



FIRST AND SECOND GRADE Activity Guide



Worksheet: Group the Vertebrates! PRE-ZOO

This worksheet will help your students conceptualize grouping animals based on similar characteristics.

Activity: Egg Hunt! PRE-ZOO POST-ZOO

Learn about all sorts of different animals that lay eggs (not just birds!) through a game of egg hide-and-seek!

Activity: Zoo Bingo! PRE-ZOO POST-ZOO

You might use general animal categories (bird, mammal, carnivore, solitary, social, predator, prey, lays eggs, etc.), or the habitats or continents where animals exist. Some other general animal groupings to call out: animals that fly, dig, crawl, hunt, hop/jump, climb, swim, animals that are fast, slow, etc. For a mid-game switcheroo, have the students trade cards with their neighbor!

Craft Activity: Tadpole to Frog PRE-ZOO POST-ZOO

This craft helps illustrate the phases of a frog's life cycle. Be prepared for lots of ribbits!

Activity: Who Are You? PRE-ZOO POST-ZOO Zoo-Do!

This activity would be great to do in one of the Zoo's open space areas (Patas Lawn, Playfield Lawn, or Nature Exploration Area), but can just as easily be played in your classroom!

Worksheet: Mystery Animath PRE-ZOO POST-ZOO Zoo-Do!

This addition and subtraction worksheet has students solving mystery animal puzzles!

Worksheet: Scavenger Hunt! Zoo-Do!

With numerous pages of scavenging, feel free to pick and choose which worksheets you'd like your students to work on while roaming the Zoo. As a Pre-Zoo craft, your students could even transform these worksheets into a Zoo Journal!

Worksheet: Animals of Africa! POST-ZOO

This worksheet explores the habitats of Africa and the animals that belong there.



GROUP THE VERTEBRATES!

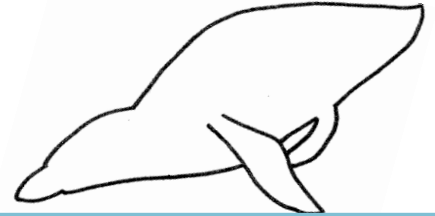


Name: _____

Scientists group animals by similar characteristics. Now you try grouping these vertebrates! Write each animal in the category where it belongs.

lion	pelican	snake	salamander	penguin	monkey
turtle	frog	vulture	rhinoceros	alligator	toad

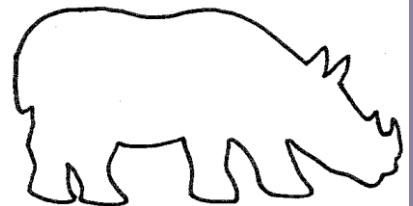
Birds



Reptiles



Mammals



Amphibians





Egg Hunt!

Lesson Plan



Activity: Egg Hunt!

PRE-ZOO

POST-ZOO

Goal: This activity will help students learn that a variety of animals are oviparous (not just birds!).

Materials needed:

- plastic eggs (1+ per child)
- small photos of different baby animals hatched from eggs (penguin, flamingos, fish, tadpole/frog, snake, turtle, ostrich, alligator, lizard, shark, caterpillar, insect, etc.)
- large photos of adult animals to match to the small photos of young animals
- optional: sample egg sizes/egg size comparison sheet

Procedure:

Pre-load eggs with photos of young animals. Hide eggs anywhere appropriate (classroom, outdoor lawn, playground, et cetera). Each child finds one egg or more, depending on how many eggs were prepared. Each student matches their young with the photo of the adult of the same species. After matching their animals, students can share out which animal laid the egg they found, find someone else that has the same egg animal, or classify the pictures into two groups (those that look like their parents, those that do not).



Zoo BINGO!

Lesson Plan



Activity: Zoo Bingo!

PRE-ZOO

POST-ZOO

To adapt these bingo sheets to your grade level, call out different types of information and animal descriptions to get your students thinking critically about the animals they see on the card in front of them.

For **Kindergartners**, you might use patterns, colors, and textures, animal names, or general animal categories (mammal, insect, amphibian, four legs, two legs, has wings, lays eggs, etc.). Some other general animal groupings to call out: animals that fly, dig, crawl, hunt, hop/jump, climb, swim, animals that are fast, slow, etc.

For **First** and **Second** graders, you might use general animal categories (bird, mammal, carnivore, solitary, social, predator, prey, lays eggs, etc.), or the habitats or continents where animals exist.

For **Third**, **Fourth**, and **Fifth** graders, you might use animal adaptations, categories (frugivore, producers, consumers, precocial, altricial), animal structures, or biomes.

For a mid-game switcheroo, have the students trade cards with their neighbor!

Use Zoo Bingo as a warm-up to your Zoo visit in order to familiarize your students with the animals, or you can use them once you've returned to your classroom to review the animals you experienced at the Zoo!

