

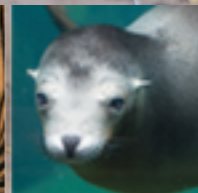
ANIMAL WEBCAM ACTIVITIES



Photo by Skip Brown/Smithsonian's National Zoo



Smithsonian
National Zoological Park
Conservation Biology Institute



FRIENDS
OF THE NATIONAL ZOO

INTRODUCTION

Welcome to the wild side of learning! This packet is a supplemental resource to be used with Smithsonian’s National Zoo’s live webcams (<https://nationalzoo.si.edu/webcams>) where animal fans of all ages can observe African lions, Asian elephants, giant pandas, and naked mole-rats. The activities in this packet are designed to engage students (grades K-5) in looking closely and thinking deeply about animal behavior and habitats. Note: animals are not always on view on cameras, so please check back if you don’t see anything.

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Smithsonian’s National Zoo



Photo by Meghan Murphy/
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NEXT GENERATION SCIENCE STANDARDS (grades K-5)

K-LS1-1: Use observations to describe patterns of what plants and animals (including humans) need to survive.

K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.

1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.

3-LS2-1. Construct an argument that some animals form groups that help members survive.

3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

3-LS4-2. Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.

4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Parent Guides are available for the Next Generation Science Standards in English and Spanish: <https://www.nextgenscience.org/parentguides>



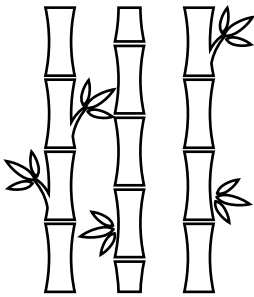
Photo by Mehgan Murphy/Smithsonian's National Zoo

Scientist (name): _____

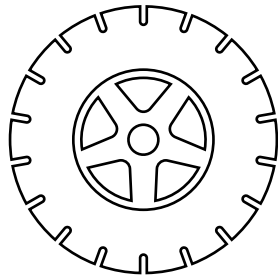
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I-Spy At The Zoo

Visit Smithsonian's National Zoo's website and check out the animal webcams. Can you "spy" the pictures below? Color what you see on the Zoo's webcams!



bamboo



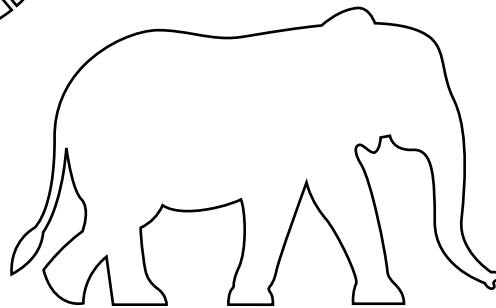
tire



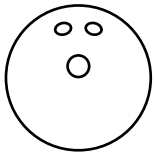
water



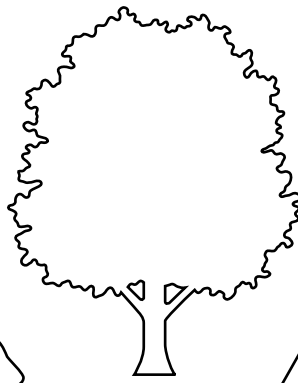
naked mole-rat



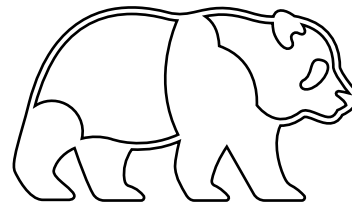
Asian elephant



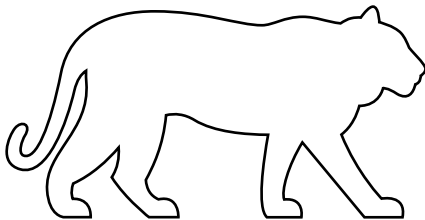
puzzle feeder



tree



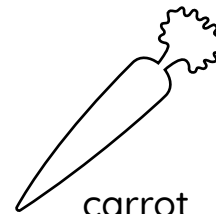
giant panda



African lion



rock



carrot


Extend Your Learning Cut and sort the pictures into groups (i.e. food, water, shelter, enrichment or create your own groups).

