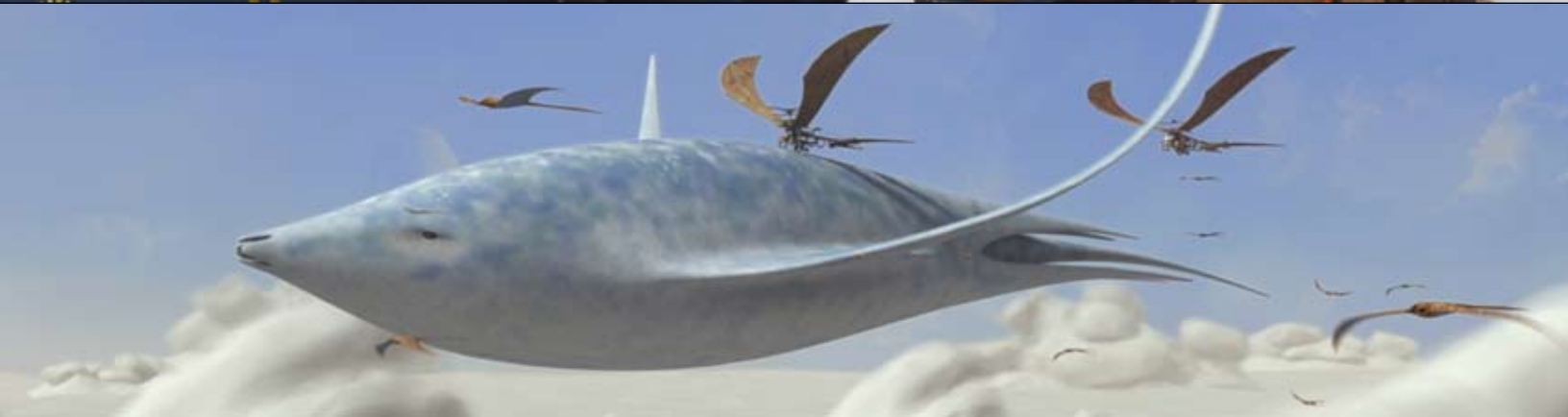


BATTLE FOR TERRA

FAMILY ACTIVITY GUIDE



LOOK INSIDE TO FIND ACTIVITIES FOR KIDS AGES 6-14 AND THEIR FAMILIES, PLUS CLASSROOM EXTENSIONS FOR EDUCATORS.

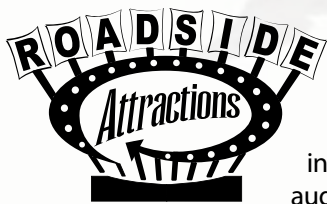
National Wildlife Federation® teams up with **BATTLE FOR TERRA**—a 3D feature film opening **May 1, 2009**

BATTLE FOR TERRA is a journey to a whole new world! It is a story of friendship, family, and sacrifice. Most importantly, it is about realizing that our survival depends on Earth's precious natural resources.

BATTLE FOR TERRA

BATTLE FOR TERRA tells the story of Senn (Justin Long) and Mala (Evan Rachel Wood), two teens who live happily on the beautiful and peaceful planet Terra. Everything changes when Terra is invaded—by human beings looking for a new home because Earth has been destroyed. Mala makes friends with an injured human pilot (Luke Wilson). Together, they learn that they are not so different from each other—but that their survival and their worlds' natural resources are now in great danger. The film also features Amanda Peet, Chris Evans, Brian Cox and Dennis Quaid and is the feature directorial debut of acclaimed shorts filmmaker Aristomenis Tsirbas. It is rated PG.

BATTLE FOR TERRA made its world premiere at the Toronto International Film Festival, and has since thrilled festival audiences worldwide. The film has been honored for its environmental awareness themes and stunning animation with the Silver Griffin Award at the 2008 Giffoni Film Festival; the Grand Prize for Best Animated Feature at the 2008 Ottawa International Animation Festival; the Crystal Heart Award at the 2008 Heartland Film Festival and most recently the Truly Moving Picture Award and DOVE foundation seal.



