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 18 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

SCIENCE-ORIENTED BOOKS

1. CHAPTER SUMMARY — This section contains a paragraph summary of 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 3rd)
- DK Encyclopedia of Animals (best for 3rd through 6th)

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

ADDITIONAL LIVING 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://elementalblogging.com/the-basics-of-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 glossary 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. 105-106 if you wish for your students to write-up the demonstration. If they are in grade 4 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 DICTIONATION — 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 FEATURES

▲ OPTIONAL SCHEDULES — This section contains two possible schedules for you to use when planning your week — a two days a week schedule option and a five days a week schedule option. 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.

❖ NOTES — This section provides space for you to add any additional thoughts or plans you might have as you go through the program.

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. 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.

- *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 suites the age and ability of your students.

- *Kingfisher First Encyclopedia of Animals* (best for grades K through 3rd)
- *DK Encyclopedia of Animals* (best for 3rd through 6th)

**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*

The following book will be needed for the demonstrations for chapter’s 4 and 15. If your library does not have a copy, you will need to purchase it in order to do those demonstrations.

- *Science Around the World by Janice VanCleave*

**Additional Living 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 Beverley 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: Camel Toes (See Note)
4 x 4 Piece of cardboard
1 Cup of sand or salt
Dime
Large jar lid

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

Chapter 10: Pouch Living
2 Thermometers
Large felt rectangle

Materials Note:
You will need Science Around the World by Janice VanCleave for the demonstrations from chapter 4 and 15. You can purchase a copy or check it out from your local library for those two weeks. Also, you will need to purchase materials from a science supply store for Chapter 12’s demonstration.
CHAPTER 8: ZIPPING THROUGH THE AMAZON RAINFOREST

CHAPTER SUMMARY

The chapter begins with Blaine and Tracey zipping off to Peru, where they catch a boat for the “Out on a Limb” Guesthouse in the Amazon Rainforest. They are joined by their local expert, Alvaro, three hikers, a local man, and a dad with his two children. As they travel up river they spot a sloth which Alvaro shares more about. Once they arrive at the guesthouse, the twins meet the other guests and swing out to their room for the night. The next morning, Tracey has a strange encounter with a hummingbird in their room and again at breakfast. After they eat, the twins head out to a rainforest zip line along with Alvaro, Violetta and Vancho. On the zip lines Blaine has a weird encounter with the hummingbird and they all see a group of toucans, which Alvaro shares more about. The chapter ends with a group of chainsaw-carrying men approaching the very tree the group is standing in.

ENCYCLOPEDIA READINGS

- Kingfisher First Encyclopedia of Animals pg. 89 (Toucan)
- DK Encyclopedia of Animals pp. 321-322 (Sloth), pg. 344 (Toucan), pp. 62-63 (Rainforest)

ADDITIONAL LIVING BOOKS

- “Slowly, Slowly, Slowly,” said the Sloth by Eric Carle
- Baby Sloth (Nature Babies) by Aubrey Lang and Wayne Lynch
- Sloths (Animals That Live in the Rain Forest) by Julie Guidone
- Score One for the Sloths by Helen Lester
- Toucans and Other Birds (Animals That Live in the Rain Forest) by Julie Guidone
- Toucans (Pebble Plus) by Mary R. Dunn
- Toco Toucans: Bright Enough to Disappear (Disappearing Acts) by Anastasia Suen
- A Rainforest Habitat (Introducing Habitats) by Molly Aloian and Bobbie Kalman
- We’re Roaming in the Rainforest: An Amazon Adventure (Travel the World) by Laurie Krebs and Anne Wilson

NOTEBOOKING (SCIDAT LOGBOOK INFORMATION)

This week, you can have your students fill out a logbook page for the sloth and toucan, as well as begin to fill out a Habitat Information Sheet for the Amazon Rainforest. Here’s the information they could include:

HABITAT INFORMATION SHEET

HABITAT: Amazon Rainforest
LOCATION AND LOCAL EXPERT: Peru and Alvaro Manihuari
AVERAGE RAINFALL — The rainforest has lots of rain.
AVERAGE TEMPERATURE — It is hot and humid.
MAIN CHARACTERISTICS — The rainforest is twice the size.
of the country of India, more than half the world's species of animals and plants live here, most animals and flowers and fruits are found up in the canopy, and the forest floor doesn't receive much sunlight.

