

AM I LIKE A LEMUR?

K-1ST GRADE
LANGUAGE ARTS, SCIENCE, MATH

Learning Goals: Students will know that both lemurs and humans are mammals and vertebrates and be able to identify the similarities and differences between them.

Students will be able to:

- Identify physical similarities and differences between lemurs and humans
- Determine that both lemurs and humans are mammals and vertebrates

LESSON DESCRIPTION

Students learn that they are similar to lemurs in some ways (both are mammals and have a backbone) and different in others. They compare body size and the shape of their hands and feet by tracing around their own and comparing them to an indri's.

Materials needed:

- Activity sheets (one set per student)
- Crayons to complete the activity sheets
- Masking tape
- Pens to label masking tape
- Measuring tape
- Rulers and/or yardsticks
- Scale
- Small blocks, sticks, or balls

40 MIN

LOOKING AT LEMURS

SETUP

Lay out a 30 foot section of masking tape with marks at 1,2,3, 4, 5, 10, 15, 20 and 30 feet, as well as a vertical measuring tape or yardstick against a wall, to pre-prepare for measuring student leaps and heights. An alternative would be string or rope with the increments marked out that can be easily laid out and rolled back up.

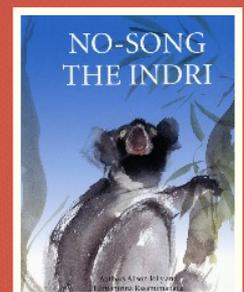
ACTIVITY

1. Read *No-Song the Indri*.
2. Copy and pass out the activity sheets.
3. Discuss what it means to be a mammal. Help students identify similarities and differences between lemurs and people, using the following prompts:

FOR BACKGROUND INFORMATION SEE:

LOOKING AT LEMURS

INVESTIGATING LEMUR ADAPTATIONS



FEATURED BOOK:
NO-SONG THE INDRI

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Humans and lemurs are both mammals. What features do mammals have?

- Mammals have hair (touch the top of your head) Ask: what other animals have hair/fur?
- Mammals are warm blooded (feel your head, are you warm?) Ask: what animals don't feel warm to the touch? (fish, turtles, frogs)
- Mammals breathe air (Take a deep breath)
- Are vertebrates (feel for your backbone) Ask: what animals don't have a backbone? (worms, insects, snails)

Humans and lemurs are both in the group of mammals called primates. What features do primates have?

- Eyes that face forward, a nose and a mouth (Have students point to each feature on themselves)
- Five fingers and five toes (Have students wiggle their fingers and toes)
- Flat nails instead of claws (Have students hold out their hands and show their fingernails) Ask: what animals have claws? (Dogs, cats, mice, rabbits)

Now that we've seen things we have in common with lemurs, lets look at ways we are different. The indri from our story is going to be our example.

Size Difference

- While larger lemurs once existed, today the indri is the largest of all the lemur species. An adult indri is 23 inches tall when standing on its hind legs. The average human adult (female) is 5 feet 4 inches (64 inches). The average adult (male) is 5 feet 9 inches (69 inches). Mark the indri and adult human heights with tape on a wall so students can make a visual comparison.
- How tall are you? Measure each student and record the height on their worksheet.

ANALYTICAL WRITING

Imagine that you had to spend a day as a lemur. What things could you do that a lemur can also do? What things would you be unable to do or find difficult to do in the wild?

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Weight Difference

An adult indri weighs 15 pounds. Do you think you weigh more or less than an indri? (You may want to have a five lb bag of flour or other comparison to give them a sense of weight.) An average human adult (male) weighs 194 lbs! Weigh each student and record their weight on their worksheet. At 15 lbs, how many lemurs would it take to equal their weight?

Difference in Body Shape

Have the children trace the lemur's body. Read the following prompts:

- An indri's legs are very long and strong. They are made for leaping and climbing through the trees. An indri can leap over 30 feet from one branch to another! How far can you leap? Measure and mark 30 feet with masking tape so students can compare their leaping distance and try their skills. Record distance students leap on the activity sheet.
- Most lemurs have long tails. This helps them balance in the trees. Do you have a tail? An indri has a short, stumpy tail. Have students trace the lemur's tail. (Ask students if they hold out their arms when they jump or land. This helps them balance in the same way the lemur's tail helps the lemur)
- Lemurs have a long nose that is moist like a dog's nose. This helps them smell food, other lemurs and predators like the fossa. A lemur's sense of smell is much stronger than ours. How is the lemur's nose different from your nose? Have students color the indri's nose black. Have them draw a nose on the child figure.
- Indris have big, black fluffy ears to help them hear sounds in the forest. How are they different from our ears? Have students color the indri's ears black. Outline the child's ears.
- Lemurs have large eyes that are orange or yellow. What color eyes do you have? Have students color the indri's eyes yellow or orange and add eyes that are the proper color to the child's face on the activity sheet.

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- Lemurs are covered with fur. The indri's fur is black and white. What kind of fur do you have on your head? What color is your hair? Have students add black and white fur to their indri. Add hair on the child that matches their hair color. The indri has fur to stay warm. How do we stay warm? Have students add clothes to the child on the drawing.

