





Disneprature Cart

**EDUCATIONAL ACTIVITY GUIDE** 



# An Amazing Journey Across Our Planet



Starting **April 22**, **2009**—the 40<sup>th</sup> anniversary of Earth Day—you and your students are invited to share an unforgettable true-life adventure as Disneynature presents **earth**, a spectacular new film that tells the remarkable story of three animal families and their amazing journey across the planet we all call home.

Disneynature is a brand new film label, building on the rich legacy of Walt Disney's groundbreaking Academy Award-winning® "True-Life Adventures" series, bringing new stories of the natural world around us to the motion picture screen as never before. Through the artistry of storytelling and utilizing new state-of-the-art technologies, leading filmmakers will make it possible for moviegoers to experience nature with an unprecedented sense of grandeur and intimacy.

**earth**, the first film under the Disneynature label, introduces us to three animal families—Polar bears, African elephants, and Humpback whales—who struggle to survive in our planet's changing world. **earth** is created by the acclaimed creative team behind the Emmy Award-Winning® "Planet Earth," Director Alastair Fothergill and Co-Director Mark Linfield.

The enclosed Educational Activity Guide, created by the curriculum specialists at Young Minds Inspired (YMI), is designed to help you make **earth** part of your learning plan leading up to the film's release in April. It provides standards-based activities for grades 3-5 that introduce key concepts from the film and set the stage for further learning. Reserve your spot today to see this landmark film together as a class when it arrives in theatres on April 22, 2009.

# Plan Your Trip Today! Call 1-888-DISNEY6 to Reserve Tickets for Your Group!!

Plan a class trip to view the film as part of your students' Earth Day activities—check with your school administrator to schedule the trip early, to place it on the school calendar, arrange transportation, and include the permission slip in parent packets well in advance of your trip.

# 58-Page Downloadable Educator's Guide

Aligned to National Science Education Standards

#### www.disney.com/nature

For even more curriculum ideas relating to the science and geography themes developed in **earth**, go to **www.disney.com/nature** and download the free, full-color 58-page Educator's Guide. The guide includes a wide variety of engaging activities for all age groups, organized to focus on five topics central to the film:

- · The Earth and the Sun
- The Great Migrations
- · Adaptation and Habitat
- · Predators and Prey
- · Life Cycles

Each topic is introduced with extensive background information to support your class planning and features student activity tasks that range from simple card games to full-scale science projects. The guide also includes a standards alignment table to help you identify how each student activity meets National Science Education Standards.

#### Additional Educator Resources

Visit the **earth** website, **www.disney.com/nature**, to find links to other downloadable materials to incorporate into your lesson plans.

### Activity Guide Objectives

- 1. Enrich students' viewing of the new Disneynature film earth.
- 2. Prompt student inquiry about the three animal families featured in **earth**.
- Guide student exploration and understanding of the animal families' changing habitats in earth.

### Activity Guide Standards Alignment

Activity	National Science Education Standards for Grades 3 – 5
Activity 1: Three Animal Families	<ul><li>Characteristics of organisms</li><li>Organisms and environment</li></ul>
Activity 2: Adapting to Habitats	<ul><li>Organisms and environment</li><li>Populations and ecosystems</li><li>Diversity and adaptations of organisms</li></ul>
Activity 3: Coping with Change	<ul><li>Interdependence of organisms</li><li>Organisms and environment</li><li>Populations and ecosystems</li></ul>



 This take-home activity includes questions relating to all standards addressed in the three classroom activities.

Diversity and adaptations of organisms



#### **Activity One**

### Three Animal Families

Part 1 Ask students to review the pictures on the activity sheet and identify the three animal families featured in earth: Polar bears, African elephants, and Humpback whales. Point out the similarities and differences identified on the graphic organizer. Have students work in teams to identify other similarities and differences among these animals. Make sure students realize how to properly record the information on the organizer (similarities should be recorded in the appropriate overlapping circles). Some possible answers:

Humpback Whale

mammal

swims

migrates

blowhole

almost hairless

ocean dwelling

young called calves

#### Polar Bear

young called cubs

#### African Elephant mammal mammal thick fur almost hairless walks and swims walks ocean dwelling land dwelling hibernates migrates

snout trunk

Part 2 Guide students in writing an Acrostic poem using their favorite animal's name. Encourage them to use facts they noted in Part 1 as they write their poems and use the lines provided on the activity sheet to format their poems. For younger students, you may want to complete a sample poem together as a class to get them started.

young called calves

**Extension Activity:** Using library or Internet resources, have students research their favorite animal family and develop a poster or PowerPoint presentation to share with the class. Encourage students to include basic information, unique facts, and pictures or illustrations.

#### **Activity Three**

## Coping with Change

Part 1 Ask students to share what they've learned about Polar bears —physical characteristics, food supply, how they hunt for food, how they travel, etc. Record their answers on the chalk/white board under the heading "Polar Bears". Direct students to the activity sheet and ask them to imagine what might happen if the sea ice where Polar bears live began melting or even disappeared. (For more on this topic, see pages 37-38 of the earth Educator's Guide, available online at www.disney.com/nature.) Have students work in small groups and complete the chart explaining how melting sea ice could change life for the Polar bear. Answers may include: Polar bears will be unable to move across the ice to hunt for food; They will lose their main food source, since seals need sea ice to breed; Without sea ice, the Polar bears will have no place to hibernate and make their birth dens.

