

# THE SASSAFRAS GUIDE TO ZOOLOGY



WRITTEN BY PAIGE HUDSON

# THE SASSAFRAS GUIDE TO ZOOLOGY

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# THE SASSAFRAS GUIDE TO ZOOLOGY:

## INTRODUCTION

Our Living Books' method of science instruction was first proposed in *Success in Science: A Manual for Excellence in Science Education*. This approach is centered on living books that are augmented by notebooking and scientific demonstrations. The students read (or are read to) from a science-oriented living book, such as *The Sassafras Science Adventures Volume 1: Zoology*. Then, they write about what they have learned and complete a related scientific demonstration or hands-on project. If the time and interest allow, the teacher can add in non-fiction books that coordinate with the topic, do an additional activity or memorize related information.

The books of the *Sassafras Science Adventures* series are designed to give you the tools you need to employ the Living Books' method of science instruction with your elementary students. For this reason, we have written an activity guide and logbook to correspond with each novel. This particular activity guide contains eighteen chapters of activities, reading assignments, scientific demonstrations and so much more for studying zoology.

Each of the chapters in this guide corresponds directly with the chapters in *The Sassafras Science Adventures Volume 1: Zoology*. They are meant to give you the information you need to turn the adventure novel into a full science course for your elementary students. They will provide you with a buffet of options that you can use to teach your students about the human body. So pick and choose what you know you and your students will enjoy!

### WHAT EACH CHAPTER CONTAINS

Each chapter begins with a summary of the corresponding chapter in *The Sassafras Science Adventures Volume 1: Zoology*. Then, there will be an overview of the supplies you will need for the demonstration, projects, and activities for the chapter. After that you will find the optional schedules – one for two days a week and one for five days a week. These schedules are included to give you an idea of how your week could be organized, so please feel free to alter them around to suit your needs.

After the week-at-a-glance information, you will find the information for the reading, notebooking, and activities for the particular chapter. This information is divided into the following sections:

#### SCIENCE-ORIENTED BOOKS

① **LIVING BOOK SPINE** – This section contains the corresponding chapter in *The Sassafras Science Adventures Volume 1: Zoology*.

📖 **ENCYCLOPEDIA READINGS** – This section contains possible reading assignments from:

📖 *Kingfisher First Encyclopedia of Animals* (best for grades K through 3<sup>rd</sup>)

📖 *DK Encyclopedia of Animals* (best for 3<sup>rd</sup> through 6<sup>th</sup>)

You can choose to read them to the students or have the students read them on their own.

📖 **ADDITIONAL LIBRARY BOOKS** – This section contains a list of books that coordinate with what is being studied in the chapter. You can check these books out of your local library.

#### NOTEBOOKING

⇒ **SCIDAT LOGBOOK INFORMATION** – This section has the information that the students could have included in their SCIDAT logbook. It contains possible answers for the body system information and the zoology record sheets. The students may or may not have all of the same information on their notebooking sheets, which is fine. You want their SCIDAT logbook to be a record of what they have

learned. The information included is meant for you to use as a guide as you check their work. For more information about notebooking, please read the following article:

🔗 <http://sassafrasscience.com/what-is-notebooking/>

- 📖 **VOCABULARY** – This section includes vocabulary words that coordinate with each chapter. If your students are older, I recommend that you have them create a glossary of terms using a blank sheet of lined paper or the vocabulary sheets provided in *The Official Sassafras SCIDAT Logbook: Zoology Edition*. You can also have them memorize these words and their definitions.

## SCIENTIFIC DEMONSTRATIONS OR OBSERVATIONS

- ☑ **SCIENTIFIC DEMONSTRATION** – This section includes a list of materials, the instructions and an explanation for a scientific demonstration which coordinates with the chapter. There is a blank lab report sheet provided for you in the Appendix on pp. 97-98 if you wish for your students to write-up the demonstration. If they are in fourth grade or higher, I recommend that they complete at least one of these for this course.

## MULTI-WEEK PROJECTS OR ACTIVITIES

- ✂ **ADDITIONAL ACTIVITIES** – This section contains additional activities that go along with the chapter. There are multi-week projects which will be done over several chapters and activities that coordinate with that specific chapter. Pick and choose the activities that interest you and your students.