Differences in Hands and Feet

- Now let's compare lemur and human hands. The hands and feet of the indri are long, large and adapted for climbing trees and leaping from branch to branch. They have semi-opposable thumbs (opposable thumbs means they can touch their thumb to all of their other fingers.) They even have semi-opposable big toes! This allows them to grasp branches and other objects. The other toes are held together by webbing and work as one unit.
- Review the outline of a lemur hand. Students will draw around their hand and compare it to the semi-opposable thumb of the indri. How are the hand prints different? How are they the same? Discuss how lemurs use their hands.
- Now let's compare feet! Students should draw around their foot creating an outline. Compare each print. How are their "foot prints" the same? How are they different? A lemur's big toes are like our thumbs! This helps the indri grab branches as they climb.
- Set the blocks, balls, or sticks on the floor and ask the students to pick them up with their hands. Then have them remove a shoe and try to pick them up with their feet. Which is easier? Why?

WRAP UP

Have the students put their finishing touches on the pictures and share with the class.

MATH EXTENSION

Students can practice measurements by measuring and comparing the lengths of their hands and feet, jumping distances, height and weight to that of the indri.

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ZOO EXTENSION

Have students compare the hands, feet and sizes of the different zoo animals seen during your field trip. Be sure to include a variety of mammals, reptiles, birds, etc. Which have backbones? Which are mammals? Do all animals have hands like primates? Do all animals have feet like primates?

EVALUATION

Evaluate the understanding of key concepts by checking the worksheets.
Ask students to explain how lemurs are similar and how they are different.

THIS ACTIVITY MEETS THE FOLLOWING NATIONAL AND FLORIDA EDUCATION STANDARDS

FLORIDA STATE STANDARDS

Kindergarten Math	Kindergarten Science	1st Grade Math	1st Grade Science
MAFS.K.MD.1.1	SC.K.L.14.3	MAFS.K12.MP.5.1	SC.1.L.14.1
MAFS.K.MD.1.2	SC.K.N.1.2	MAFS.1.MD.1.a	SC.1.N.1.1
	SC.K.P.12.1		SC.1.N.1.2
	SC.K.N.1.4		SC.1.N.1.3
	SC.K.N.1.5		SC.1.N.1.4

NATIONAL SCIENCE STANDARDS

Kindergarten and 1st Grade
Characteristics of organisms
Organisms and environments
Form and Function

NEXT GENERATION NATIONAL SCIENCE STANDARDS

Kindergarten Interdependent Relationships in Ecosystems (K-LS1-1, K-ESS3-1)
1st Grade Structure, Function and Information Processing (1-LS1-1)

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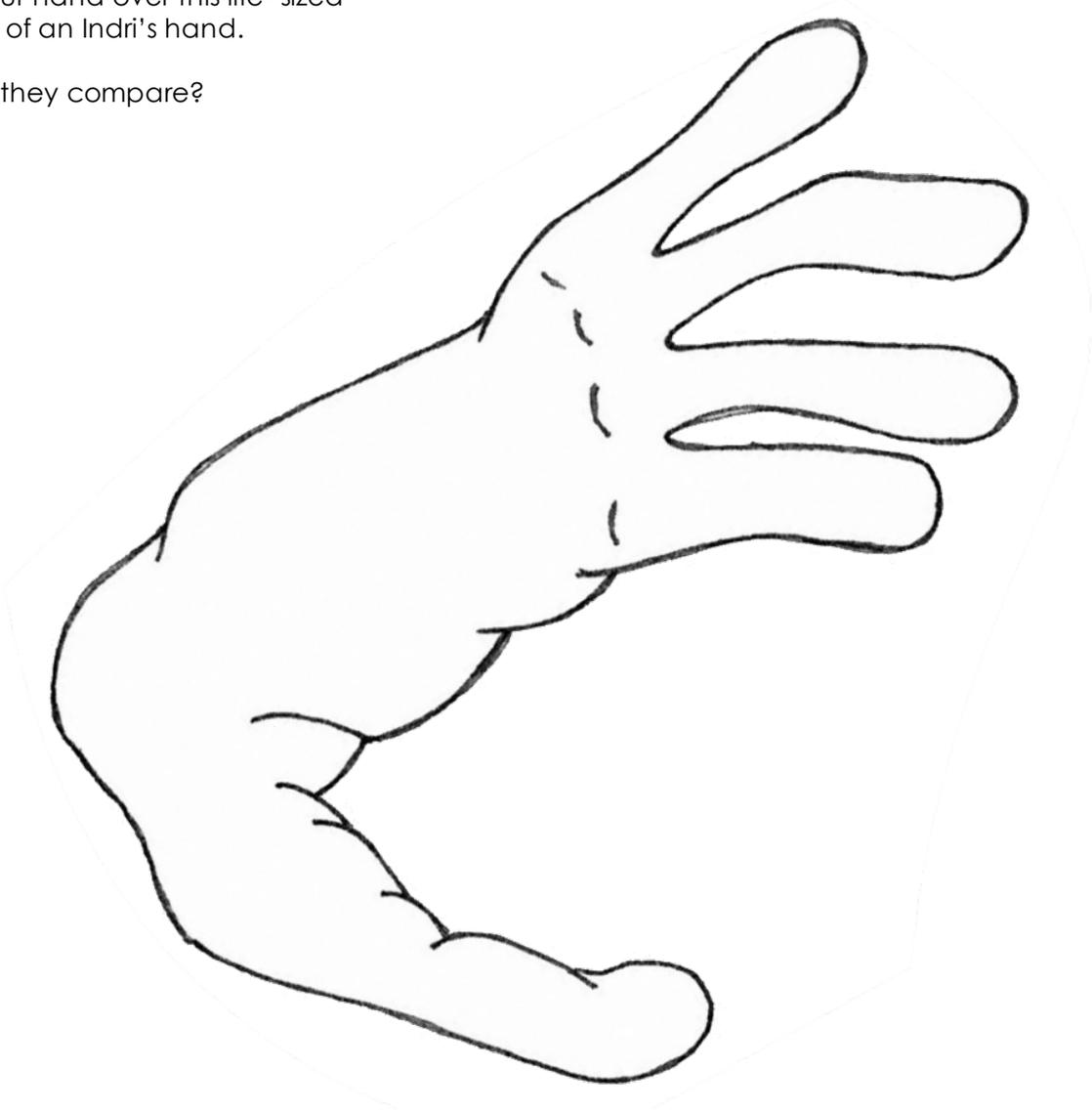
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INDRI'S HAND