Roadside Attractions is a film distribution company committed to championing independent films with a willingness to entertain. The company works with filmmakers to devise innovative marketing strategies that encourage audiences to see films that are not typical studio fare. Roadside Attractions' current release includes Ramin Bahrani's *GOODBYE SOLO*, winner of the 2008 Venice Film Festival's FIPRESCI International Critics' prize, and upcoming releases include the Sundance documentary thriller *THE COVE* and RJ Cutler's much anticipated documentary *THE SEPTEMBER ISSUE*.



National Wildlife Federation (NWF) inspires Americans to protect wildlife for our children's future. For more than 70 years, NWF has been connecting people of all ages with nature through award-winning education programs and resources, including the children's magazines *Wild Animal Baby*®, *Your Big Backyard*®, and *Ranger Rick*®.

National Wildlife Federation believes that a daily dose of the outdoors is essential to the physical, mental and emotional health of America's children. NWF is mobilizing families, educators, health-care practitioners, corporate leaders, policymakers, and the media to get children outdoors to play, learn, and rediscover nature. Find out more about the Be Out There™ movement at nwf.org/beoutthere.

NWF is proud to be the educational outreach partner for **BATTLE FOR TERRA**. The film is a story of friendship, family, and sacrifice. Most importantly, it is about realizing that our survival relies on Earth's precious natural resources. This message is timely, and the powerful environmental theme underscores the limits of our planet, as well as the importance of being connected to nature and to the natural resources on which all life depends.

This activity guide is designed for kids ages 6-14 and their families. Plus it includes classroom extensions for educators. It is best used in conjunction with the film, *Battle for Terra*. Have fun!

TABLE OF CONTENTS

The World in 3-D	3
Survival Story	3
Terra Talk	4
Make a Terrarium	5
Edible Terrarium	6
Terra Diorama.....	6-8
Earth Pledge	9
Resources	10
Terra Talk Answers	10

CREDITS

This guide was developed by *National Wildlife Federation* in association with *Roadside Attractions*.

© 2009 National Wildlife Federation. Permission granted for non-commercial educational uses only. All other rights reserved.

THE WORLD IN 3-D

Explore nature with all of your senses.

BATTLE FOR TERRA is an exciting 3D adventure. But the world outside your door doesn't just look 3-D—it is 3-D! You can see everything around you in three dimensions and living color. And you can experience it through your other senses, too. Why not take a 3-D walk around your yard, your neighborhood, or a nearby park or trail? Here are some things to look for and think about:

- Explore with your eyes, your ears, your nose, and your fingertips. Take time to focus on each sense separately.
- Look up. What do you see?
- Look under something. What can you find?
- How many different colors do you see?
- Close your eyes. What do you hear?
- Can you find a flower or plant that smells nice?
- How many different textures can you feel? (smooth, rough, soft, hard, fuzzy, prickly, etc.)
- What does the air feel like on your skin? Warm or cool? Still or windy?
- What animals and plants live in this place?
- What nonliving things do you see?
- How is this place important to other creatures?
- How is it important to you?

If you could visit the planet Terra, you would see a very different world. But what would beings from Terra see if they came to your world? Earth would be new and amazing to them! Imagine that Senn and Mala have come to visit you. As you take your 3-D walk, pretend that you are giving them a tour. What would things look like through their eyes? If you could give them a souvenir to take back to Terra, what would it be?

EXTENSIONS FOR EDUCATORS

Have each student make a chart with five columns, one for each sense. Send students on a 3-D exploration of the schoolyard, asking them to record observations on their charts and use descriptive words to convey what they saw, heard, smelled, touched, and tasted. Then ask them to write a poem about the experience, using the descriptive language to bring the poem to life.

Concepts and Standards: *living and nonliving things, characteristics of organisms, five senses, descriptive language*

Skills: *curiosity, observation, description, data recording, creative writing*

SURVIVAL STORY

What do you really need?