**Animals Found There — Add the sloth and toucan (could also have hummingbird and howler monkey).**

**Animal Record Sheets**

**Animal Name:** Three-toed Sloth  
**Classification:** Mammal  
**Food:** Herbivore  
**Location Found:** Amazon Rainforest  
**Information Learned**

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

- They spend their lives hanging upside down in trees by their hooked claws.
- They have 3 toes in the back and 3 toes in the front; each toe ends in a long curved claw.
- They sleep up to 18 hours a day.
- They only climb to the forest floor once every 1-2 weeks to go to the bathroom.
- They are awake mostly at night.
- They feed on leaves and fruit.
- Sloths give birth to one young at a time.
- The mothers carry their baby sloth around on their stomachs for about 5 weeks.
- The baby sloth holds on by clinging to its mother’s fur.
- They are covered in fur and are about the size of a small dog.
- Green algae grows on the coats of Amazonian sloths as a form of camouflage.
- They also have hundreds of beetles living in their coats that feed on the algae.
- Unlike other mammals, they don’t regulate their body temperature internally.
- Sloths can rotate their heads through a 270 degree angle so that they can see all around them while hanging upside down.

**Animal Name:** Toucan  
**Classification:** Bird  
**Food:** Omnivore  
**Location Found:** Amazon Rainforest  
**Information Learned**

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

- Toucans are birds that live in the canopy of tropical rainforests in South America.
- They are some of the noisiest birds in the forest, as their call includes loud croaks, barks and hoots.
- They are not excellent flyers, so they often walk or hop along branches, using their tails for balance.
- They are covered in black feathers, with a few white feathers around their eyes.
- Their large beaks are bright orange and yellow, but they are light because they are mostly hollow.
- They use their beaks to eat, to attract mates and to help in regulating their temperature.
- They use their beaks to pick fruit, which they toss back into their mouths and catch before they can eat.
- Passion fruit is their favorite food to eat.
- They also eat small birds or reptiles, which they pluck from cavities with their long bills.
- Their feet have two toes pointing forward and two toes pointing backward, making it easier for them to grip tree branches.
- They often nest in the hollows of decaying trees, laying clutches of 2-5 eggs in their nests.
- The male and female bird will both incubate the eggs until they have hatched.
Vocabulary

Have your older students look up the following term in the glossary in the Appendix on pp. 123-124 or in a science encyclopedia. Have them copy the definition onto a blank index card or into their SCIDAT logbook.

**RAINFOREST** — A habitat with lots of plants, trees, and animals due to the heavy amount of rain it receives.

Scientific Demonstration: Rainforest In A Bottle

**Materials**
- 2-liter Soda bottle with top
- Gravel
- Potting soil
- Several small plants
- Scissors
- Tape
- Water

**Procedure**
1. Have an adult cut the soda bottle in half.
2. Pour in a layer of gravel about 1 inch thick on the bottom of one half. Cover the gravel with a layer of potting soil several inches deep.
3. Then plant your plants and water them well.
4. Tape the top half of the bottle back onto the bottom half and place the “Rainforest in a Bottle” on a sunny window sill.
5. Record what happens over the next several days.

**Explanation**
You should see that, after several hours, the bottle is coated with water droplets. Over several days, you will see that the soil remains moist and the bottle stays coated with water droplets. What is happening in the bottle is a small picture of the water cycle, which is repeated over and over in the rainforest.

Multi-Week Projects and Activities

**Multi-week Projects**
- **Food Chart** — This week, add the sloth to the herbivore side and the toucan to the omnivore side of your food chart. You can use the mini-animal pictures found in the Appendix on pg. 107 of this guide or print out your own.
- **Habitat Project** — Make a poster or diorama that depicts the rainforest. This week, add the sloth and toucan. You can use the mini-animal pictures found in the Appendix on pg. 107 of this guide and the habitat poster on pg. 111 or print out your own.

**Activities For This Week**
- **Foot Sloth** — Have your students make a sloth using paper, markers, tape and a toilet paper tube. Begin by tracing the students’ foot onto the paper and cutting it out. This will be the sloth’s body and head. Then cut out 4 rectangles for the sloth’s arms and legs. Color all 5 pieces and then glue them together. Attach the sloth to the toilet paper tube so that it is hanging upside down. Add the sloth’s claws and decorate the tube so that it looks like a branch of a tree.
- **Tissue Paper Toucan** — Have your students make a toucan using tissue paper. Begin by printing out the toucan template from the Appendix on pg. 116. Then glue balled up black, orange,
yellow, white, brown and green tissue paper to the toucan. Once dry, hang your toucan up to display.