Part 2 Ask students to remain in their small groups and discuss how similar changes in habitat might affect animals like the African elephant and Humpback whale. Have students complete the flow charts to show the chain of events that could take place. Answers may include:

- African Elephant: A decrease in rainfall causes droughts and dries up water sources in the desert. As a result, the elephants will migrate over 100 miles for food and water that are no longer there. To survive they will need to change their migration patterns to find new sources of food and water.
- Humpback Whale: When sea waters become warmer, the supply of krill—the whale's main food source—will be reduced. As a result, the whales will find less food in their normal feeding waters, and to survive they will need to migrate to different waters where they can find more food.

**Extension Activity:** Launch an Earth Day class project to explore the subject of global warming and the impact it is having on habitats across the globe. Have students work in teams to research, write, illustrate, and publish a handbook of things they can do each day—at home and at school—to help reduce the effects of global warming. Use your class computer to publish a copy for each class in your school and your school library.

#### **Activity Two**

# Adapting to Habitats

Part 1 Use a world map and introduce the habitats of the animal families featured in earth. Point out the longest migration by any mammal on the planet—the Humpback whale's 4,000-mile journey from the tropics where they breed to Antarctica where they can feed on vast quantities of food. Refer students to the activity sheet and ask them to match each animal to its habitat (Polar bear to icy waters of the Arctic; African elephant to Kalahari Desert; Humpback whale to Pacific Ocean).

Next, lead a discussion about the adaptations animals make to survive in their habitats. Give examples of physical adaptations (how an animal gets its food, moves, or protects itself) and behavioral adaptations (migration, hibernation, etc). Ask students to pretend they are scientists observing the animal families featured in earth. What might they see? Have students write a short explanation of how the traits listed in the chart help each animal adapt to its habitat. (For more on this topic, see pages 28-38 of the earth Educator's Guide, available online at www.disney.com/nature.)

Some answers may include:

- Polar Bear: Thick white fur keeps the Polar bear warm and provides camouflage in the snow-covered Arctic, which helps the bear stalk its prey; Black nose indicates that the polar bear has black skin under its fur, which absorbs heat from the sun; **Long claws** help the bear catch seals and walk across ice without slipping.
- · African Elephant: Huge ears help African elephants hear each other over long distances and can be flapped to signal danger; Tusks help the elephant dig out water holes; Trunk helps the elephant reach and pick up different types of food and shoot water into its mouth or onto its back to stay hydrated.
- Humpback Whale: Flippers help the Humpback whale migrate from the tropics to Antarctica; **Throat grooves** expand the whale's throat to allow large amounts of water and food into its mouth; Blubber provides an energy source in the food-poor tropics and insulation in the food-rich waters of Antarctica.

Part 2 Have students think about adaptations their families make to survive and live comfortably in their habitats. Encourage students to share their descriptions with the class.

Extension Activity: Working in teams, have students research, write, and illustrate a travel brochure that describes an animal habitat. It can be an animal featured in earth, an animal they have seen at the zoo, or an animal they have read about in a book.

#### **Activity Four** Take-Home Activity

# Check Your Family's earth IQ

This is designed as a take-home activity that students can complete with their parents. If your students have viewed earth, it also will provide a good opportunity for them to share what they have learned.







Activity One Reproducible Master



# Three Animal Families

In the new Disneynature film earth, you'll go on an adventure with three amazing animal families.



#### **Polar Bear**

You will meet a Polar bear and her two newborn cubs as they emerge from their icy den.



#### African Elephant

 You will follow an African elephant and her calf as they search for water.



#### **Humpback Whale**

You will join a
 Humpback whale
 and her calf on their
 migration to their
 summer feeding
 grounds.

**Part 1** Just like human families, the animal families in **earth** are <u>similar</u> and <u>different</u> from one another. Let's get to know them better! Look at the graphic organizer below. You'll see that we've already filled in some similarities and differences. What can you add?

Adat Bear Ocean Calf Mammal Mammal

**Migration** – The movement of animals because of changes in climate, availability of food, or to have their young.

Part 2 Which animal family is your favorite? Write an Acrostic poem about your favorite. Write the animal's name on the title line. Then use the letters in the animal's name as the first letter of each line in your poem.

TITLE	

# Did You Know...

The Polar bear's fur covers its feet to help it walk across the ice.



Coming to theatres Earth Day, April 22, 2009



**Activity Two** Reproducible Master



# Adapting to Habitats

In the new Disneynature film earth, we visit the habitats of many different animals around the world and see how each kind of animal adapts to survive in its habitat. Let's take a closer look at the three animal families you will meet in the film.







Part 1 Help our three animal families find their way. Draw a line from the animal to the picture of its habitat.

