

# Science



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# Table of Contents

<b>Introduction</b> .....	3
<b>Getting Started</b> .....	4
<b>Cootie Catchers Reproducibles</b>	
<b>Life Science</b>	
Living or Nonliving? .....	5
What Am I? .....	6
Adapt, Migrate, or Hibernate? .....	7
Habitats .....	8
Plants and Animals .....	9
Insects .....	10
Butterflies and Moths .....	11
Plant Parts .....	12
<b>Earth Science</b>	
Life in the Past .....	13
Rocks and Soil .....	14
Renewable or Nonrenewable Resource? .....	15
Reduce, Reuse, Recycle .....	16
Weather .....	17
<b>Physical Science</b>	
Matter: Solid, Liquid, Gas .....	18
Energy .....	19
Sound .....	20
Forces .....	21
Simple Machines .....	22
Magnets .....	23
<b>Investigation</b>	
Science Tools .....	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
- \* Investigation

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!

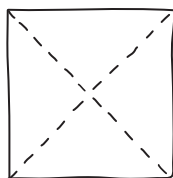
# Getting Started

## How to Use

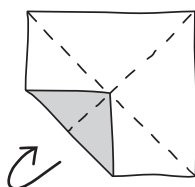
1. Select a skill you would like your students to practice, and make multiple copies of the corresponding page. Store the pages in a labeled hanging file in a science center.
2. Demonstrate how to fold the cootie catchers. Display the instructions for students' reference.
3. Remind students to read the *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

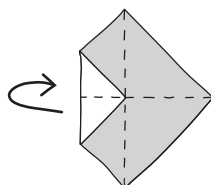
1. Carefully cut along the outline of the square. Fold and unfold the square in half diagonally in both directions to make two creases that form an X.



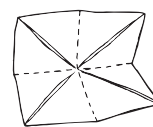
2. Place the paper facedown, and then fold each of the four corners in so that their points touch the center.



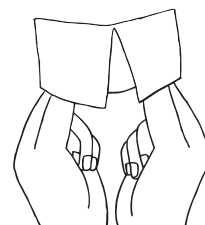
3. Turn the paper over so the flaps are facedown. Again, fold each of the four corners in so their points touch the center.



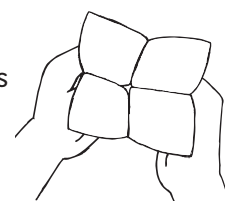
4. Fold the square in half, making a rectangle. Unfold and fold in half in the opposite direction, making a rectangle.



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.

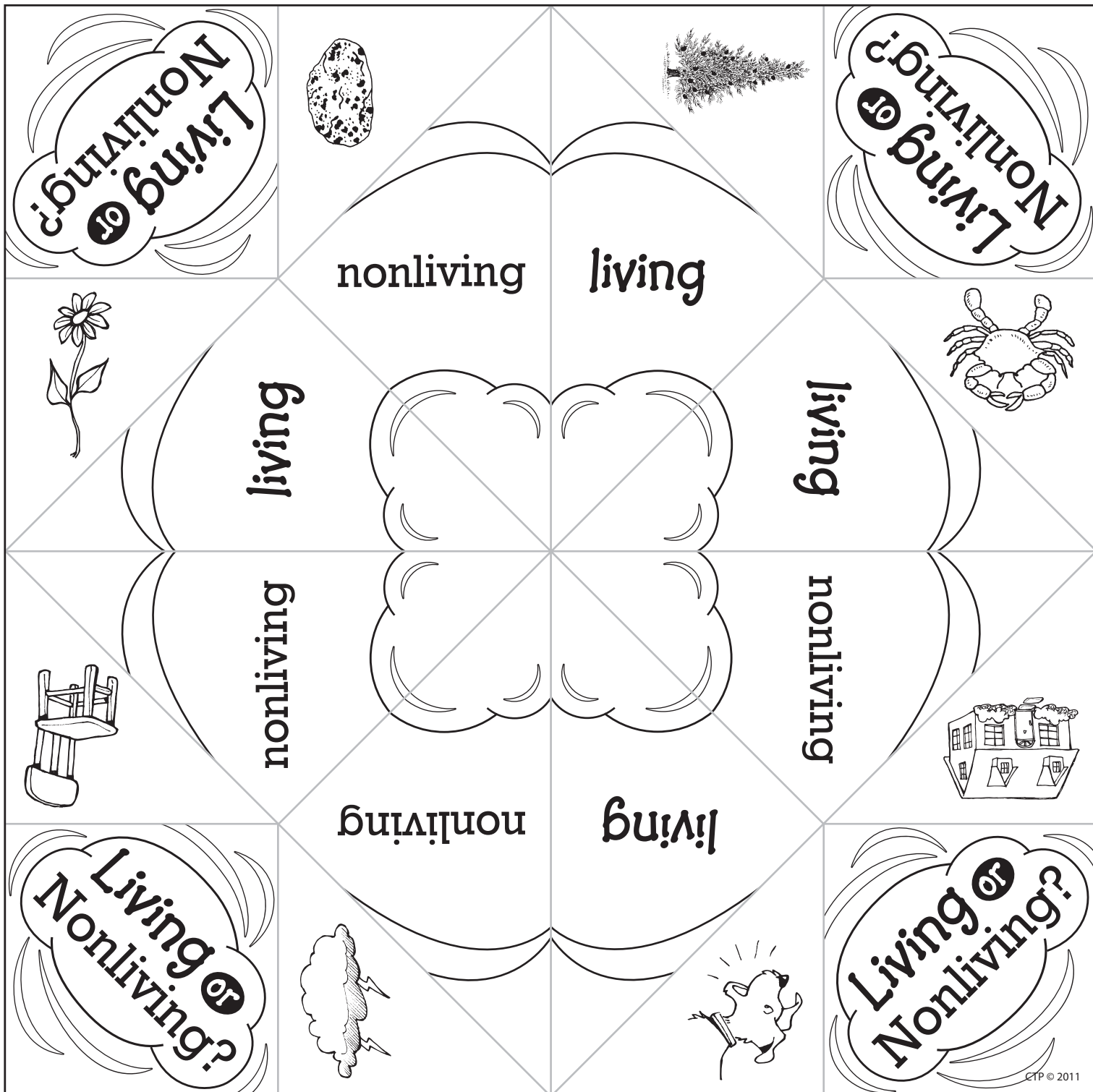
# Living or Nonliving?