**Memorization**

- **Copywork Sentence**
  
  *The rainforest has a lot of different plants and animals.*

- **Dictation Selection**
  
  *“The Amazon rainforest is twice the size of the country of India, and more than half of the world’s species of animals and plants live here. Most animals and flowers and fruits are found up in the canopy, because the forest floor doesn’t receive much sunlight,” Alvaro shared.*

**Optional Schedules**

**Two Days a Week Schedule**

- **Day 1**
  - Read the section entitled “Sloth Sighting” of Chapter 8 in *The Sassafras Science Adventures Volume 1: Zoology*.
  - Fill out the Animal Record Sheet for the sloth.
  - Read the assigned pages from the encyclopedia of your choice.
  - Do the demonstration entitled “Rainforest in a Bottle”.
  - Go over the vocabulary word and enter it into the Zoology Glossary.
  - Choose one of the activities for this week to do.

- **Day 2**
  - Read the section entitled “Tree-hopping Toucans” of Chapter 8 in *The Sassafras Science Adventures Volume 1: Zoology*.
  - Fill out the Animal Record Sheet for the toucan.
  - Read the assigned pages from the encyclopedia of your choice.
  - Fill out the Habitat Information Sheet for the Amazon Rainforest.
  - Do the copywork or dictation assignment and add it to the Zoology Notes sheet.
  - Work on one or all of the multi-week activities.

**Five Days a Week Schedule**

- **Day 1**
  - Read the section entitled “Sloth Sighting” of Chapter 8 in *The Sassafras Science Adventures Volume 1: Zoology*.
  - Fill out the Animal Record Sheet for the sloth.
  - Go over the vocabulary word and enter it into the Zoology Glossary.

- **Day 2**
  - Read the section entitled “Tree-hopping Toucans” of Chapter 8 in *The Sassafras Science Adventures Volume 1: Zoology*.
  - Fill out the Animal Record Sheet for the toucan.
☐ Fill out the Habitat Information Sheet for the Amazon Rainforest.

⚠️ DAY 3
☐ Read one or all of the assigned pages from the encyclopedia of your choice.
☐ Have your students tell you what they have learned and add it to the Zoology Notes sheet.
☐ Do the demonstration entitled “Rainforest in a Bottle”.

⚠️ DAY 4
☐ Read one or two of the additional living books from your library.
☐ Have your students tell you what they have learned and add it to the Zoology Notes sheet.
☐ Choose one of the activities for the week to do.

⚠️ DAY 5
☐ Do the copywork or dictation assignment and add it to the Zoology Notes sheet.
☐ Work on one or all of the multi-week activities.

NOTES
Chapter 9: Trouble in the Jungle

Chapter Summary

The chapter opens with Blaine, Tracey, Violetta, Vancho and Alvaro having the tree cut down right out from under them. They all survive the fall and the rogue ProLog employees are scared off by poison arrows from a local tribe. Alvaro takes a moment to share some information about Poison Dart frogs before they notice a strange hummingbird flying near them. The twins realize that the hummingbird is a robot that is being operated by the Man with No Eyebrows. They chase after him, but he gets away just as the group is caught by a net set by the rogue ProLog employees. Alvaro shares about the Blue-morpho butterflies that are hovering nearby to take the groups’ minds off of their predicament. The natives once again rescue the group and the Perez children are reunited with their father. The chapter ends with an unknown man breaking into Uncle Cecil’s basement laboratory.

Encyclopedia Readings

- Kingfisher First Encyclopedia of Animals pg. 115 (Frog), pg. 114 (Amphibian), pg. 138 (Butterfly)
- DK Encyclopedia of Animals pp. 181-182 (Frog), pp. 92-94 (Amphibian), pp. 121-123 (Butterfly)

Additional Living Books

- From Tadpole to Frog (Let’s-Read-and-Find... Science 1) by Wendy Pfeffer
- Frogs and Toads and Tadpoles, Too (Rookie Read-About Science) by Allan Fowler
- National Geographic Readers: Frogs! by Elizabeth Carney
- From Caterpillar to Butterfly (Let’s-Read-and-Find...) by Deborah Heiligman
- National Geographic Readers: Great Migrations Butterflies by Laura F. Marsh
- Caterpillars and Butterflies (Usborne Beginners) by Stephanie Turnbull

Notebooking (SCIDAT Logbook Information)

This week, you can have your students fill out a logbook page for the frog and the butterfly, as well as continue to fill out a Habitat Information Sheet and the Around the World Sheet for the Amazon Rainforest. Here’s the information they could include:

Habitat Information Sheet

- Habitat: Amazon Rainforest
- Location and Local Expert
- Average Rainfall
- Average Temperature
- Main Characteristics
- Animals Found There — Add the frog and butterfly.
AROUND THE WORLD

MAP — Have your students put a star in the top of Peru, where the Amazon Rainforest is, and label it “Peru”. Then, have them color the regions of the world that are covered with the rainforest habitat dark green. Use the map pictured as a guide.