ZOO BINGO!



Name: _____



All photos © Marianne Hale

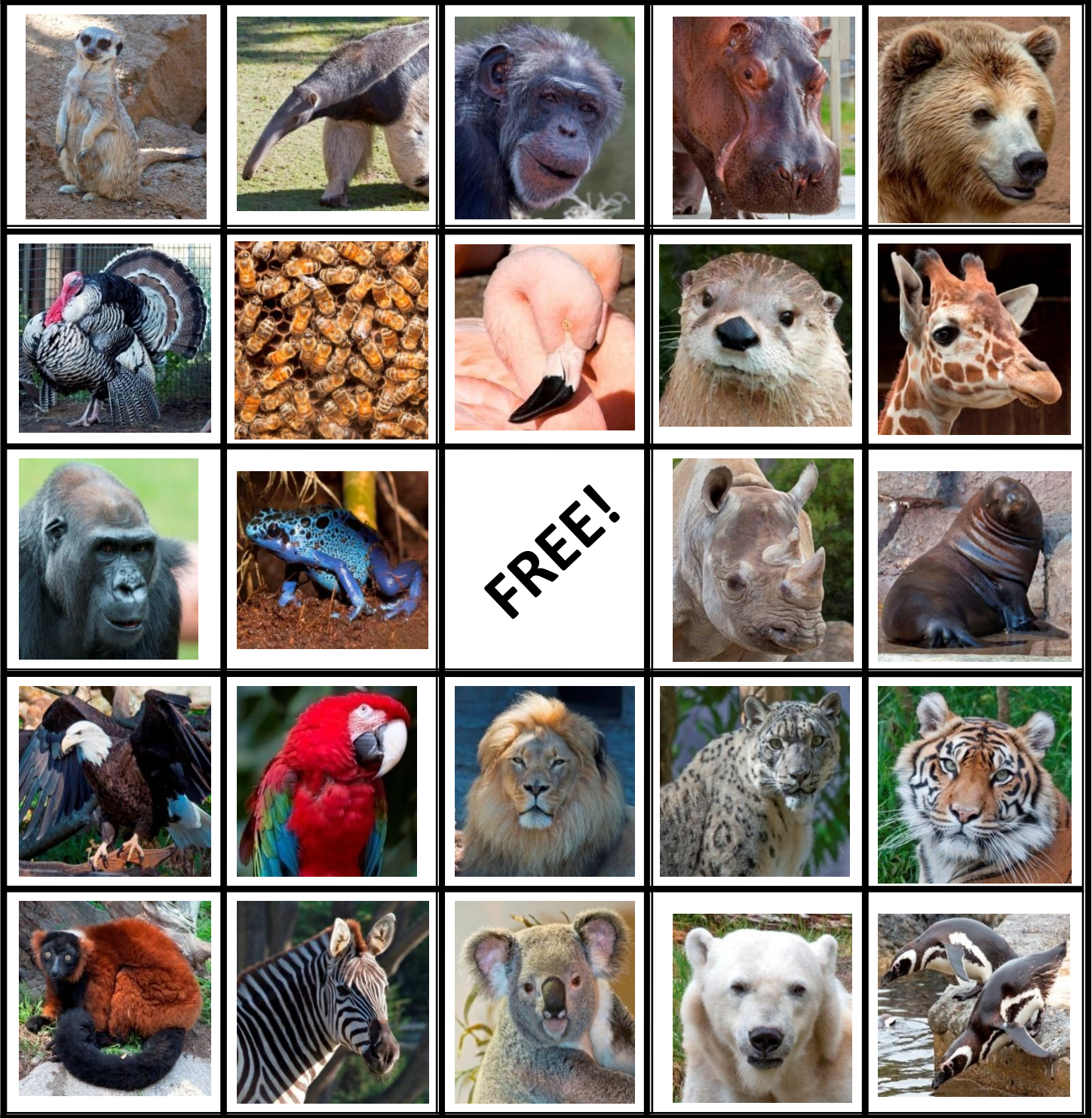
When you get 5 in a row, be sure to call out “Bingo”!



ZOO BINGO!