## MEMORIZATION

- 📄 **COPYWORK AND DICTATION** – This section contains a short copywork passage and a longer dictation passage for you to use. Some students may use the shorter passages for dictation or the longer passages for copywork. Feel free to tailor the selections to your students' abilities. You can also use the selections as memory work assignments for the students.

## ADDITIONAL MATERIALS

In the back of this guide there are a few additional materials for your convenience. The first is a glossary of terms, which you can use with your students as they define the words for each chapter. After that, you will find a set of eight simple quizzes that you can use with your students to verify if you students are retaining the material.

## A WORD ABOUT THE SCIDAT LOGBOOK

The SCIDAT logbook is meant to be a record of your students' journey through their study of zoology. It is explained in more detail in Chapter 1 of this guide. You can choose to make your own or purchase a pre-made logbook from Elemental Science. *The Official Sassafras SCIDAT Logbook: Zoology Edition* has all the pages the students will need to create their own logbook. Each one has been attractively illustrated for you so that you don't have to track down pictures for the students to use. This way they are able to focus on the information they are learning.

## FINAL THOUGHTS

As the author and publisher of this curriculum I encourage you to contact me with any questions or problems that you might have concerning *The Sassafras Guide to Zoology* at [info@elementalscience.com](mailto:info@elementalscience.com). I will be more than happy to answer them as soon as I am able. I hope that you and your students enjoy your journey through zoology with the Sassafras twins.

# BOOK LIST

## MAIN TEXT

The following book is required reading for the activities suggested in this guide.

① *The Sassafras Science Adventures Volume 1: Zoology*

## ENCYCLOPEDIA READINGS

The following encyclopedias have suggested pages scheduled in this guide. I recommend that you choose the one that best suits the age and ability of your students.

📍 *Kingfisher First Encyclopedia of Animals* (best for grades K through 3<sup>rd</sup>)

📍 *DK Encyclopedia of Animals* (best for 3<sup>rd</sup> through 6<sup>th</sup>)

## RECOMMENDED RESOURCES

The following book will be very beneficial to have when completing this course. It contains all the pages and pictures your students will need to record their journey through zoology.

📖 *The Official Sassafras SCIDAT Logbook: Zoology Edition*

View all the links mentioned in this guide in one place and get a digital copy of the templates, glossary, and quizzes by visiting the following page:

📖 <http://sassafrasscience.com/volume-1-links/>

## ADDITIONAL LIBRARY BOOKS LISTED BY CHAPTER

### CHAPTER 1

📖 *What Is the Animal Kingdom?* (Science of Living Things) by Bobbie Kalman

📖 *Animal Classification* by Polly Goodman

📖 *Who's in Your Class?* Level 4: An Animal Adventure (Lithgow Palooza Readers: Level 4) by John Lithgow and Susan Blackaby

### CHAPTER 2

📖 *Face to Face with Lions* (Face to Face with Animals) by Dereck Joubert and Beverly Joubert

📖 *Tawny Scrawny Lion* (Little Golden Book) by Golden Books and Gustaf Tenggren

📖 *The Cheetah: Fast as Lightning* (Animal Close-Ups) by Christine Denis-Huot and Michel Denis-Huot

📖 *Cheetah* (Welcome Books: Animals of the World) by Edana Eckart

📖 *Cheetah Cubs: Station Stop 2* (All Aboard Science Reader) by Ginjer L. Clarke and Lucia Washburn

