

MISSION #15

Create a food chain using animals from this exhibit. You can add other African animals if you need.

Example:

hawk → snake → mouse → grass →

Please record ALL data from each group for missions one and 14 on the data sheet provided. This is very important so that we can share your data with other students and the public. Your information is very valuable!

19

PRIDE OF THE PLAINS



BACKPACK RESEARCH TEAM

Fifth & Sixth grade

NAME _____

POSITION

Welcome to Africa!

You are members of a research team helping local researcher, Dr. Leta Akiiki Kagiri collect information. In your backpack you should find:

- 4 pencils
- 1 pencil sharpener
- 1 clipboard
- 1 thermometer
- 1 compass & compass instruction sheet*
- 1 map of the Pride of the Plains exhibit*
- 1 map of Africa*
- 1 footprint guide*
- 1 ruler
- 1 pair of binoculars
- 4 student field notepads
- 1 magnifying glass

*Signifies that the item is laminated

To complete your missions you must divide your team into different positions.

1. **Climate Specialist** – uses the **thermometer** to measure temperatures
2. **Directional Guide** – uses the **compass** to discover direction
3. **Vision Expert** – uses the **binoculars** to view animals
4. **Measurement Monitor** – uses the **ruler** to determine the size of items
5. **Adult Coordinator** – keeps the team working and helps with problems

In addition to their assigned duties, members of the team will record information in this field journal.

MISSION #14

Use the information you have been gathering to fill in the following charts. Dr. Kagiri will compare her data to yours. List each animal and the temperature at the sign.

Animal				
Temp				

Chart the number of signs facing each direction.

4				
3				
2				
1				
Sign	N	S	E	W

List 4 animals and check the characteristics that fit under each animal.

IDENTIFIED FOOTPRINT				
BIRD				
MAMMAL				
REPTILE				
3 TOES				
4 TOES				
5 TOES				
BIG				
SMALL				

MISSION #13

Briefly explain a problem that hunting dogs (**circle 11**) are experiencing in Africa.

As a group, think of as many solutions to the problem as you can, even if your ideas seem impractical. Your idea may help someone think of something even better. Evaluate each solution, thinking about the impact on the land and the animals as well as cost and manpower. Enter the best solution below.

(Gather everyone's information for Missions #1 & #14)

Notes from Dr. Kagiri:

Make sure to read my field notes as you travel through the area. There will be information that will help you with your assignments. Start with the sign near the restrooms.

As you finish each mission, read ahead to the next task before traveling to a new destination. You don't want to waste time backtracking and miss animal activity.

Missions #1 and #14 are very important and will need information from many different areas. Keep checking on them as you trek through the savanna.

Most important, enjoy your journey! The fantastic animals you will encounter have much to teach you, but will also show you their beauty.

MISSION #1

Fill in a box for each of the animals you encounter on your journey. There are many observation areas to take temperature and direction measurements. Make sure the animals are visible when you take your measurements. Use the signs and map of Africa to find the countries the animals are found in. Use the binoculars to watch the animals and make observations.

Name of Animal:
Scientific Name:
Countries:
Temperature/Time/Date:
Direction:
Three Observations: 1. _____ _____ _____ _____
2. _____ _____ _____ _____
3. _____ _____ _____ _____

MISSION #12

Write a short biography of Dr. Kagiri's investigation. Make sure you include skills she has and equipment she uses. Her camp is located near **circle ten** on the map.

Name of Animal:
Scientific Name:
Countries:
Temperature/Time/Date:
Direction:
Three Observations: 1. _____ _____ _____ _____
2. _____ _____ _____ _____
3. _____ _____ _____ _____

MISSION #11

Dr. Kagiri wants you to use the clues at **circle nine** on the map to figure out what happened. Make sure you look in all directions to find clues. Remember to use your footprint guide to identify any prints on the scene.

What do you think happened?

Read Dr. Kagiri's notes. Record what actually happened. Were you right?

(Don't forget to gather lion information next for missions #1 & #14!)

MISSION # 1 Continued

Name of Animal:	Name of Animal:
Scientific Name:	Scientific Name:
Countries:	Countries:
Temperature/Time/Date:	Temperature/Time/Date:
Direction:	Direction:
Three Observations: 1. _____ _____ _____ _____	Three Observations: 1. _____ _____ _____ _____
2. _____ _____ _____ _____	2. _____ _____ _____ _____
3. _____ _____ _____ _____	3. _____ _____ _____ _____

4

MISSION #2

You will find many footprints in the path as you travel. For each type of print you find, draw a picture, measure and record the print's length and width, and predict what animal made the print. Then use the footprint guide to check your prediction. Use standard measurement to measure the footprints. After you have found four prints, order them from shortest to longest by putting numbers in the small boxes.

Prediction	
Animal	

Prediction	
Animal	

5

MISSION #10

Hieroglyphs are ancient picture carvings found on rock walls. Look at the hieroglyphs on the west wall at **circle eight** on the map. Read Dr. Kagiri's notes to find out more about the carvings.

Now tell your own story using hieroglyphs. Draw the story here.

(Don't forget to gather your information at meerkats for missions #1 & #14!)

MISSION #9

Now stand at **circle seven** on the map. Look west toward **circle eight** on the map. On the rocks inside the lion exhibit, you should see some markings. Perhaps they are drawings. What do you see? Draw a picture.

(Don't forget to gather your information at warthogs for missions #1 & #14!)

MISSION #2 Continued

Prediction	
Animal	

Prediction	
Animal	

MISSION #3

Using the lion statues at **circle one** on the map, compare the size of young and adult lions with young and adult humans. Measure each body part to the nearest half inch (1/2 inch).

Adult Lion	Adult Human
Head _____	Head _____
Foot _____	Foot _____
Tail _____	Tail _____
Leg _____	Leg _____

Young Lion	Young Human
Head _____	Head _____
Foot _____	Foot _____
Tail _____	Tail _____
Leg _____	Leg _____

MISSION #8

Stand at **circle six** on the map. Look east toward the rocks on the map. The large rock looks like an animal. What do you see?
Draw a picture.

MISSION #7

Dr. Kagiri has other students watching the animals and collecting information about their behavior. Predict what each of the four animals will be doing using the information the students have gathered. When you observe each animal, list what the animals were doing. Was your prediction correct?

Lion

Prediction

Observed Behavior

Meerkat

Prediction

Observed Behavior

Warthog

Prediction

Observed Behavior

Hunting Dog

Prediction

Observed Behavior

MISSION #4

Look at the odd shaped, tall object in the meerkat yard (**circle two**).

Describe and draw it here.

What do you think it is? What made it? What do you think the lions did when they saw it?

After you make your predictions, read Dr. Kagiri's notes and find out what it is and what happened.

What is it and who made it?

What did the lions do?

MISSION #5

As you continue on you will cross a bridge and come upon the local waterhole (**circle three**). (This is a great place to gather footprints. All the animals must come here to drink.) It looks like the two lions have been here. Look at the evidence around the waterhole and the nearby rocks.

What do you think happened here?

Read Dr. Kagiri's notes to find out what happened and report her findings here.

MISSION #6

The next stop on your journey is a wooden door at **circle four** on the map. This is the door to an abandoned diamond mine. The painted symbols mean "Do Not Enter" and "Danger Falling Rocks." Some other symbols we use are:



These pictures tell us an important message without using words. Design a symbol to use in your school or even your home or bedroom.

Draw and label your symbol here.