BATTLE FOR TERRA deals with our most basic needs for survival. What is the difference between a need and a want? Try this activity to help you narrow down to what is most essential for life.

WHAT YOU NEED:

- Scrap paper torn into small squares
- Pencils or pens
- A bowl or bucket

WHAT YOU DO:

1. Start by giving each person 15 small squares of paper. On each of your squares, write one thing that you couldn't—or wouldn't want to—live without. Spread out your squares in front of you.
2. Imagine that a disaster strikes and you must give up 5 of the things you have written. Choose 5 of your squares and drop them into the bowl, leaving you with your top 10 necessities.
3. Another disaster strikes and takes away 5 more things. Drop 5 more items into the bowl, leaving you with just 5 remaining necessities.
4. What 5 things are left in front of you? Could you really survive if these things were all you had left in the world? Is there anything missing? As a family, compare what each of you has left and discuss why these things are most important to you.

EXTENSIONS FOR EDUCATORS

Do this activity with students and then have them break up into small groups to discuss the items that remain on their squares. What did they choose? Why? Then introduce the idea that living things have certain survival needs. Food, water, and shelter are among these most basic requirements. If just one of these necessities is missing or in short supply, it becomes the limiting factor—it determines whether or not an individual or group of organisms will survive. Ask students to look at their squares again and decide if their most basic survival needs have been met.

Concepts and Standards: *characteristics of organisms, populations, survival needs, limiting factors*

Skills: *decision-making, prioritizing, analyzing*



TERRA TALK

Where does the name Terra come from?

The name Terra is a Latin word that means "land" or "earth." There are lots of words in English that are formed from this root word. See if you can find the ones hidden in the word search below. Look up, down, across, and diagonally.

TERRA WORDS TO FIND

TERRAIN	EXTRATERRESTRIAL	SUBTERRANEAN	TERRACE	MEDITERRANEAN
TERRITORY	TERRARIUM	TERRA FIRMA	TERRIER	TERRA COTTA

OTHER WORDS TO FIND

EARTH	GALAXY	SENN	STANTON
SPACESHIP	UNIVERSE	MALA	



A **terrarium** is an earth-filled container where plants grow.

A submarine travels under the water; **subterranean** means "under the earth."

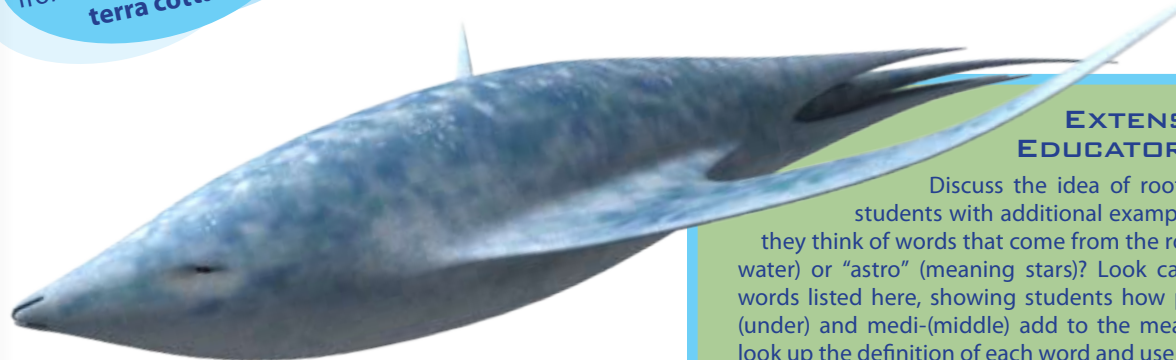
Pottery made from clay (which is dug from the earth) is called **terra cotta**.



A **terrier** is a dog bred to hunt by digging in the earth.

Extraterrestrial is another word for "alien." It means "from outside of earth."

A sailor returning from sea is happy to step onto **terra firma**, or solid ground.