📖 *What is a Mammal?* (Science of Living Things) by Kalman

### CHAPTER 3

📖 *Elephants: A Book for Children* by Steve Bloom

📖 *Face to Face With Elephants* (Face to Face with Animals) by Beverly Joubert

📖 *Giraffes* by Jill Anderson

📖 *Baby Giraffes* (It's Fun to Learn about Baby Animals) by Bobbie Kalman

# DEMONSTRATION SUPPLIES LISTED BY CHAPTER

## CHAPTER 1: OBSERVATION WALK

*No supplies needed.*

## CHAPTER 2: CAT'S EYES

*Toilet paper tube*

*Foil*

*Rubber bands*

*Construction paper*

*Flashlight*

## CHAPTER 3: GIRAFFE SALIVA

*Cornstarch*

*Water*

*Leaves and twigs*

*2 Cups*

## CHAPTER 4: REPTILE EGG

*Clear glass*

*Vinegar*

*Egg*

*Plastic wrap*

*Rubber band*

## CHAPTER 5: EAR COOLING

*Hot water*

*1 Coffee cup*

*1 8x10 Pan*

*Instant thermometer*

## CHAPTER 6: MAKING BUTTER

*1 Pint of cream*

*1 Large glass jar with lid*

*½ Cup of water*

## CHAPTER 7: DECOMPOSING INSECTS

*1 Apple*

*1 Glass jar*

## CHAPTER 8: RAINFOREST IN A BOTTLE

*2-Liter Soda bottle with top*

*Gravel*

*Potting soil*

*Several small plants*

*Scissors*

*Tape*

*Water*

## CHAPTER 9: EXAMINING LIFE CYCLES

*Life Cycle of a Butterfly Worksheet and Life Cycle of a Frog Worksheet (Appendix pp. 109-115)*

*OPTIONAL: Grow a Frog or Raise a Butterfly Kit (order from a science supply store)*

## CHAPTER 10: POUCH LIVING

*2 Thermometers*

# PROJECT AND ACTIVITY SUPPLIES LISTED BY CHAPTER

The projects and activities listed in this guide are optional, so you may not need all of these supplies. However, this list has been provided for your convenience. If you do decide to do these projects, in addition to the items listed each week you will need glue, scissors, a variety of paint colors, and a set of markers.

## CHAPTER 1

*No supplies needed.*

## CHAPTER 2

*Poster board or Shoebox*

*Paper plate*

*Pompom*

## CHAPTER 3

*Grey sock*

*Newspaper or cotton batting*

*Clothespin*

*Cardboard*

## CHAPTER 4

*Egg carton*

*Brown pipe cleaners*

*Googly eyes*

## CHAPTER 5

*Newspaper*

*Flour and salt*

*Pipe cleaners and cheesecloth*

## CHAPTER 6

*Air dry clay*

*Ingredients for cookies (white sugar, butter-flavored shortening, honey, eggs, vanilla extract, baking soda, all-purpose flour, and cinnamon)*

## CHAPTER 7

*Black pipe cleaners*

*Googly eyes*

*Styrofoam balls (one large, one small)*

## CHAPTER 8

*Toilet paper tube*

*Brown construction paper*

*Tissue paper (black, orange, yellow, white, brown, and green)*

## CHAPTER 9

*Paper (copy and construction)*

## CHAPTER 10

*Ingredients for eggs (mushrooms, oil, tomato, eggs, milk, and cream cheese)*

*Fused beads*

*Empty can*

*Cotton balls*

*Felt (pink and blue)*

## CHAPTER 11

*Felt (white and black)*

# CHAPTER 1: THE ADVENTURE BEGINS

## CHAPTER SUMMARY

Blaine and Tracey Sassafras begin this chapter upset because they are going to spend all summer with their crazy Uncle Cecil learning about science, instead of enjoying the zip lines at Camp Zip-fire. They are surprised to find out that Uncle Cecil and his lab assistant, President Lincoln, have a zip line adventure of sorts already prepared for them. The scientific duo has created invisible lines that will take the twins all over the world to learn about science. They will have to meet local experts along the way and enter data into their smartphones before they can proceed to the next place. At the close of the chapter, the twins take off for their first location, the African Grasslands.

## SUPPLIES NEEDED

Experiment	Projects and Activities
• No Supplies Needed	• No Supplies Needed

## OPTIONAL SCHEDULES FOR TWO-DAYS-A-WEEK

Day 1	Day 2
<ul style="list-style-type: none"> <li><input type="checkbox"/> Read Chapter 1 in <i>SSA* Volume 1: Zoology</i>.</li> <li><input type="checkbox"/> Set up your students' SCIDAT logbook.</li> <li><input type="checkbox"/> Go over the vocabulary words and enter them into the Zoology Glossary on SL** pg. 93.</li> <li><input type="checkbox"/> Do the demonstration entitled "Observation Walk"; write observations on SL pg. 5.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the assigned pages from the encyclopedia of your choice; write narration on the Zoology Notes Sheet on SL pg. 6.</li> <li><input type="checkbox"/> Read one of the additional living books from your library; write narration on the Zoology Notes Sheet on SL pg. 6.</li> <li><input type="checkbox"/> Do the copywork or dictation assignment and add it to the Zoology Notes sheet on SL pg. 6.</li> <li><input type="checkbox"/> Play a game of "I Spy".</li> </ul>