CONTINENTS FOUND — North America, South America, Africa, Asia, Australia or Oceania

ANIMAL RECORD SHEETS

ANIMAL NAME: Poison Dart Frog
CLASSIFICATION: Amphibian
FOOD: Carnivore
LOCATION FOUND: Amazon Rainforest

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

- The students could share information about the frog life cycle (see worksheet in the Appendix on pg. 109 for answers).
- They are brightly colored orange, yellow, red, green and blue.
- They eat fruit flies, ants, termites, small crickets and tiny beetles, which they catch with their long sticky tongues and then swallow whole.
- They are amphibians with strong back legs that they use for jumping.
- They are also very good swimmers.
- The Amazon snake has developed a tolerance for the alkaloid poison secreted by the frogs, so it is able to eat the amphibians.
- They secrete an alkaloid toxin slime that covers their body.
- Natives use the most poisonous varieties of their slime on the tips of their arrows when hunting.
- Frogs call by moving air across a series of vocal cords in their inflatable throat pouch.

ANIMAL NAME: Butterfly
CLASSIFICATION: Insect
FOOD: Herbivore
LOCATION FOUND: Amazon Rainforest

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

- Blue Morpho has bright blue wings that are edged with black, but the underside of their wings are dull brown with several eyespots as camouflage.
- Every part of their body is covered by thousands of tiny scales.
- They have two forewings and two hind wings, 3 body parts (head, thorax and abdomen) and six legs, which makes them insects.
- They sometimes head to the canopy for mating or to sun themselves.
- They spend most of their time on the forest floor eating rotting fruits, tree sap, fungi, wet mud and the juice from decomposing plants or animals.
- They feed entirely on liquids, which they suck up through their hollow tongues, called a proboscis.
- When not using their tongue they coil it up like a spring under their head.
- They have antennae, which they use to detect scents in the air of food or other members of their species.
The students could share information about the butterfly life cycle (see worksheet in the Appendix on pg. 113 for answers).

Blue Morpho caterpillars feed at night on plants that are a part of the pea family that can contain a toxin which the butterfly will secrete later, making it toxic to animals.

Most butterflies are colorful and fly by day, most moths fly at night and are dull in color, most butterflies rest with their wings up, while moths rest with their wings flat.

Butterflies generally have long slender antennae with clubbed ends while moths can have feathered antennae.

**VOCABULARY**

Have your older students look up the following term in the glossary in the Appendix on pp. 123-124 or in a science encyclopedia. Have them copy the definition onto a blank index card or into their SCIDAT logbook.

**AMPHIBIAN** — A cold-blooded, smooth-skinned vertebrate, such as a frog or salamander.

**Scientific Demonstration: Examining Life Cycles**

**Materials**
- Life Cycle of a Butterfly Worksheet
- Life Cycle of a Frog Worksheet

**Procedure**
1. Explain to your students the life cycle of a butterfly and frog using the worksheets provided in the Appendix on pp. 117-118. If you have an older students, have them fill in the blank forms in the Appendix on pp. 119-120 as you go along. If you have a younger students, let them color the completed worksheets as you explain them.

**Take It Further**

This would be a good week to raise a tadpole into a frog or to watch a caterpillar grow into a butterfly.

**Multi-Week Projects and Activities**

**Multi-week Projects**
- **Food Chart** — This week, add the frog to the carnivore side and the butterfly to the herbivore side of your food chart. You can use the mini-animal pictures found in the Appendix on pg. 107 of this guide or print out your own.
- **Habitat Project** — This week, add the frog and butterfly to your rainforest habitat. You can use the mini-animal pictures found in the Appendix on pg. 107 of this guide or print out your own.

**Activities For This Week**
- **Frog Race** — Have your students race to the finish line while hopping like frogs.
- **Butterfly Symmetry** — Have your students paint one half of a sheet of paper as they choose. While the paint is wet, fold sheet in half to get two equal sides. Cut out a butterfly shape and paste it onto a sheet of construction paper.

**Memorization**

**Copywork Sentence**

*Amphibians, like frogs, are cold-blooded.*
The word "amphibian" comes from the Greek words, "amphi" and "bios", meaning double life. Amphibians are cold-blooded, smooth-skinned vertebrates, like frogs or salamanders. Their young typically begin life in water, but once they grow lungs, they live on land.