EXTENSIONS FOR EDUCATORS

Discuss the idea of root words and provide students with additional examples. For example, can they think of words that come from the root "hydro" (meaning water) or "astro" (meaning stars)? Look carefully at the "terra" words listed here, showing students how prefixes such as sub-(under) and medi-(middle) add to the meaning. Have students look up the definition of each word and use it in a sentence.

Concepts and Standards: root words, prefixes, origins of words

Skills: decoding word meanings, using context clues

MAKE A TERRARIUM

Create your own mini-world!

A terrarium is a small garden inside a container. Some terrariums are open to the air, and some are closed systems. Both work like tiny versions of the world outside. In a closed terrarium, it even rains! You can make either kind. You don't need to water a closed terrarium, but it can be tricky to get the balance just right. Open terrariums need more care, but fewer things can go wrong.

WHAT YOU NEED:

- Clear plastic or glass container (such as a wide-mouth jar, a fishbowl, or a plastic soda bottle with the top cut off)
- Gravel
- Activated charcoal (optional)
- Potting soil
- Several small plants
- Other decorations, if you want

WHAT YOU DO:

1. Start by washing and drying your container.
2. Fill the bottom of the container with about an inch of small gravel. Like bedrock under the soil outside, the gravel gives water a place to drain so the soil won't get too soggy.
3. If you want, you can sprinkle a thin layer of activated charcoal (sold with aquarium supplies) over the gravel. This helps to filter the water in your terrarium so it stays pure.
4. Add a layer of potting soil. The soil should fill one-third to one-half of the container, to give the plants' roots a place to grow.
5. Now you're ready to add the plants. Choose plants that will stay fairly small, and be sure that they need similar amounts of light and water. A cactus (which needs little moisture) and a fern (which needs a lot) won't be happy in the same terrarium!
6. Water the terrarium lightly. It's especially important not to add too much water if you're making a closed terrarium, because extra water can't escape.
7. Add rocks, sticks, animal figures, or other decorations to complete your scene.
8. Put your terrarium in a sunny place. Check it often to make sure it has enough water, but not too much.



EXTENSIONS FOR EDUCATORS

Make one large closed terrarium with the class, or have each student make a small one. Discuss the concept of an ecosystem in which all living and nonliving parts are connected. Have students predict what will happen in the terrarium and make observations over time: Sunlight shining into the terrarium will evaporate the water. When the water vapor hits the top of the container, it will condense and drip or run back down to the soil—just as it does in the Earth's water cycle. Plants will grow, using nutrients from the soil, and decay, returning nutrients back to the soil.

Concepts and Standards: *habitat, ecosystems, plant biology, life cycles, water cycle*

Skills: *prediction, observation, description*



EDIBLE TERRARIUM

It's "dirt" you can eat!

If you dig down into the earth, you'll see layers in the soil. These layers have different colors and textures. Here's a recipe for making your own layered "dirt" that you can eat!

WHAT YOU NEED:

- See-through bowl or cup
- Chocolate sandwich cookies
- Chocolate pudding or ice cream
- Gummy worms
- Edible or fake flowers (optional)

WHAT YOU DO:

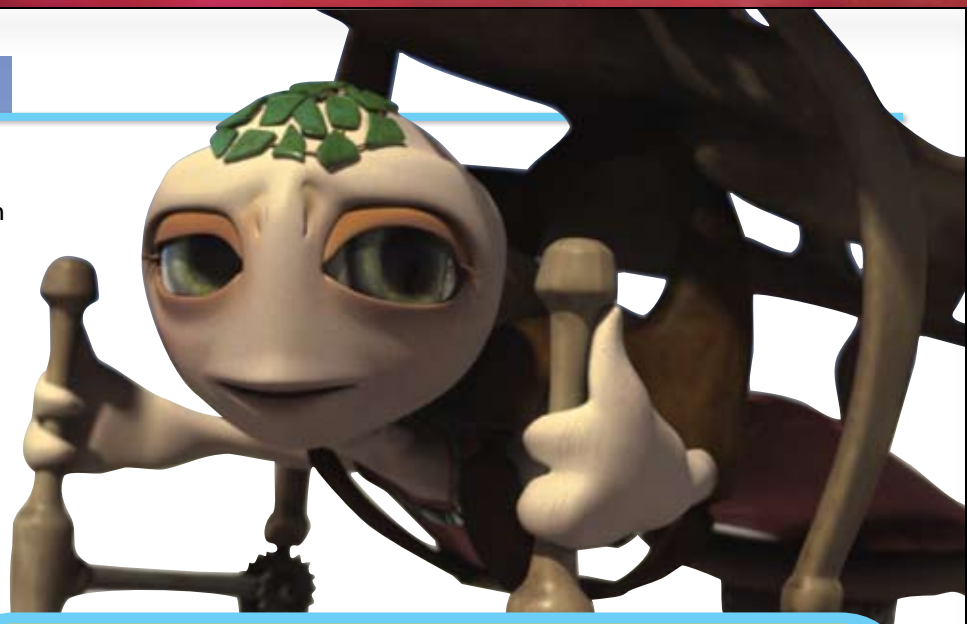
1. Seal the sandwich cookies in a zip-top bag and crush them into small pieces.
2. Put a layer of cookie crumbs in the bottom of your bowl or cup.
3. Scoop in a layer of pudding or ice cream.
4. Add another layer of cookie crumbs. Keep adding layers until you get to the top.
5. Decorate your "dirt" with gummy worms. Poke in some edible or fake flowers if you want.
6. Enjoy!

EXTENSIONS FOR EDUCATORS

Before making an edible terrarium, introduce students to real soil layers. Show them a diagram of a soil profile or, better yet, dig a soil pit so they can see and feel the different layers themselves. Point out features such as the rich, dark organic horizon on the surface, which may include plant roots, worms, and other organisms; the mineral soil below; and the bedrock that breaks down and helps to create the soil. Have students measure the thickness of each layer. Use soil vocabulary as you assemble and enjoy your treat, and discuss how the edible terrarium is similar to and different from real soil.

Concepts and Standards: *soil, soil layers, bedrock, plant biology, habitat*

Skills: *observation, measurement, modeling, comparing and contrasting*



TERRA DIORAMA

Make a scene!

The world of Terra is full of strange landscapes and interesting creatures. Using the cutouts on the next page, have fun making a Terra scene.

WHAT YOU NEED:

- Empty shoebox
- Scissors
- Tape or glue
- Terra scenes and characters on next two pages

WHAT YOU DO:

1. Cut out the shapes on the next two pages. Or, if you'd rather, draw your own.
2. Stand your shoebox up on one side.
3. Arrange your cutouts inside the box to make a scene from the planet Terra. You can add other things to your scene if you want, too. Be creative and have fun!