## OPTIONAL SCHEDULE FOR FIVE-DAYS-A-WEEK

Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the section entitled "Crazy Uncle Cecil" of Chapter 1 in <i>SSA Volume 1: Zoology</i>.</li> <li><input type="checkbox"/> Set up your students' SCIDAT logbook.</li> <li><input type="checkbox"/> Go over the vocabulary words and enter them into the Zoology Glossary on SL pg. 93.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the section entitled "Zip lines and Smartphones" of Chapter 1 in <i>SSA Volume 1: Zoology</i>.</li> <li><input type="checkbox"/> Do the demo*** entitled "Observation Walk"; write observations on SL pg. 5.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the assigned pages from the encyclopedia of your choice; write narration on the Zoology Notes Sheet on SL pg. 6.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read one of the additional living books from your library; write narration on the Zoology Notes Sheet on SL pg. 6.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Do the copywork or dictation assignment and add it to the Zoology Notes sheet on SL pg. 6.</li> <li><input type="checkbox"/> Play a game of "I Spy".</li> </ul>

\*SSA = *The Sassafras Science Adventures*

\*\*SL = *The Official Sassafras SCIDAT Logbook: Zoology Edition*

\*\*\*demo = demonstration

## SCIENCE-ORIENTED BOOKS

### LIVING BOOK SPINE

- 📖 Chapter 1 of *The Sassafras Science Adventures Volume 1: Zoology*

### OPTIONAL ENCYCLOPEDIA READINGS

- 📖 *Kingfisher First Encyclopedia of Animals* – No pages scheduled for this week.
- 📖 *DK Encyclopedia of Animals* pp. 14-15 (*Animal Classification*), pp. 16-17 (*Animal Kingdoms*)



### ADDITIONAL LIBRARY BOOKS

- 📖 *What Is the Animal Kingdom?* (Science of Living Things) by Bobbie Kalman
- 📖 *Animal Classification* by Polly Goodman
- 📖 *Who's in Your Class? Level 4: An Animal Adventure* (Lithgow Palooza Readers: Level 4) by John Lithgow and Susan Blackaby

## NOTEBOOKING (SCIDAT LOGBOOK INFORMATION)

This week, you will set up your students' SCIDAT logbook. You can use blank sheets of copy paper with dividers for each section or purchase *The Official Sassafras SCIDAT Logbook: Zoology Edition* with all the pictures from Elemental Science. Below is an explanation of each of the student sheets:

### HABITAT INFORMATION SHEET

The purpose of these sheets is for your students to record what they have learned about the various habitats visited in *The Sassafras Science Adventures Volume 1: Zoology*.

**HABITAT** – Enter the name of the habitat they are studying.

**LOCATION AND LOCAL EXPERT** – Enter the place that the particular habitat was found along with the name of the local expert from the region.

**AVERAGE RAINFALL** – Enter the average rainfall the habitat receives per year.

**AVERAGE TEMPERATURE** – Enter information about the average temperatures throughout the year in the habitat, e.g. “warm summers and cold winters”.

**MAIN CHARACTERISTICS** – Enter the main features of the habitat, e.g. “lots of grass, very few trees”.

**ANIMALS FOUND THERE** – Enter the animals from the story that are found in the habitat. You can write the names of the animals or use pictures of them.

**(Note** – Not every chapter will have all the above information. You can choose to leave those sections blank or use the encyclopedia readings to fill in the answers.)

### AROUND THE WORLD

The purpose of these sheets is to give your students an opportunity to work on their mapping skills.

