .





Post-assessment

Students will apply concepts learned in this unit by revisiting the pre-test, where they recorded what they needed to live. This activity will be extended by including another animal and its needs.

CONCEPTS

- All living things have basic needs that must be met.

SKILLS

Science: Comparing, communicating, applying knowledge

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

TIME

Set-up: 5 minutes

Class: 30 minutes

MATERIALS

Per student

- Sheet of white construction paper, 18 in. x 12 in.
- Crayons or markers



EXTENSION

Students may write a story or poem about an animal or plant and its needs. Younger students could “brain storm” in groups and dictate their ideas to the teacher or make picture books.

Most living things need air, food and water. Organisms also need physical space. Some plants and animals are similar in the ways they use resources from the environment and in the places where they live; others are very different from one another. Plants, in general, need air, nutrients from soil, water and sunlight in order to grow and reproduce. Plants can capture, store and use energy from the sun through a process known as photosynthesis. Animals are dependent on plants and other photosynthetic organisms (such as seaweeds) for food. Some animals eat only plants, others eat only animals, and some eat both plants and animals. Animals also need air and water.

Like all other living things, people need air, food, water and a place to be. Unlike plants and animals, people cook and combine their foods to make them better tasting and easier to digest. Unlike other organisms, people also create and use things to make their lives more comfortable and more pleasurable.

This final activity is designed to help you, the teacher, assess what your students have learned during this unit about the needs of living things. Part of the activity is matched to the drawing they created at the beginning of the unit. The second part of the activity lets you judge how they have been able to extend their knowledge.

SETUP

Collect paper and crayons or markers.

PROCEDURE

1. Distribute materials and instruct students to fold the large piece of paper in half (like a book), so that the folded page is 9 in. x 12 in. They should make a crease on the fold, open the paper and draw a line down the crease. On the left side of the page, each student should draw a picture of him or herself. Students then should draw images of their basic needs around the pictures of themselves.
2. Next, have students draw an image of one living thing (plant or animal—their choice) on the right side of the page. After they complete the animal or plant drawings, have students add images of what is needed by the selected animals or plants for survival. Older students may want to label the objects.
3. Return to students’ original pre-assessment activities. As a group, compare the pre- and post-drawings, and have students identify additional elements present in the new drawings.