Name: _____



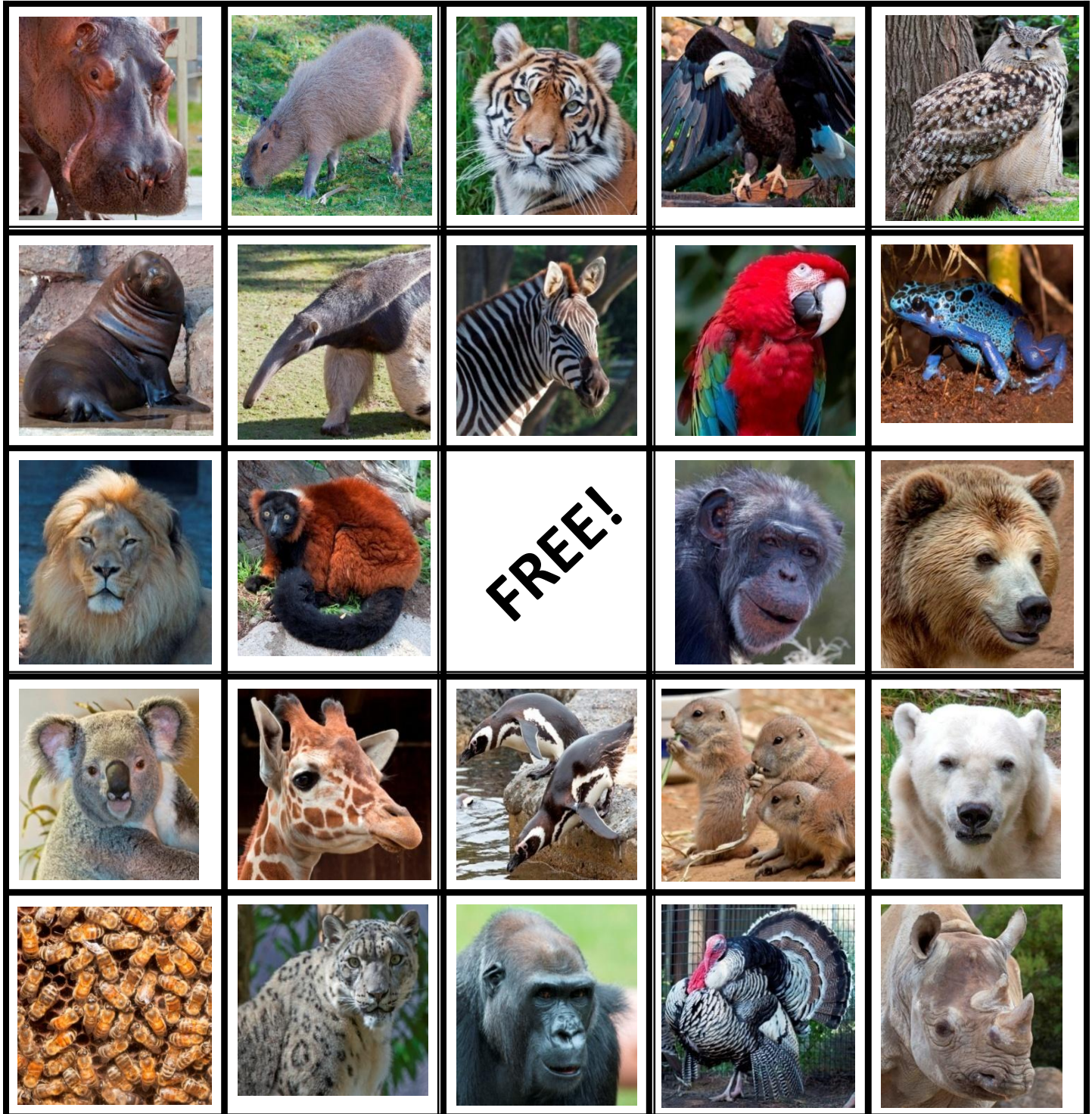
All photos © Marianne Hale

When you get 5 in a row, be sure to call out "Bingo"!

ZOO BINGO!



Name: _____



All photos © Marianne Hale

When you get 5 in a row, be sure to call out "Bingo"!

ZOO BINGO!



Name: _____



All photos © Marianne Hale

When you get 5 in a row, be sure to call out “Bingo”!

ZOO BINGO!



Name: _____



When you get 5 in a row, be sure to call out "Bingo"!

ZOO BINGO!



Name: _____



All photos © Marianne Hale

When you get 5 in a row, be sure to call out “Bingo”!



Zoo BINGO!

Teacher Key



Animals found on the Zoo Bingo sheets with the **GREEN** header are:

- Reticulated giraffe (*Giraffa camelopardalis reticulata*)*
- Green-winged macaw (*Ara chloropterus*)*
- Polar bear (*Ursus maritimus*)*
- Honey bees (*Apis mellifera*)*
- Western lowland gorilla (*Gorilla gorilla gorilla*)
- Snow leopard (*Uncia uncia*)*
- Black rhino (*Diceros bicornis*)*
- Koala (*Phascolarctus cinereus adustus*)*
- Red-ruffed lemur (*Varecia variegata rubra*)*
- Domestic turkey (*Meleagris gallopavo*)
- Nile hippopotamus (*Hippopotamus amphibious*)*
- Sumatran tiger (*Panthera tigris sumatrae*)*
- Bald eagle (*Haliaeetus leucocephalus*)
- Giant anteater (*Myrmecophaga tridactyla*)*
- Grizzly bear (*Ursus arctos*)*
- Chimpanzee (*Pan troglodytes*)*
- California sea lion (*Zalophus californianus*)*
- Chilean flamingo (*Phoenicopterus chilensis*)
- Grant's Zebra (*Equus quagga boehmi*)*
- North American river otter (*Lutra canadensis*)
- Poison dart frog (*Dendrobatidae*)*
- Magellanic penguin (*Spheniscus magellanicus*)*
- African lion (*Panthera leo*)
- Slender-tailed meerkat (*Suricata suricatta*)⁺

* This species is found on all three bingo cards.