**(Note** – The information for this sheet will come from the encyclopedia readings.)

**MAP** – Color the places on the world map where the particular habitat can be found.

**CONTINENTS FOUND ON** – Enter the continents where the particular habitat can be found around the globe.

### ANIMAL RECORD SHEETS

The purpose of these sheets is for your students to record what they have learned about the various

animals that are introduced in *The Sassafras Science Adventures Volume 1: Zoology*.

**ANIMAL NAME** – Enter the name of the animal.

**CLASSIFICATION** – Enter whether it is a mammal, bird, reptile, amphibian, fish or invertebrate.

**FOOD** – Enter whether the animal is a carnivore, herbivore or omnivore.

**LOCATION FOUND** – Enter the habitat it was found in.

**INFORMATION LEARNED** – Enter any information that your students learned about the animal.

## PROJECT RECORD SHEETS

The purpose of these sheets is for your students to record the projects they have done through the course of their study of zoology.

## ZOOLOGY NOTES

The purpose of these sheets is for your students to record any additional information that they have learned during their study of zoology. You can use these sheets to record narrations, copywork and dictation assignments.

## ZOOLOGY GLOSSARY

The purpose of these glossary is for your students to create a glossary of terms that they have encountered throughout reading *The Sassafras Science Adventures Volume 1: Zoology*. They can look each of the terms up in a science encyclopedia or in the glossary included on pg. 1115-116 of this guide. Your students should illustrate each of the vocabulary words on their own. (**Note** – In *The Official Sassafras SCIDAT Logbook: Zoology Edition* these pictures are already provided.) This week, have the older students look up the following terms:

📖 **CLASSIFICATION** – A way of identifying or grouping living things.

📖 **OBSERVATION** – Something that you see with your eyes, or the act of regarding attentively.

For each of these sheets you can have your students enter information only from *The Sassafras Science Adventures Volume 1: Zoology*, or you can have them do additional research to gather more facts. What you choose to do will depend upon the ages and abilities of your students.

## SCIENTIFIC DEMONSTRATION: OBSERVATION WALK

Begin by taking a moment to discuss what nature study is and the importance of observation in science. You can view the following blog posts for more information on the subject:

🔗 <http://elementalblogging.com/what-is-nature-study>

🔗 <http://elementalscience.com/blogs/news/63858627-observation-is-key>

Explain that today you are going to practice your observation skills while on a walk. Then, take a walk in your neighborhood or on a nature trail nearby where you live. Allow the students to make observations and ask questions. Ask the students:

⇒ *What kind of plants do you see?*

⇒ *What kind of animals do you see?*

⇒ *What else do you see that you would like to tell me about?*

## MULTI-WEEK PROJECTS AND ACTIVITIES

### ACTIVITIES FOR THIS WEEK

✂ I SPY – Play a game of “I Spy” to help your students to work on their observation skills.

## MEMORIZATION

### COPYWORK/DICTATION

#### ☞ COPYWORK SELECTION

*Observation is taking the time to look at the things around me.*

#### ☞ DICTATION PASSAGE (poem selection by Henry Wadsworth Longfellow)

*And he wandered away and away,*

- With Nature the dear old nurse,  
*Who sang to him night and day,  
The rhymes of the universe.*

*And when the way seemed long,  
and his heart began to fail,  
She sang a more wonderful song,  
or told a more wonderful tale.*

## NOTES

# CHAPTER 2: THE AFRICAN GRASSLANDS

## CHAPTER SUMMARY

The chapter opens with Blaine and Tracey arriving at their first stop in the African grasslands. They join Nicholas Mzuri and four other guests on a photo safari through Kenya. The group spots a pride of lions and Nicholas shares more about them. They also race several cheetahs on the hunt and their guide tells more about the animals. All the while, the narcoleptic Hank will fall asleep and the comical couple, Fred and Pam, will make their characteristic blunders and mistakes. The chapter ends with the mysterious Man with No Eyebrows stealing the jeep, leaving the group stranded in Elephant Valley.

