

Science



Written by

Sharon L. Apichella and Mary D. Sutton

Editor: Christie Weltz

Cover Illustrator: Gloria Jenkins

Designer/Production: Kammy Peyton

Art Director: Moonhee Pak

Project Director: Stacey Faulkner

© 2011 Creative Teaching Press Inc., Huntington Beach, CA 92649

Reproduction of activities in any manner for use in the classroom and not for commercial sale is permissible.

Reproduction of these materials for an entire school or for a school system is strictly prohibited.

Table of Contents

Introduction 3

Getting Started 4

Cootie Catchers Reproducibles

Life Science

Ecosystems 5

Living Things and Their Environment 6

Food Chains 7

Microorganisms 8

Adaptation and Extinction 9

Life Cycles 10

Plants Get and Give Energy 11

Earth Science

Earth's Structure 12

Rocks and Minerals 13

What Type of Rock? 14

Landforms 15

Shaping Earth 16

The Rock Cycle 17

Earthquakes 18

Volcanoes 19

Physical Science

Electricity 20

Electric Circuits 21

Magnetism 22

Energy Changes 23

Matter Changes 24

Introduction

Cootie Catchers Science is an interactive and motivating tool for daily review. Using a new twist on the popular origami fortune tellers, this hands-on resource provides a fun and unique approach to practicing and reviewing standards-based science concepts and academic language. *Cootie Catchers Science* features 20 reproducible cootie catchers that each reinforce specific science concepts. Each page includes a *Before You Flip* hint for students to apply while they use each cootie catcher and an *After You Flip* activity to extend their learning after they have finished. Once the cootie catcher is made, students read and answer the questions; then they lift the flaps to reveal the correct answers. A recording sheet is provided on the inside back cover to help teachers keep track of assigned cootie catchers.

Aligned to National Science Education Standards (NSES), *Cootie Catchers Science* is an ideal resource for providing specific review for all students. Research shows that repetition is essential for the brain to learn and recall information. Furthermore, children have a tendency to repeat activities they enjoy. *Cootie Catchers Science* offers a fun and quick way for students to repeat and retain essential information. This teacher-tested, student-approved resource can be used for classroom center activities, as enrichment assignments when regular class work is completed, or for homework. Perfect for individuals, partners, or small groups, *Cootie Catchers Science* makes practicing science concepts enjoyable. The following areas are addressed in this resource:

- * Life science
- * Earth science
- * Physical science

Cootie catchers fit in pants pockets, backpacks, or lunch boxes for review on the go! Students can use them in a classroom center, at their desks, on the playground, or in a car or bus. Parents can slip cootie catchers into a pocket or purse and use them to review with their child at home, in line at the store, or while waiting for appointments. With these easy-to-make, fun-to-use, portable manipulatives, students will love reviewing science concepts and vocabulary the *Cootie Catchers Science* way!

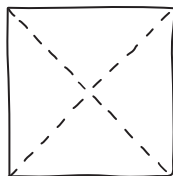
Getting Started

How to Use

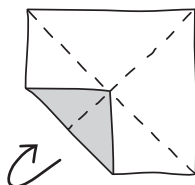
1. Select a skill you would like your students to practice, and make multiple copies of the corresponding page. Store the pages in a labeled hanging file in a science center.
2. Demonstrate how to fold the cootie catchers. Display the instructions for students' reference.
3. Remind students to read the *Before You Flip* section before using each cootie catcher.
4. Have the students complete the *After You Flip* activity as an extension or quick assessment after they have used each cootie catcher. Ask the students to return the top portion of the page to you. Use this, along with the recording sheet, to keep track of assigned cootie catchers.
5. Send the cootie catchers home for additional practice.

How to Make

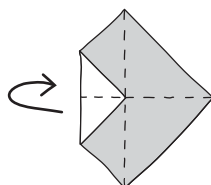
1. Carefully cut along the outline of the square. Fold and unfold the square in half diagonally in both directions to make two creases that form an X.



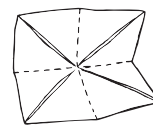
2. Place the paper facedown, and then fold each of the four corners in so that their points touch the center.



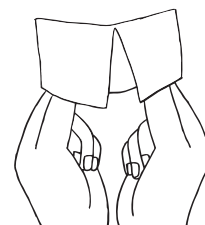
3. Turn the paper over so the flaps are facedown. Again, fold each of the four corners in so their points touch the center.



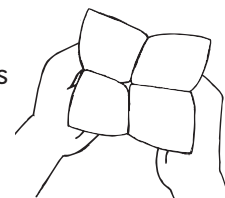
4. Fold the square in half, making a rectangle. Unfold and fold in half in the opposite direction, making a rectangle.



5. Slide both index fingers and thumbs under the four flaps.



6. Use your thumbs and index fingers to pinch the top corners together and form a point. You are ready to play.



How to Play

1. Choose a number from one to five.
2. Open and close the cootie catcher (front to back and then sideways) as many times as the number selected.
3. Choose one of the four questions shown inside and answer it.
4. Lift the flap on which the question is written and check the answer.
5. Continue playing in the same way until all eight questions have been answered.

Ecosystems

Before
you
"FLIP"

Hint: An ecosystem includes all the living and nonliving things in an environment.