Then pretend you are a scientist studying these animals in their habitats. Use the chart to record your observations. Explain how each trait listed on the chart helps that animal adapt to its habitat and survive. Then look at the pictures to see if you can find other traits that help these animals adapt. Add your own observations in the blank spaces provided on the chart.

**Habitat** — The environment in which an animal lives. **Adapt** — Animals develop traits and special behaviors to survive in their habitats. These are called adaptations.

African Elephant





**Humpback Whale** 



Arctic



Pacific Ocean



Kalahari Desert



Polar Bear	
African Elephant	
oack Whale	
0	

Animal Traits	How each trait helps the animal adapt to its habitat
thick white fur	
black nose	
long claws	
huge ears	
tusks	
trunk	
flippers	
throat grooves	
blubber	

Did You Know...

Male Humpback whales sing songs that can last up to 20 minutes.



Part 2 Now, think about yourself and your habitat. On the back of this sheet, write a brief description of where you live and the things you have done to adapt to your environment — buildings, clothing, what you eat, the activities you do, etc.

Coming to theatres Earth Day, April 22, 2009



#### **Activity Three**

Reproducible Master



# Coping with Change

In the new Disneynature film **earth**, we learn that our planet has been changing for millions of years, and we see how every change in Earth's habitats can make survival a challenge for the animals that live there. Let's explore how changes in habitat have changed life for the animal families featured in **earth**.







#### **Effects on Polar Bears**

Part 1 Polar bears live on the sea ice that forms on the Arctic Ocean. For thousands of years this ice has provided a cold but solid habitat where Polar bears can hunt for food and raise their young. But now the ice is melting in some regions. Use this chart to explain three ways this change in habitat might change life for the Polar bear family we meet in **earth**.



#### Cause

Unusual warm temperatures in the Arctic are melting the sea ice.

changes occur. First describe how the change affects the animal's habitat. Then explain how the change affects the animal's life. Finally, explain how the animal might cope with this change to survive.

Part 2 In the film earth, we see how animals find ways to survive when their habitat changes. The African elephant family must survive a change in rainfall. The Humpback whale family must survive changing temperatures in the ocean. Complete the flow charts below to explore what happens when such

#### **African Elephant**



## **Change**Rainfall decreases in

the desert.

#### **Effect on Habitat**

Causes droughts and dries up water sources.

#### Effect on Animal's Life

How Animal Copes to Survive

#### **Humpback Whale**



#### Change

Sea waters become warmer.

#### **Effect on Habitat**

Effect on Animal's Life
Humpback whales find
less food in their normal
feeding waters.

### How Animal Copes to Survive

# Did You Know...

An elephant's trunk contains almost 100,000 different muscles.





**Activity Four** Reproducible Master



# Take-Home Activity

# Check Your Family's earth IQ

#### Dear Parent/Guardian.

In celebration of Earth Day, the natural wonders of the world come to the big screen as Disneynature unveils earth on April 22, 2009.

Disneynature is a brand new film label that builds on the rich legacy of Walt Disney's Academy-Award-winning "True-Life Adventures" series. Through the artistry of storytelling and utilizing new state-of-the-art technologies, leading filmmakers will make it possible for moviegoers to experience nature with an unprecedented sense of grandeur and intimacy.

earth will take your family on an adventure as it tells the remarkable story of three families— Polar bears, African elephants, and Humpback whales—as they make their amazing journeys across the planet we all call home.

Below you will find a family activity to test your family's earth IQ! Answer the questions below to see who scores the highest, and don't be surprised if your child seems to know all the answers!

earth opens in theatres nationwide on April 22, 2009.

Go to www.disney.com/nature for more information.

Sincerely,

(Teacher's Signature)











# Check Your Family's earth IQ

- 1. All creatures on Earth must \_\_\_ \_\_ to their habitat in order to survive.
- 2. With the changing of the seasons comes the annual of many animals that travel great distances in search of food and a comfortable climate.
- is the natural environment where a plant or an animal lives.
- 4. A Polar bear's white fur provides it with very effective \_\_\_\_\_\_ as it lies on the ice and waits for the seals on which it preys.
- 5. Elephants have a very large brain, which helps them remember the areas where they can find and \_\_\_\_\_ during the different seasons.
- \_ of a Humpback whale are the largest of any whale; they can measure up to a third of the length of the body.
- 7. Polar bears have one large non-retractable \_\_\_\_\_\_ on each foot. It works like an ice pick and keeps the bear from slipping.
- 8. An elephant's ivory \_\_\_\_\_ are actually very long teeth. They use them for digging.
- 9. Baby elephants, like baby whales, are called \_\_\_\_
- 10. In earth, we learn how important it is to maintain the finely tuned \_\_\_\_\_\_ in the relationship between the earth and the sun.

Coming to theatres Earth Day, April 22, 2009 Reserve your group tickets today! Call 1-888-DISNEY6!

# NARRATED BY JAMES EARL JONES

DISNEYNATURE PRESENTS "EARTH" ABBC, GREENLIGHT MÉDIA, DISCOVERY CHANNEL CORPODUCTION ABBC NATURAL HISTORY UNIT FLM
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