## SUPPLIES NEEDED

Experiment	Projects and Activities
<ul style="list-style-type: none"> <li>• Toilet paper tube</li> <li>• Foil</li> <li>• Rubber bands</li> <li>• Construction paper</li> <li>• Flashlight</li> </ul>	<ul style="list-style-type: none"> <li>• Poster board or Shoebox</li> <li>• Paper plate</li> <li>• Pompom</li> </ul>

## OPTIONAL SCHEDULE FOR TWO-DAYS-A-WEEK

Day 1	Day 2
<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the section entitled “Look... a Lion” of Chapter 2 in <i>SSA Volume 1: Zoology</i>.</li> <li><input type="checkbox"/> Fill out the Animal Record Sheet on SL pg. 9 for the lion.</li> <li><input type="checkbox"/> Add to the Habitat Information Sheet on SL pg. 7 for the African Grasslands.</li> <li><input type="checkbox"/> Go over the vocabulary words and enter them into the Zoology Glossary on SL pp. 93-94.</li> <li><input type="checkbox"/> Choose one of the activities for this week to do.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the section entitled “Chasing Cheetahs” of Chapter 2 in <i>SSA Volume 1: Zoology</i>.</li> <li><input type="checkbox"/> Fill out the Animal Record Sheet on SL pg. 10 for the cheetah.</li> <li><input type="checkbox"/> Do the demonstration entitled “Cat’s Eyes”; write information learned on SL pg. 13.</li> <li><input type="checkbox"/> Do the copywork or dictation assignment and add it to the Zoology Notes sheet on SL pg. 13.</li> <li><input type="checkbox"/> Work on one or all of the multi-week activities.</li> </ul>

## OPTIONAL SCHEDULE FOR FIVE-DAYS-A-WEEK

Day 1	Day 2	Day 3	Day 4	Day 5
<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the section entitled “Look... a Lion” of Chapter 2 in <i>SSA Volume 1: Zoology</i>.</li> <li><input type="checkbox"/> Fill out the Animal Record Sheet on SL pg. 9 for the lion.</li> <li><input type="checkbox"/> Go over the vocabulary words and enter them into the Zoology Glossary on SL pp. 93-94.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read the section entitled “Chasing Cheetahs” of Chapter 2 in <i>SSA Volume 1: Zoology</i>.</li> <li><input type="checkbox"/> Fill out the Animal Record Sheet on SL pg. 10 for the cheetah.</li> <li><input type="checkbox"/> Add to the Habitat Information Sheet on SL pg. 7 for the African Grasslands.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read one or all of the assigned pages from the encyclopedia of your choice; write narration on the Zoology Notes Sheet on SL pg. 13.</li> <li><input type="checkbox"/> Do the demo entitled “Cat’s Eyes”; write information learned on SL pg. 13.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Read one of the additional living books from your library; write narration on the Zoology Notes Sheet on SL pg. 13.</li> <li><input type="checkbox"/> Choose one of the activities for the week to do; fill out the project record sheet on pg. 15.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Do the copywork or dictation assignment and add it to the Zoology Notes sheet on SL pg. 13.</li> <li><input type="checkbox"/> Work on one or all of the multi-week activities.</li> </ul>

## SCIENCE-ORIENTED BOOKS

### LIVING BOOK SPINE

- 📖 Chapter 2 of *The Sassafras Science Adventures Volume 1: Zoology*

### OPTIONAL ENCYCLOPEDIA READINGS

- 🔍 *Kingfisher First Encyclopedia of Animals* pg. 20 (Mammals), pg. 21 (Lion), pg. 24 (Cheetah)  
🔍 *DK Encyclopedia of Animals* pp. 239-241 (Mammals), pp. 231-233 (Lion), pp. 136-137 (Cheetah)



### ADDITIONAL LIBRARY BOOKS

- 📖 *Face to Face with Lions* (Face to Face with Animals) by Dereck Joubert and Beverly Joubert  
📖 *Tawny Scrawny Lion* (Little Golden Book) by Golden Books and Gustaf Tenggren  
📖 *The Cheetah: Fast as Lightning* (Animal Close-Ups) by Christine Denis-Huot and Michel Denis-Huot  
📖 *Cheetah* (Welcome Books: Animals of the World) by Edana Eckart  
📖 *Cheetah Cubs: Station Stop 2* (All Aboard Science Reader) by Ginjer L. Clarke and Lucia Washburn  
📖 *What is a Mammal?* (Science of Living Things) by Kalman