Scientist (name): _____

Date: _____

Zoo Explorers: Habitat Edition

Visit Smithsonian's National Zoo's website and check out the animal webcams. Explore the animals' habitats, use the questions below to think deeply, and then write and/or draw your responses.

Parts What are the components of the habitat?	Purposes What does each part do or provide for the animals?	Importance How is each part helpful to the animals?
 There's a big, red <u>brush</u> in the elephant's yard.	# e It provides <u>enrichment</u> for them.	J Enrichment <u>enhances</u> their life.




Extend Your Learning Build an animal habitat including food, water, shelter, and enrichment.

Scientist (name): _____

Date: _____

If You Were An Animal At The Zoo

Visit Smithsonian's National Zoo's website and check out the animal webcams. Imagine that you are an animal at the Zoo, use the questions below to think deeply, and then write and/or draw your responses.

Observe What does the animal see? What are they doing?	Believe What might the animal think or feel?	Care About What might the animal care about?
 <p>An elephant is <u>shaking her head</u>.</p>	 <p>Maybe she's <u>feeling silly</u>.</p>	 <p>She might like to <u>play</u>.</p>

Extend Your Learning Write a journal entry about your day from the point of view of an animal at the Zoo.

ZOO WEBCAM BINGO



Try to get bingo while you watch the Zoo's live [Naked Mole-rat Cam](#)! Look for the items or behaviors below and mark off the ones you see. To win, get five in a row across, down, or diagonally.

A mole-rat faces the camera	Two mole-rats eat the same piece of food at one time	A mole-rat eats lettuce	A mole-rat runs uphill in tunnel	A mole-rat does something that makes you curious
A mole-rat steals a piece of food from another	A mole-rat steps on or crawls over another	A mole-rat pulls a piece of food through the tunnel	No mole-rats are on camera	A mole-rat runs downhill in tunnel
A mole-rat eats sweet potato	A mole-rat does something that makes you laugh	 FREE	You count at least four mole-rats in a pile	A mole-rat does something that grosses you out!
You see the  QUEEN	You count three mole-rats in one of the tunnels (cam 2)	A mole-rat poops!	You spot your first mole-rat while playing this game!	A mole-rat kicks bedding around
A mole-rat walks over a piece of food	A mole-rat eats corn	A mole-rat runs backwards	You count four mole-rats in the chamber (cam 1)	A mole-rat turns around in the tunnel

QUEEN: The queen is rare to see and will be tricky to identify. Keep watching for the biggest (longest) naked mole-rat. The queen is the largest because she is the only breeding female (only female that will have babies).

Learn more about naked mole-rats: <https://nationalzoo.si.edu/animals/naked-mole-rat>



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ZOO WEBCAM BINGO



Try to get bingo while you watch the Zoo's live [Elephant Cam](#)! Look for the items or behaviors below and mark off the ones you see. To win, get five in a row across, down, or diagonally.

You count at least two elephants in the same habitat	An elephant throws sand on their back	An elephant uses their trunk to pick something up	You see a type of shelter in their habitat	An elephant flaps their ears
An elephant does something that makes you laugh	You see a type of enrichment	No elephants are on camera	An elephant eats	You see water in their habitat
You see an elephant with tusks	An elephant walks outside	 FREE	An elephant plays with enrichment	An elephant stands in sun
An elephant lifts their trunk above their head	An elephant drinks water	You spot your first elephant while playing this game!	An elephant walks inside	A bird flies by
The doors open or close	An elephant touches another with their trunk	An elephant swishes their tail	An elephant shakes their head	An elephant poops!