⁺ This species is unique to this card.



Zoo BINGO!

Teacher Key



Animals found on the Zoo Bingo sheets with the **PURPLE** header are:

- Eurasian eagle owl (*Bubo bubo*)⁺
- Capybara (*Hydrochoerus hydrochaeris*)⁺
- Reticulated giraffe (*Giraffa camelopardalis reticulata*)*
- Green-winged macaw (*Ara chloropterus*)*
- Polar bear (*Ursus maritimus*)*
- Honey bees (*Apis mellifera*)*
- Snow leopard (*Uncia uncia*)*
- Black rhino (*Diceros bicornis*)*
- Koala (*Phascolarctus cinereus adustus*)*
- Red-ruffed lemur (*Varecia variegata rubra*)*
- Domestic turkey (*Meleagris gallopavo*)
- Nile hippopotamus (*Hippopotamus amphibious*)*
- Sumatran tiger (*Panthera tigris sumatrae*)*
- Bald eagle (*Haliaeetus leucocephalus*)
- Giant anteater (*Myrmecophaga tridactyla*)*
- Grizzly bear (*Ursus arctos*)*
- Chimpanzee (*Pan troglodytes*)*
- California sea lion (*Zalophus californianus*)*
- Grant's Zebra (*Equus quagga boehmi*)*
- Poison dart frog (*Dendrobatidae*)*
- Magellanic penguin (*Spheniscus magellanicus*)*
- African lion (*Panthera leo*)
- Black-tailed prairie dog (*Cynomys ludovicianus*)
- Western lowland gorilla (*Gorilla gorilla gorilla*)

* This species is found on all three bingo cards.

⁺ This species is unique to this card.



Zoo BINGO!

Teacher Key



Animals found on the Zoo Bingo sheets with the **BLUE** header are:

- Black rhino (*Diceros bicornis*)*
- Chimpanzee (*Pan troglodytes*)*
- Koala (*Phascolarctus cinereus adustus*)*
- California sea lion (*Zalophus californianus*)*
- Giant anteater (*Myrmecophaga tridactyla*)*
- Chilean flamingo (*Phoenicopterus chilensis*)
- Reticulated giraffe (*Giraffa camelopardalis reticulata*)*
- Magellanic penguin (*Spheniscus magellanicus*)*
- Black-tailed prairie dog (*Cynomys ludovicianus*)
- Snow leopard (*Uncia uncia*)*
- Red-ruffed lemur (*Varecia variegata rubra*)*
- Nile hippopotamus (*Hippopotamus amphibious*)*
- Sumatran tiger (*Panthera tigris sumatrae*)*
- Grizzly bear (*Ursus arctos*)*
- Grant's Zebra (*Equus quagga boehmi*)*
- North American river otter (*Lutra canadensis*)
- Poison dart frog (*Dendrobatidae*)*
- Green-winged macaw (*Ara chloropterus*)*
- Polar bear (*Ursus maritimus*)*
- Honey bees (*Apis mellifera*)*
- Komodo dragon (*Varanus komodoensis*)⁺
- South American coati (*Nasua nasua*)⁺
- Greater kudu (*Tragelaphus strepsiceros*)⁺
- Squirrel monkey (*Saimiri sciureus*)⁺

*This species is found on all three bingo cards.

⁺ This species is unique to this card.



Tadpole to Frog

Lesson Plan



Craft Activity: Tadpole to Frog

PRE-ZOO

POST-ZOO

Time:

30 – 45 mins

Background Information:

Although specific time frames of frog life cycles can vary, there are general stages: First, female frogs lay their **eggs** in water. After about a day, tadpoles start to develop. The **tadpoles** eventually hatch from the eggs and start swimming and breathing through their gills. At around 6 weeks, the tadpole is breathing air through lungs. At 8 weeks, hind legs are present. At 10-12 weeks, front legs form, tail shrinks, and the **froglet** can leave the water. Eventually, the frog's tail is totally absorbed. After 1-2 years as a juvenile, frogs are sexually mature at 2-3 years.