Before  
you  
"FLIP"

**Hint:** A living thing grows, changes, and makes other living things just like itself.

After  
you  
"FLIP"

On the back of this paper, list three living things and three nonliving things in your community.



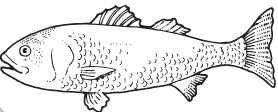


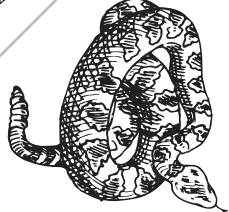
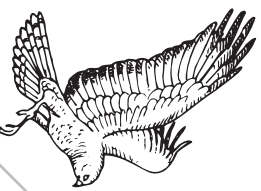

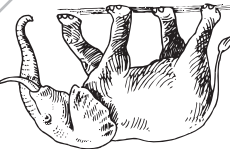

# What Am I?

**Before  
you  
"FLIP"**

**Hint:** Think about the characteristics that make an animal a mammal, bird, reptile, amphibian, or fish.

**After  
you  
"FLIP"**

On the back of this paper, name at least two animals each that belong in the following groups: mammals, birds, reptiles, amphibians, and fish.

<p><b>What Am I?</b></p>	<p><b>fish</b></p> <ul style="list-style-type: none"> <li>wet scales</li> <li>breathe with gills</li> </ul> 	<p><b>mammal</b></p> <ul style="list-style-type: none"> <li>covered in fur or hair</li> <li>babies drink mother's milk</li> </ul> 	<p><b>What Am I?</b></p>
<p><b>amphibian</b></p> <ul style="list-style-type: none"> <li>lay soft eggs</li> <li>babies hatch in water; adults move to land</li> </ul> 	<p><b>reptile</b></p> <ul style="list-style-type: none"> <li>rough, dry scales</li> <li>lay leathery eggs</li> </ul> 	<p><b>bird</b></p> 	<p><b>What Am I?</b></p>
<p><b>amphibian</b></p> <ul style="list-style-type: none"> <li>wet skin</li> <li>go through a metamorphosis</li> </ul> 	<p><b>mammal</b></p> 	<p><b>reptile</b></p> 	<p><b>What Am I?</b></p>
<p><b>What Am I?</b></p>	<p><b>mammal</b></p> <ul style="list-style-type: none"> <li>warm-blooded</li> <li>most babies do not hatch from eggs</li> </ul>	<p><b>reptile</b></p> <ul style="list-style-type: none"> <li>cold-blooded</li> <li>rough, dry scales</li> </ul>	<p><b>What Am I?</b></p>

# Adapt, Migrate, or Hibernate?

**Before  
you  
“FLIP”**

**Hint:** Animals make changes to help them survive. They can adapt, migrate, or hibernate.

**After  
you  
“FLIP”**

Choose an animal and, on the back of this paper, describe how it would survive a cold winter.

<p><b>Adapt, Migrate, or Hibernate?</b></p>	<p>A tortoise sleeps in a burrow during the cold winter.</p> <p><b>hibernate</b></p>	<p><b>Adapt, Migrate, or Hibernate?</b></p> <p>A herd of African elephants searches for food and water in the dry season.</p> <p><b>migrate</b></p>
<p>A flock of Canada geese flies to a warmer climate for the winter.</p> <p><b>migrate</b></p>	<p><b>migrate</b></p>	<p><b>adapt</b></p> <p>A sea otter's special fur and layers of fat keep it warm in water.</p>
<p><b>migrate</b></p> <p>A herd of reindeer moves to find food.</p>	<p><b>adapt</b></p>	<p><b>hibernate</b></p> <p>A grizzly bear sleeps during the cold winter months.</p>
<p><b>Adapt, Migrate, or Hibernate?</b></p> <p>A walking stick insect looks like small twigs.</p>	<p><b>adapt</b></p>	<p><b>Adapt, Migrate, or Hibernate?</b></p> <p>A poison dart frog's bright colors warn predators.</p>