ENRICHMENT: Enrichment is something provided to animals that keeps their minds and bodies stimulated (active). Enrichment can be objects or toys, new food items, fun features in their habitat, etc.

Learn more about Asian elephants: <https://nationalzoo.si.edu/animals/asian-elephant>



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ZOO WEBCAM BINGO



Try to get bingo while you watch the Zoo's live [Giant Panda Cam](#)! Look for the items or behaviors below and mark off the ones you see. To win, get five in a row across, down, or diagonally.

No panda is visible on camera	You spot a type of shelter in their habitat	A panda sits	A panda scratches their body against something	A panda does something that makes you laugh
A panda stands on their back legs	You see a type of food <i>other than bamboo</i> in their habitat	A panda sleeps in a hammock made out of firehose	You see water in their habitat	A panda walks through a doorway
A panda eats bamboo	A panda climbs	 FREE	You see a type of enrichment	A panda sleeps on rocks
A panda plays with a type of enrichment	A panda holds bamboo	A panda falls	A panda walks directly towards the camera	A panda does something that makes you curious
A panda rolls around	A panda changes directions while walking	A bird flies by	A panda touches their face with their paw	You see panda poop!

HABITAT: The environment where an animal lives, including nutrients, water, shelter, and resources that an individual needs to survive.

Learn more about giant pandas: <https://nationalzoo.si.edu/animals/giant-panda>



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ZOO WEBCAM BINGO



Try to get bingo while you watch the Zoo's live [Lion Cam](#)! Look for the items or behaviors below and mark off the ones you see. To win, get five in a row across, down, or diagonally.

A lion jumps down to a lower level of the habitat	Two or more lions are touching	One or more lions play	A lion rubs their body against something	A lion faces the camera
You count three or more lions in the pride	A lion yawns or wakes up from a nap	You see a female lion	A lion flicks their tail	You spot shelter in their habitat
One or more lions are sleeping	A lion does something that makes you laugh	 FREE	A lion uses a type of enrichment	You see a male lion
No lions are on camera	A lion climbs up to a higher level of the habitat	You see only one member of a lion pride	You spot water in their habitat	A lion roars
A lion drinks from the moat	You see a type of enrichment	You spot your first lion while playing this game!	One lion chases another	A lion eats or you spot food in their habitat

***PRIDE:** A group of lions. At the Zoo, members of the pride rotate into the same yard. You may see a social group with all females, all males or a mix of males and females.*

Learn more about African lions: <https://nationalzoo.si.edu/animals/lion>



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EDUCATOR RESOURCES

Animal Webcams

(<https://nationalzoo.si.edu/webcams>)

African Lion Fact Sheet

(<https://nationalzoo.si.edu/animals/lion>)

Asian Elephant Fact Sheet

(<https://nationalzoo.si.edu/animals/asian-elephant>)

Giant Panda Fact Sheet

(<https://nationalzoo.si.edu/animals/giant-panda>)

Naked Mole-Rat Fact Sheet

(<https://nationalzoo.si.edu/animals/naked-mole-rat>)

Parts, Purposes, Complexities Thinking Routine

(<https://pz.harvard.edu/resources/parts-purposes-complexities>)

Perceive, Believe, Care About Thinking Routine

http://www.visiblethinkingpz.org/VisibleThinking_html_files/03_ThinkingRoutines/03g_CreativityRoutines/StepInside/StepInside_Routine.html

GLOSSARY

- **Bamboo**: a tall treelike tropical grass with a hard hollow jointed stem.
- **Enrichment**: the process of providing stimulating environments for animals in order for them to demonstrate their species-typical behavior, to allow them exercise control or choice over their environment, and to enhance their well-being.
- **Habitat**: the environment where an animal lives, including nutrients, water, shelter, and resources that an individual needs to survive.
- **Zoological Park**: a place that provides engaging experiences with animals and creates and shares knowledge to save wildlife and habitats.



Photo by Roshan Patel/Smithsonian's National Zoo