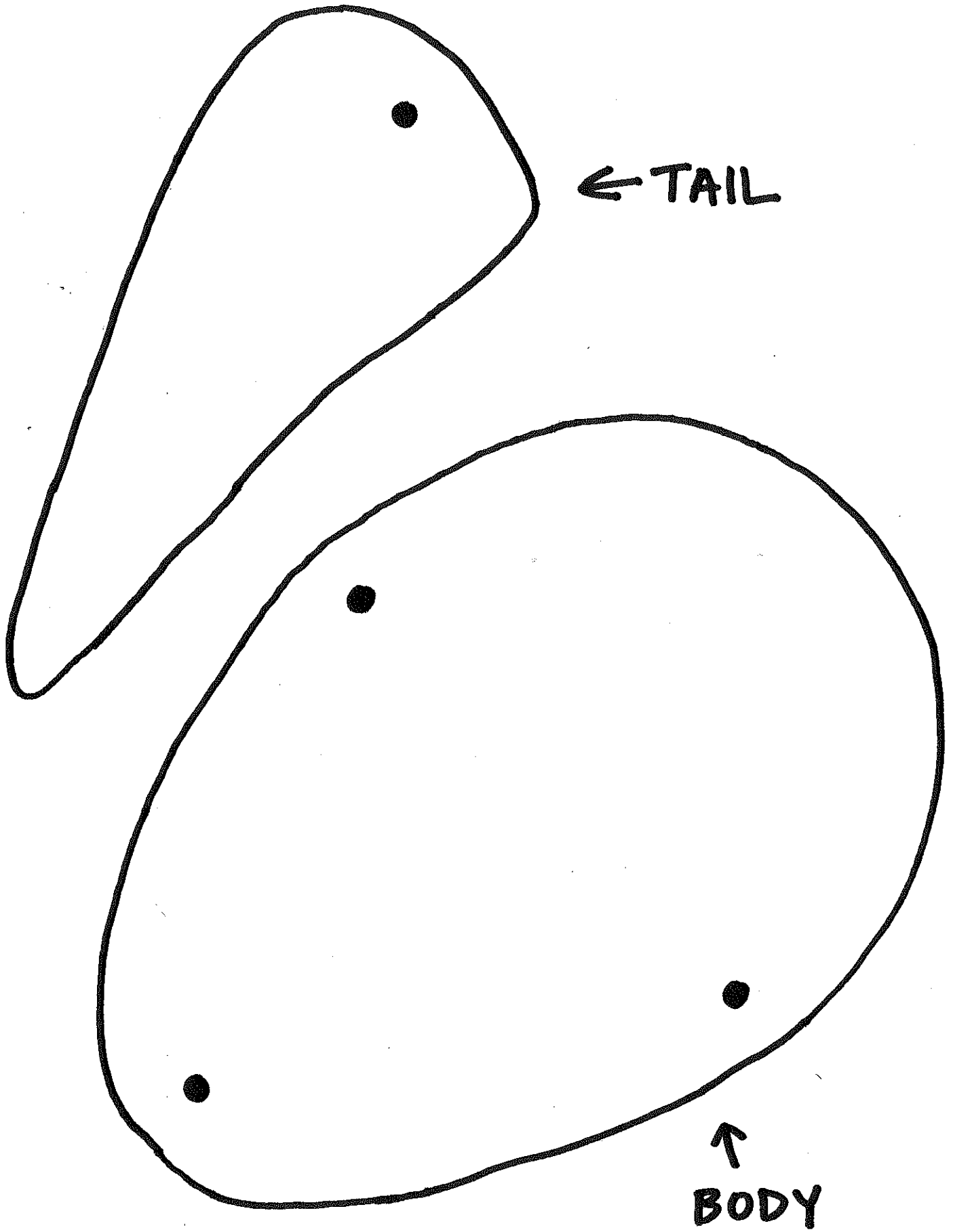
Materials:

- Masters printed on cardstock (2 sheets per student)
- Brads (3 per student)
- Scissors
- Coloring materials
- Optional: pictures of frogs with different colorations/markings (some included)

Procedure:

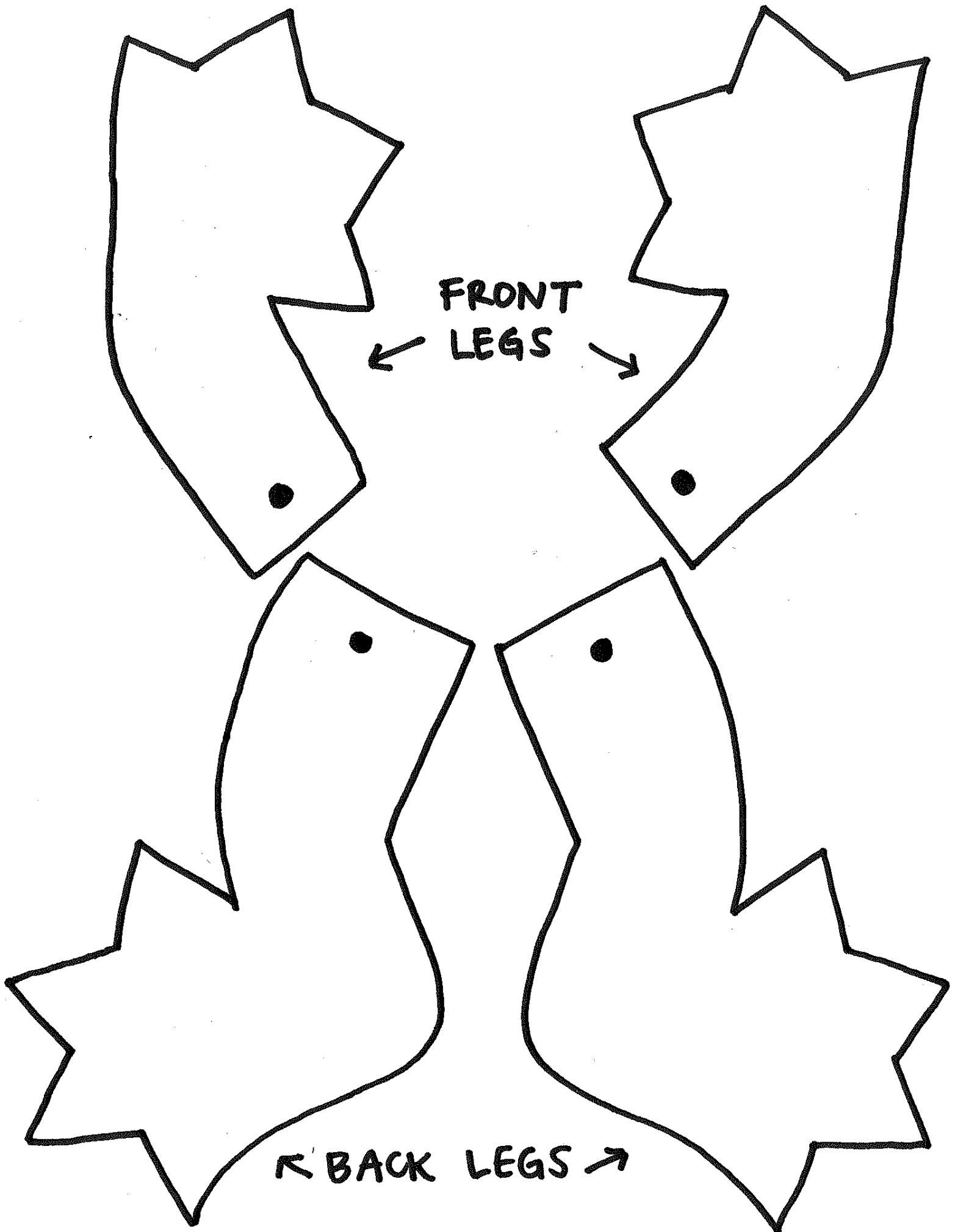
Review frog metamorphosis and life cycle stages. Color in all parts of the frog. Put the frog together using the brads— we recommend the teacher does this when students are ready. Once the brads are secured through each of the holes, fold the prongs in half to 'hide' the pointy ends. Then, model the different life cycle stages! To show the tadpole, bring the front and back legs in underneath the body. To show the frog, bring front and back legs out and spin the tail to the front of the frog to create a tongue.

A supplemental source: <http://www.aza.org/amphibian-education-resources/>



← TAIL

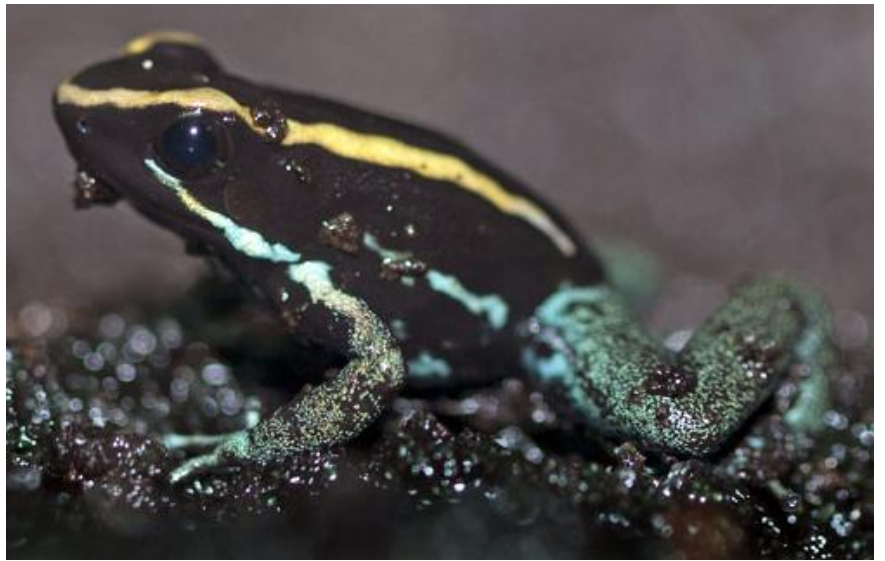
↑
BODY



FRONT
LEGS

BACK LEGS

Poison dart frogs
Dendrobatidae



Pacific chorus frog
Pseudacris regilla





Who Are You?