**Optional Schedules**

**Two Days a Week Schedule**

- ** DAY 1  
  ▲ Day 1
    - Read the section entitled "Fearsome Frogs" of Chapter 9 in *The Sassafras Science Adventures Volume 1: Zoology.*
    - Fill out the Animal Record Sheet for the frog.
    - Read the assigned pages from the encyclopedia of your choice.
    - Fill out the Rainforests Around the World Sheet and add any additional information to the Habitat Information Sheet for the Amazon Rainforest.
    - Go over the vocabulary word and enter it into the Zoology Glossary.
    - Choose one of the activities for this week to do.

- ** DAY 2  
  ▲ Day 2
    - Read the section entitled "Beguiled by Butterflies" of Chapter 9 in *The Sassafras Science Adventures Volume 1: Zoology.*
    - Fill out the Animal Record Sheet for the butterfly.
    - Read the assigned pages from the encyclopedia of your choice.
    - Do the demonstration entitled "Examining Life Cycles".
    - Do the copywork or dictation assignment and add it to the Zoology Notes sheet.
    - Work on one or all of the multi-week activities.

**Five Days a Week Schedule**

- ** DAY 1  
  ▲ Day 1
    - Read the section entitled "Fearsome Frogs" of Chapter 9 in *The Sassafras Science Adventures Volume 1: Zoology.*
    - Fill out the Animal Record Sheet for the frog.
    - Go over the vocabulary word and enter it into the Zoology Glossary.

- ** DAY 2  
  ▲ Day 2
    - Read the section entitled "Beguiled by Butterflies" of Chapter 9 in *The Sassafras Science Adventures Volume 1: Zoology.*
    - Fill out the Animal Record Sheet for the butterfly.
    - Fill out the Rainforests Around the World Sheet and add any additional information to the Habitat Information Sheet for the Amazon Rainforest.
DAY 3
☐ Read one or all of the assigned pages from the encyclopedia of your choice.
☐ Have your students tell you what they have learned and add it to the Zoology Notes sheet.
☐ Do the demonstration entitled “Examining Life Cycles”.

DAY 4
☐ Read one or two of the additional living books from your library.
☐ Have your students tell you what they have learned and add it to the Zoology Notes sheet.
☐ Choose one of the activities for the week to do.

DAY 5
☐ Do the copywork or dictation assignment and add it to the Zoology Notes sheet.
☐ Work on one or all of the multi-week activities.

NOTES
APPENDIX
Lab Report Sheet

Title: ____________________________________________________________

Hypothesis (What I Think Will Happen):

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Materials (What We Used):

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Procedure (What We Did):

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Observations and Results (What I Saw and Measured):

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
Conclusion (What I Learned):
Toucan
Life Cycle of a Frog

1. The egg is laid by mature adults in eggs that have been fertilized. The embryos develop in the eggs.
2. The tadpoles hatch from the eggs.
3. The tadpoles grow and develop legs. The tadpole moves from the water onto the land.
4. In adult frogs, the tadpoles mature into adult frogs. The adult frog is able to lay eggs and the cycle begins again.
Life Cycle of a Frog
Caterpillars hatch out of the eggs and eat the leaves. When they are full, caterpillars make a chrysalis. A butterfly emerges from the chrysalis. Butterflies lay eggs on leaves.

Life Cycle of a Butterfly
Life Cycle of a Butterfly
Zoology Glossary

A
• Amphibian — A cold-blooded, smooth-skinned vertebrate, such as a frog or salamander.
• Arctic — A habitat that has little vegetation and very cold temperatures.
• Arthropod — An animal with a jointed body, such as an insect or spider.

B
• Bird — A warm-blooded, egg-laying, feathered vertebrate; it also has wings.

C
• Carnivore — An animal that eats meat.
• Classification — A way of identifying or grouping living things.

D
• Desert — A habitat that receives very little rain; it is hot during the day and cold at night.
• Domesticated Animal — An animal that has been under human control for many generations.

E

F
• Fish — A cold-blooded, aquatic vertebrate that has gills, fins, and typically an elongated body covered with scales.
• Food Chain — A chain of living things that eat each other.
• Forest — A habitat that is characterized by the abundance of trees, either deciduous or evergreen.

G
• Grassland — A habitat characterized by vast grassy fields.

H
• Herbivore — An animal that eats plants.
• Hibernation — The ability of an animal to go into a deep sleep for a long period of time by shutting down its body.

I
• Insect — An animal that has three body parts (head, thorax, and abdomen) and six legs.
• Invertebrate — An animal without a backbone.