## NOTEBOOKING (SCIDAT LOGBOOK INFORMATION)

This week, you can have your students begin to fill out a Habitat Information Sheet for the African Grasslands and a logbook page for lions and cheetahs. Here's the information they could include:

### HABITAT INFORMATION SHEET

HABITAT: *Grasslands (Tropical)*

LOCATION AND LOCAL EXPERT: *Africa (or Kenya), and Nicholas Mzuri*

AVERAGE RAINFALL – *The grasslands receive an average of 10 to 30 inches per year.*

AVERAGE TEMPERATURE – *The grasslands usually have warm winters and hot summers.*

MAIN CHARACTERISTICS – *There are few trees, vast grassy fields, and some rolling hills.*

ANIMALS FOUND THERE – *Add the cheetah and lion (could also have zebra and wildebeest).*



### ANIMAL RECORD SHEETS



ANIMAL NAME: *Lion*

CLASSIFICATION: *Mammal*

FOOD: *Carnivore*

LOCATION FOUND: *African Grasslands*

INFORMATION LEARNED

Your students could have included any number of facts from the list below.

- ⇒ *They are part of the cat family.*
- ⇒ *They are found in the plains of Africa, but they once roamed throughout Europe, Africa and Asia.*
- ⇒ *They are the grassland's largest predator.*
- ⇒ *They are social animals that live in groups called prides, which are made up of several females and their cubs along with a few males-one of whom is dominant.*

- ⇒ *They hunt at night and rest during the day.*
- ⇒ *They hunt anything that they can kill, but usually they eat zebra and wildebeest.*
- ⇒ *Lion cubs have spots.*
- ⇒ *Male lions have large manes around their necks.*
- ⇒ *Lions lie down to eat and rest with their paws in front.*



ANIMAL NAME: *Cheetah*  
 CLASSIFICATION: *Mammal*  
 FOOD: *Carnivore*  
 LOCATION FOUND: *African Grasslands*  
 INFORMATION LEARNED

Your students could have included any number of facts from the list below.

- ⇒ *They have slim, muscular bodies with long legs that allow them to move with speed, strength and flexibility.*
- ⇒ *They are agile climbers and use their tails to help them balance while leaping, running and climbing.*
- ⇒ *They can reach speeds of over sixty miles per hour, but only for short distances.*
- ⇒ *They are found in the plains of Africa, south of the Sahara, but once they lived in North Africa, the Middle East and India.*
- ⇒ *Female cheetahs can have up to four babies at a time.*
- ⇒ *Cheetah babies are born with a coat of long gray hair so that they look more like a honey badger, which is an aggressive animal. This is a form of camouflage.*
- ⇒ *They are endangered animals.*

## VOCABULARY

Have the older students look up the following terms in the glossary in the Appendix on pp. 115-116 or in a science encyclopedia. Then, have them copy the definitions onto a blank index card or into their SCIDAT logbook.

- 📖 **FOOD CHAIN** – A chain of living things that eat each other.
- 📖 **GRASSLAND** – A habitat characterized by vast grassy fields.
- 📖 **MAMMALS** – Any warm-blooded vertebrate with skin that is more or less covered with hair; they give birth to live young which are nourished with milk at the beginning of their life.

## SCIENTIFIC DEMONSTRATION: CAT'S EYES

### MATERIALS

- Toilet paper tube
- Foil
- Rubber bands
- Construction paper
- Flashlight

### PROCEDURE

1. Cover one end of one of the toilet paper tubes with the foil and cover the other with construction paper. Secure both with rubber bands.
2. Take your tubes and your flashlight and go into a dark room.
3. Shine the flashlight into the tubes, what happens?

### EXPLANATION

Your students should see that the tube with the foil on the bottom appears to shine. This is because

the foil reflects light, just like a cat's eye. They reflect light which makes them appear to glow in the dark.