Lesson Plan



Activity: Who Are You?

PRE-ZOO

POST-ZOO

Zoo-Do!

This activity would be great to do in one of the Zoo's open space areas (Patas Lawn, Playfield Lawn, or Nature Exploration Area), but can just as easily be played in your classroom!

Materials:

- Optional: index cards or labels with animals written on them (1 per student)

Procedure:

As a class, one student thinks of an animal (or plant or fungi) and the other students have twenty questions to try and figure out what the organism is. The student who successfully guesses the animal gets to 'brainstorm' during the next round.

A variation: Pre-make sheets of labels/cards with animals written on them. When the students are ready to play, a label is put on each student's back (or a card is held up to their forehead so they are unable to see which animal they have been assigned). To encourage mingling, each student can only ask one question per classmate. This will keep students moving and will require them to shape their questions based on the answers they have already received.



MYSTERY ANIMATH

Addition and Subtraction



Name: _____

Step 1: Calculate the sum for each of the following problems.

Step 2: Write the answer in the middle rectangle.

Step 3: Write the letter that matches the sum in the bottom rectangle to discover the mystery Family Farm animal!

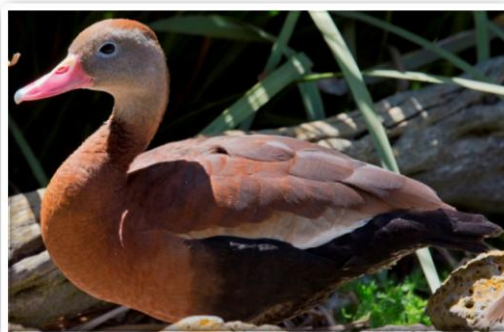
1	2	3	4	5	6	7	8	9
X	S	P	Q	R	M	A	O	F

10	11	12	13	14	15	16	17	18
U	T	N	B	E	G	C	D	Y

19	20	21	22	23	24	25	26
H	L	J	V	I	W	Z	K

Example:

Step 1	$20 - 3$	$6 + 4$	$11 + 5$	$19 + 7$
Step 2	17	10	16	26
Step 3	D	U	C	K





MYSTERY ANIMATH

Addition and Subtraction



Name: _____

Solve these on your own!

10 +5	5 +3	2 +5	8 +3

7 -5	10 +9	7 +7	11 +3	8 -5

10 -3	20 +3	13 +2

6 +5	13 -3	9 -4	13 +13	9 +5	9 +9

MYSTERY ANIMATH

Addition and Subtraction

Answers (in order):

10	5	2	8
+5	+3	+5	+3
15	8	7	11
G	O	A	T



7	10	7	11	8
-5	+9	+7	+3	-5
2	19	14	14	3
S	H	E	E	P



10	20	13
-3	+3	+2
7	23	15
P	I	G



6	13	9	13	9	9
+5	-3	-4	+13	+5	+9
11	10	5	26	14	18
T	U	R	K	E	Y





Savanna Study Student Explorer Log



Name: _____

Draw a
giraffe
eating the
leaves
off of an
acacia tree!



Find these animals in the African savanna and write what you see!

An animal with a long neck _____

A bird with a crown _____

A striped animal _____

The largest bird in the world! _____

An animal with horns _____

How many kudus do you see in the savanna?

Pleased About Primates!

Student Explorer Log



Write one lemur behavior you see in the Lemur Forest.

Name: _____

How many types of lemurs are at the Zoo?

Bonus: can you name them all?

Circle the mandrill.



Can you **trace** the **moustache** on this emperor tamarin?



How many moustaches do you see in the emperor tamarin exhibit?