After
you
"FLIP"

On the back of this paper, list one example each of a biotic and abiotic factor in a desert habitat.

herbivore
An animal that eats only plants.

omnivore
An animal that eats both plants and meat.

carnivore
An animal that eats only meat.

microorganism
Bacteria are a type of *this* that is too small to see without a microscope.

accommodation
An individual's response to a change in its ecosystem.

abiotic
Biotic factors are the living parts of an environment. What factors are the nonliving parts?

competition
The struggle between living things for the same resources.

adaptation
A behavior or feature that helps an organism survive.

Ecosystems

Ecosystems

Ecosystems

Ecosystems

Living Things and Their Environment

Before you "FLIP"

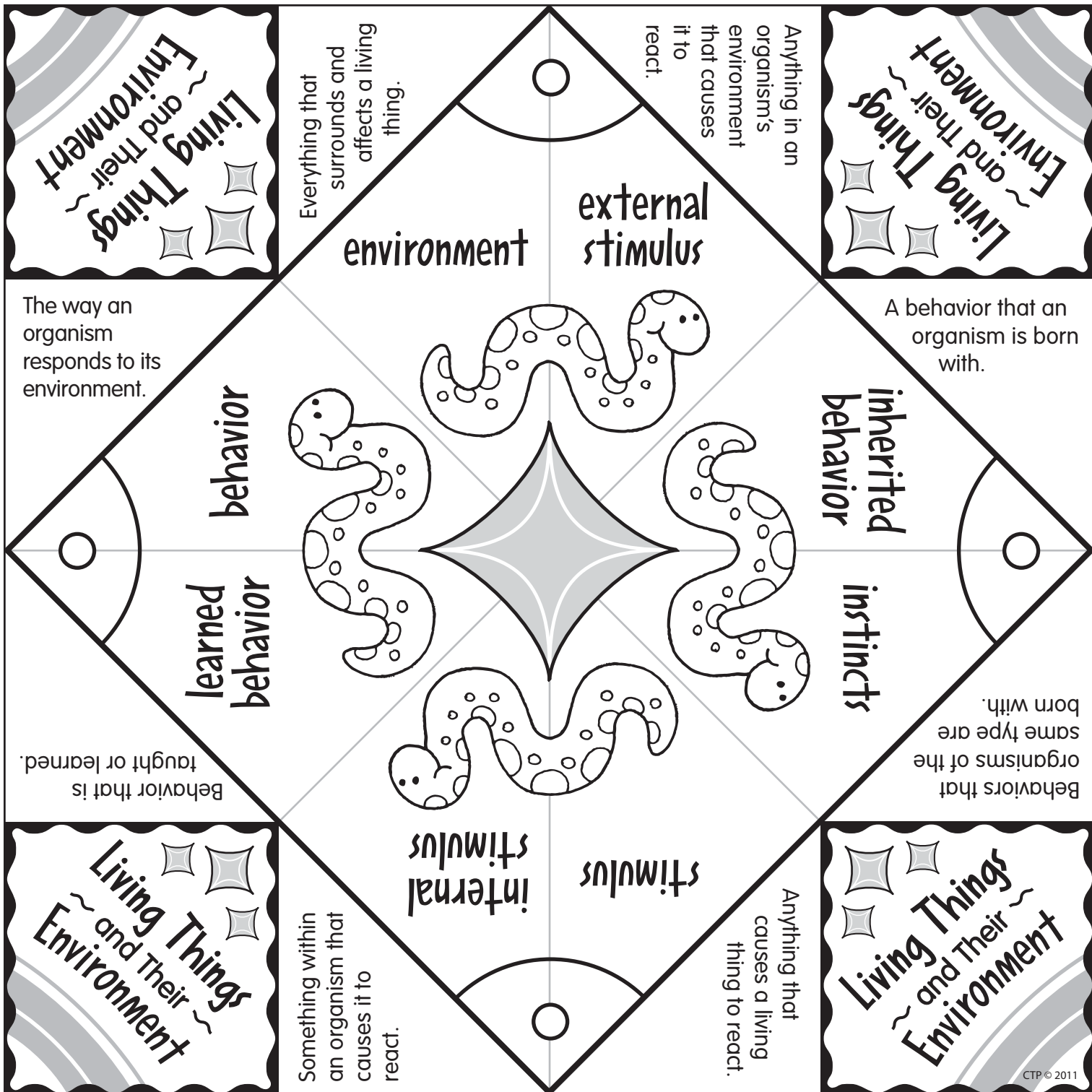
Hint: Living things in an environment have different responses to a stimulus.

After you "FLIP"

Give an example of one learned behavior and one inherited behavior.

learned behavior

inherited behavior



Food Chains

**Before
you
"FLIP"**

Hint: A food chain shows the path that energy takes from one organism to another in the form of food.

**After
you
"FLIP"**

On the back of this paper, list at least one producer, one consumer, and one decomposer you might find in a forest ecosystem.

Food Chains

producer
An organism that makes its own food.

sun
This is usually the beginning of a food chain.

predator
An animal that hunts another animal for food.

decomposer
An organism that breaks down other organisms.

consumer
An organism that consumes plants or other animals to survive.

prey
An animal that is hunted as food.

primary consumer
The first consumer in a food chain.

food web
Multiple food chains connect to create this.

Food Chains

Food Chains

Food Chains

CTP © 2011