## MULTI-WEEK PROJECTS AND ACTIVITIES

### MULTI-WEEK PROJECTS

- ✂ FOOD CHART – Create a poster with 3 sections on it, one for carnivores, one for omnivores and one for herbivores. You will add to this weekly over the coming weeks, so post it somewhere visible on your wall. This week, you can add the lion and cheetah to the carnivore side of your food chart. You can use the mini-animal pictures that are in the Appendix on pg. 99 of this guide.
- ✂ HABITAT PROJECT – Make a poster or diorama that depicts the grassland habitat. This week, add the lion and cheetah. You can use the mini-animal pictures found in the Appendix on pg. 99 of this guide and the habitat poster on pg. 100 or print out your own.

### ACTIVITIES FOR THIS WEEK

- ✂ MAKE A HANDPRINT LION – This project is super cute! It uses the students hands and some orange and yellow paint to make a lion design. Simply follow the model project found on this pin:  
<https://www.pinterest.com/pin/192036371585041320/>
- ✂ MAKE A CHEETAH MASK – Paint a paper plate completely yellow. Then use a pompom dipped in brown paint to add spots to the plate. Cut out holes for the eyes and add two yellow triangles for ears. Finally add a string so that your students can wear their masks.
- ✂ HAVE A FOOT RACE – Have a foot race and declare the winner to be the cheetah of the group! Crown them with the cheetah mask you made earlier.

## MEMORIZATION

### COPYWORK/DICTATION

#### ☞ COPYWORK SENTENCE

*Mammals are warm-blooded. They feed their young with milk.*

#### ☞ DICTATION SELECTION

*Mammals are warm-blooded and they feed their young with milk. Mammals also have fur or hair covering most of their body. Lions and cheetahs are mammals.*

## NOTES

# ZOOLOGY QUIZ #1

## CHAPTERS 2 AND 3

1. What can you find in the grasslands?

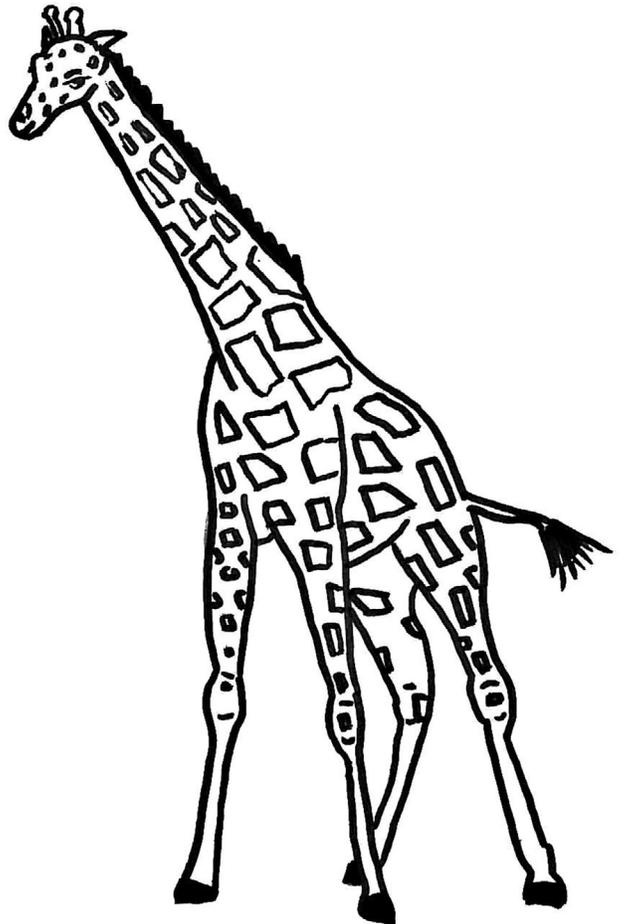
- A. Few trees
- B. Vast grassy fields
- C. Rolling hills
- D. All of the above

2. Lions live in groups called \_\_\_\_\_.

- A. Herds
- B. Prides
- C. Families
- D. None of the above

3. What does the cheetah's tail help it do?

- A. Find water
- B. Look pretty
- C. Keep is balance
- D. Attract a mate



4. What does an elephant's ears help it do?

- A. Cool down
- B. Communicate with other elephants
- C. None of the above
- D. All of the above

5. The giraffe is the world's \_\_\_\_\_ animal.

- A. Shortest
- B. Skinniest
- C. Tallest
- D. Fattest