Comparing Hands

Trace your hand over this life- sized drawing of an Indri's hand.

How do they compare?



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INDRI'S FOOT

Comparing Feet

Trace your foot over this life- sized drawing of an Indri's foot.

How do they compare?



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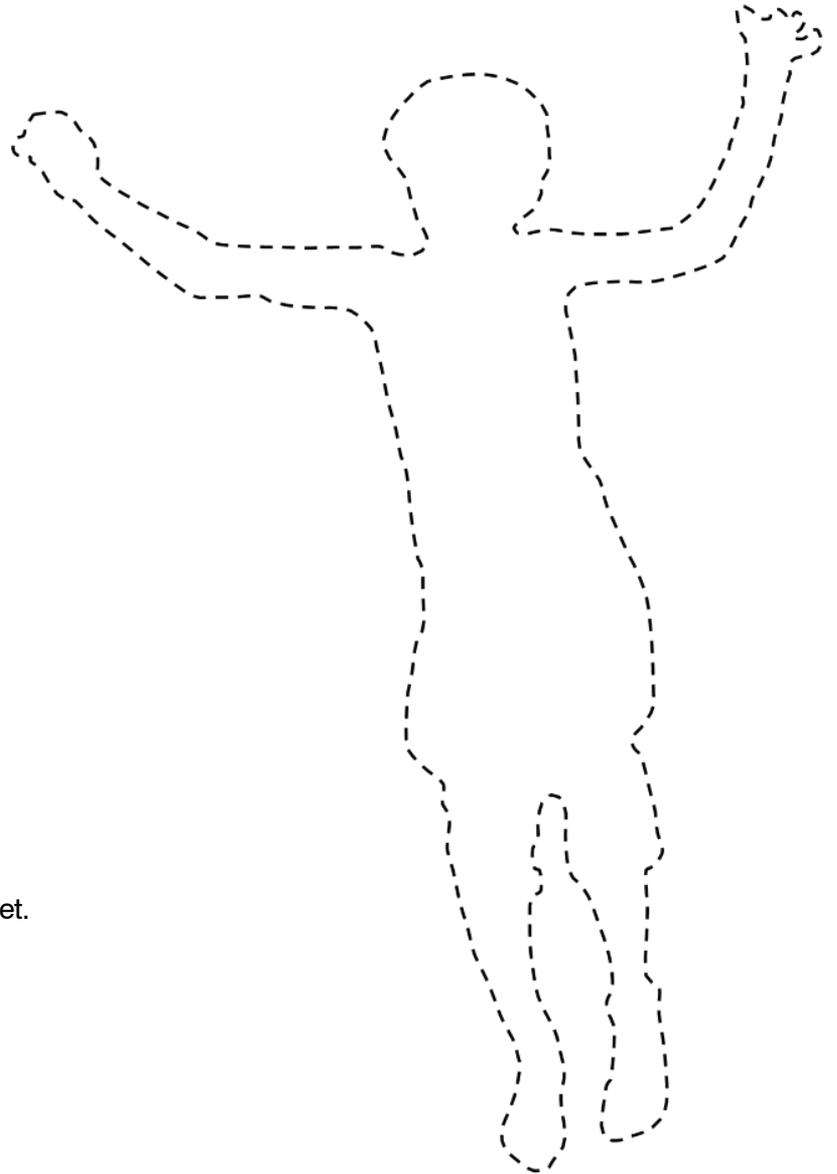


Me

I am _____ tall.

I weigh _____ pounds.

I can jump _____ feet.



Indri

Height: An indri is 23 inches tall.

Weight: An indri weighs 15 pounds.

Jumping Distance: An indri can leap 30 feet.