EXTENSIONS FOR EDUCATORS

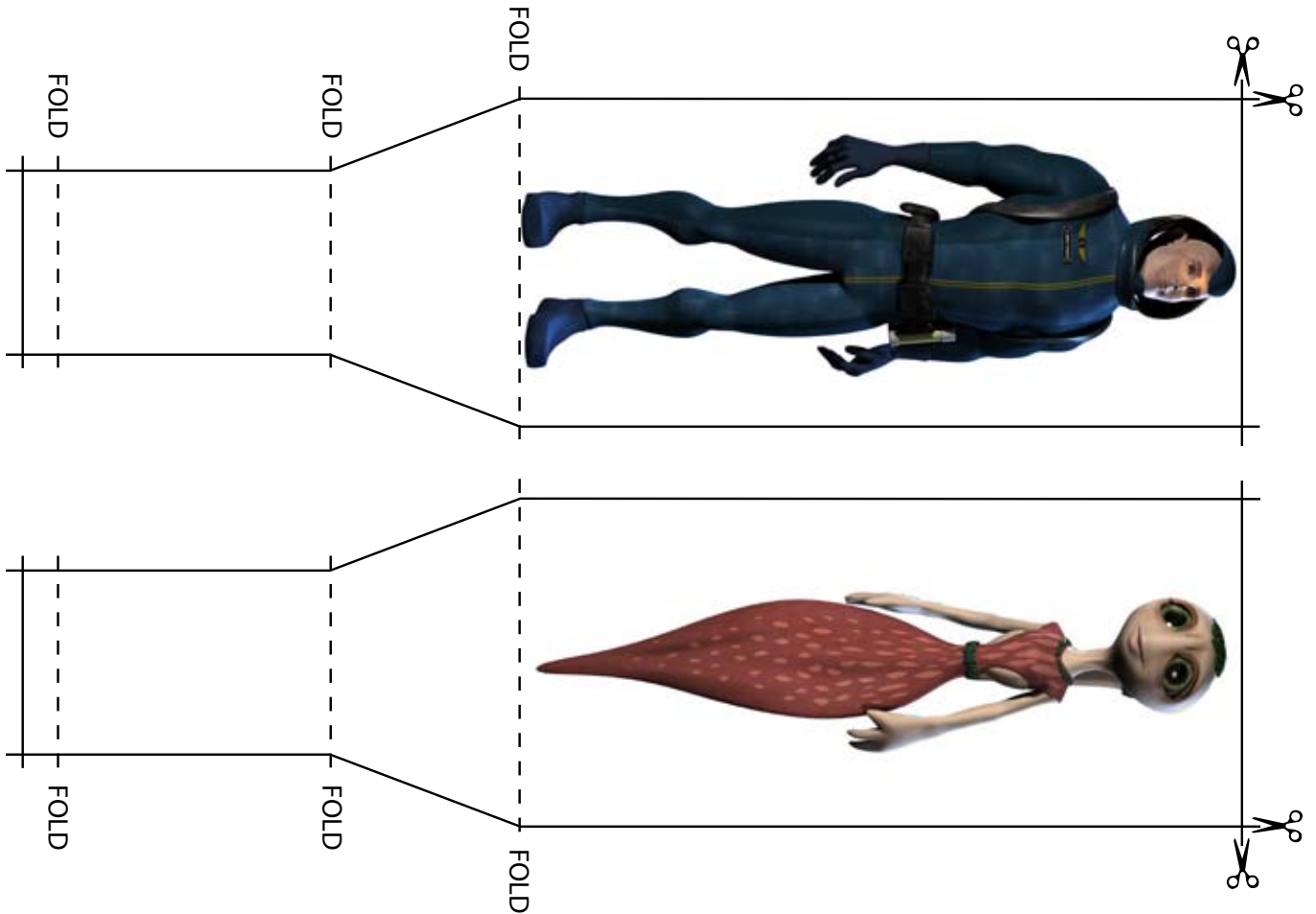
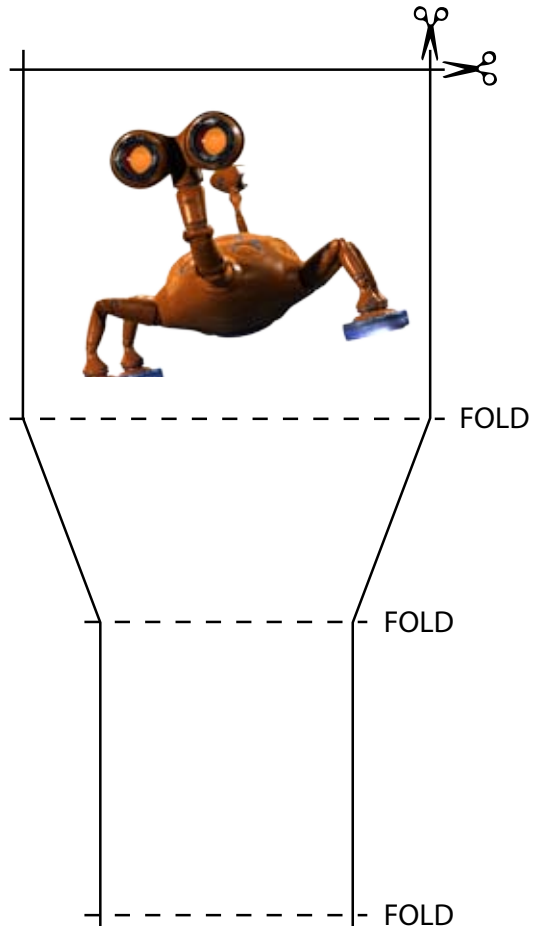
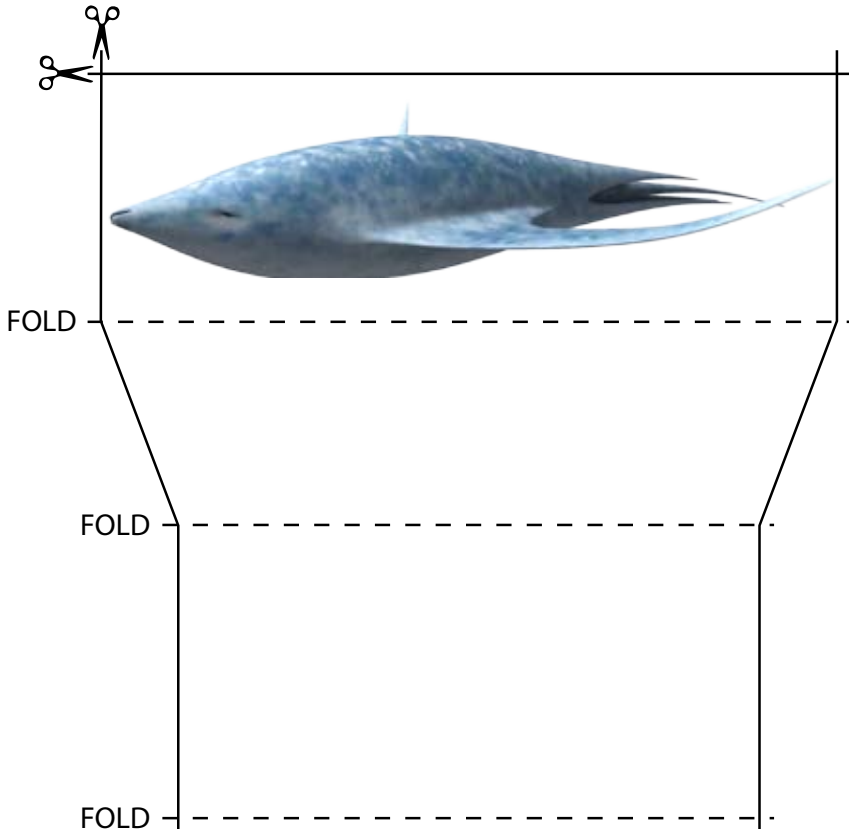
Define ecosystem and have students compare some of Earth's ecosystems with their Terra scenes. How is life on Terra different from life on Earth? What is the same? What features do all the ecosystems have in common? What makes them places where living things can survive? For comparison, students could make dioramas of Earth ecosystems as well, or they could use their understanding of what an ecosystem is to invent a scene from another made-up planet.