Australian WalkAbout Student Explorer Log



Name: _____

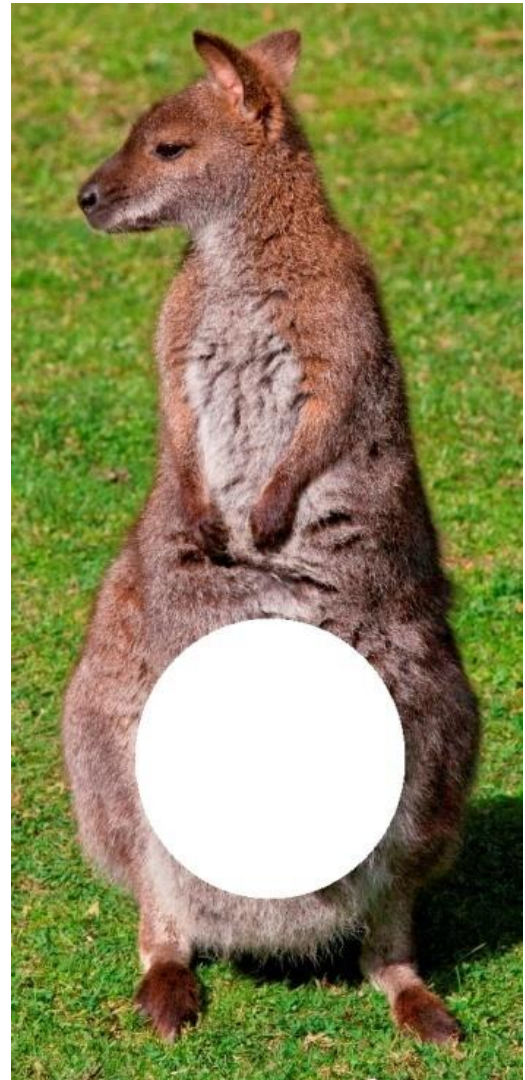
What do kangaroos use to help them balance while hopping?

Can you jump like a kangaroo? Try it!

A red kangaroo can hop 25 feet in a single bound. How many times would you need to hop to go 25 feet?

What is the largest bird native to Australia? Hint: they don't fly!

Wallaroos are **marsupials**. Marsupials are animals that have a pouch. The females carry their babies in the pouch. Draw a **joey** in this mother wallaroo's pouch!



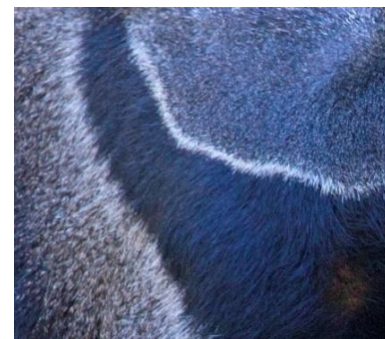
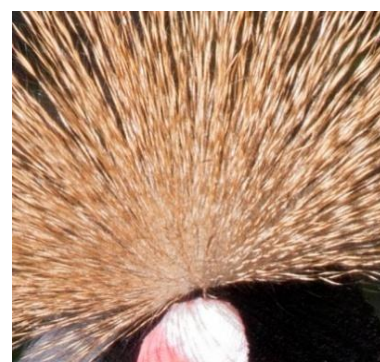
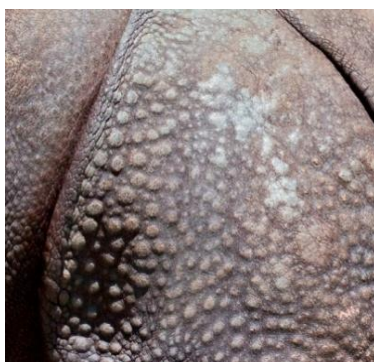
All photos © Marianne Hale

Plenty of Patterns! Student Explorer Log



Name: _____

Find the Zoo animals with these wild colors and patterns!





Exploring South America!

Student Explorer Log



Name: _____

South America is home to lots of beautiful birds. How many different types of birds do you see in Puento al Sur?

How many ants can an anteater eat in one day?



An anteater's tongue can be up to 24 inches long! About how long is your tongue?

Can you find the animal that is the largest rodent in the world?
What is it called?





My Zoo Notes

Student Explorer Log



Name: _____

Name a Zoo animal that is **smaller** than you:

Name a Zoo animal that is **bigger** than you:

What is your favorite zoo animal?

Why?

Draw your favorite zoo animal in its habitat!

Name: _____

Use the **Color Code** to color the map. Cut out the animals on the right side of the page. Use the **Map Key** to glue each animal to a square pointing to its biome.

Color Code

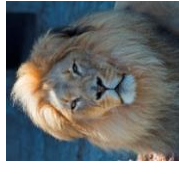
desert = brown

rain forest = green

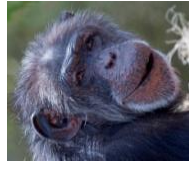
savanna = yellow



Map Key	
	dung beetle
	chimpanzee
	giraffe
	Waldrapp ibis



African lion



chimpanzee



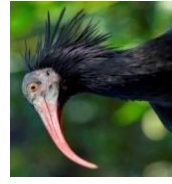
dung beetle



giraffe



gorilla



Waldrapp ibis