Concepts and Standards: *ecosystems, habitats, characteristics of organisms, requirements for life*

Skills: *visual arts, creativity, comparing and contrasting, applying knowledge to a new situation*



TERRA DIORAMA Characters





EARTH PLEDGE

Make your pledge to stay connected to the Earth!

In *BATTLE FOR TERRA*, the humans living on the spaceship had lost their connection with nature and the Earth. But the beings on Terra loved and celebrated their natural world, and this helped them survive. How can you stay connected to the Earth? Write a pledge saying what you will do, and then hang it on your door as a daily reminder.

WHAT YOU NEED:

- * Doorhanger cutout
- * Scissors
- * Crayons or markers

WHAT YOU DO:

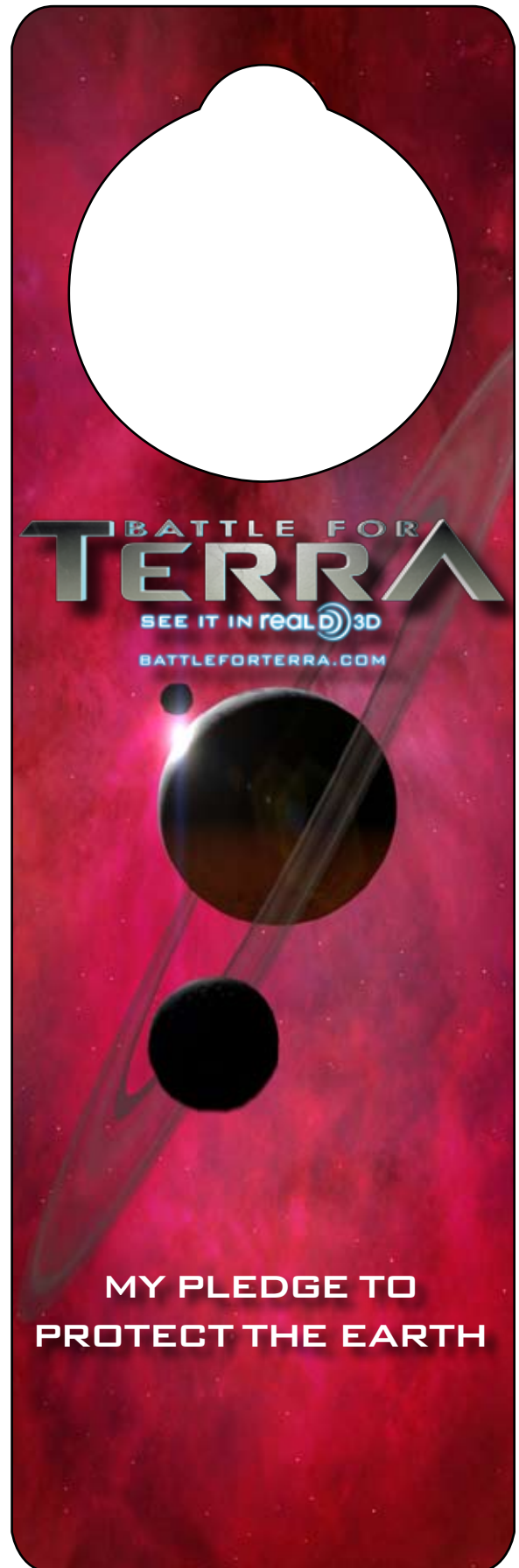
1. Cut out the doorhanger shape on this page, or use it as a pattern to cut the shape out of construction paper, cardboard, or craft foam.
2. Write your pledge to stay connected to the Earth on the blank side of the doorhanger.
3. Decorate the doorhanger however you like.
4. If you want, laminate the doorhanger or cover it with clear contact paper to make it more durable.
5. Hang the doorhanger on your bedroom door to remind you to keep your pledge each day.

EXTENSIONS FOR EDUCATORS

After students write their personal pledges, brainstorm some actions you could take as a class to be caretakers of the Earth. Choose one or more of these actions and engage students in making a plan, gathering any necessary information or resources, and carrying out this plan. Then celebrate your success!

Concepts and Standards: *stewardship, cooperation, teamwork*

Skills: *contributing ideas, compromising, planning, prioritizing, following through, evaluating*



RESOURCES

FOR KIDS

Ready to get out and explore the special places in your world?

- Check out the Ranger Rick Web site at www.nwf.org/rangerrick to learn more about wildlife and nature and get great ideas for having fun outside.

FOR PARENTS

- Find out why a “daily dose” of the outdoors is essential to the physical, mental, and emotional health of children at www.nwf.org/beoutthere.
- Get lots of tips and ideas for outdoor family fun from Green Hour at www.greenhour.org

FOR THE WHOLE FAMILY

- Where’s nature near you? Visit NatureFind at www.greenhour.org/naturefind and click to enter your zip code.
- What’s up with global warming? Get answers at www.nwf.org/climateclassroom

Answers to word puzzle

