

# LAPBOOKING THROUGH BOTANY

## TABLE OF CONTENTS

INTRODUCTION.....	5
SUPPLY LIST.....	8
LESSON PAGES.....	9
Rainforest Mini-Lapbook Overview	11
<i>Rainforest Biome Mini-Lapbook: Lesson 1</i>	12
<i>Rainforest Biome Mini-Lapbook: Lesson 2</i>	13
<i>Possible Schedule for the Rainforest Biome Mini-Lapbook</i>	14
Peat Bog & Gardens Mini-Lapbook Overview	15
<i>Peat Bog &amp; Gardens Mini-Lapbook: Lesson 1</i>	16
<i>Peat Bog &amp; Gardens Mini-Lapbook: Lesson 2</i>	17
<i>Possible Schedule for the Peat Bog &amp; Gardens Mini-Lapbook</i>	18
Grasslands Mini-Lapbook Overview	19
<i>Grasslands Mini-Lapbook: Lesson 1</i>	20
<i>Grasslands Mini-Lapbook: Lesson 2</i>	21
<i>Possible Schedule for the Grasslands Mini-Lapbook</i>	22
Rainforest Extras Mini-Lapbook Overview	23
<i>Rainforest Extras Mini-Lapbook: Lesson 1</i>	24
<i>Rainforest Extras Mini-Lapbook: Lesson 2</i>	25
<i>Possible Schedule for the Rainforest Extras Mini-Lapbook</i>	26
Tundra Mini-Lapbook Overview	27
<i>Tundra Mini-Lapbook: Lesson 1</i>	28
<i>Tundra Mini-Lapbook: Lesson 2</i>	29
Deciduous Forest Mini-Lapbook Overview	31
<i>Deciduous Forest Mini-Lapbook: Lesson 1</i>	32
<i>Deciduous Forest Mini-Lapbook: Lesson 2</i>	33
<i>Possible Schedule for the Deciduous Forest Mini-Lapbook</i>	34
Coastal Forest Mini-Lapbook Overview	35
<i>Coastal Forest Mini-Lapbook: Lesson 1</i>	36
<i>Coastal Forest Mini-Lapbook: Lesson 2</i>	37
<i>Possible Schedule for the Coastal forest Mini-Lapbook</i>	38
Desert Mini-Lapbook Overview	39
<i>Desert Mini-Lapbook: Lesson 1</i>	40
<i>Desert Mini-Lapbook: Lesson 2</i>	41
<i>Possible Schedule for the Desert Mini-Lapbook</i>	43
APPENDIX.....	45
Lapbooking through Botany Cover Page	46
Lab Report	47

Book Narration	49
Blank Vocabulary Cards	50

TEMPLATES.....T1

Rainforest Mini-Lapbook Cover	T3-T8
Peat Bog & Gardens Mini-Lapbook Cover	T9-T14
Grasslands Mini-Lapbook Cover	T15-T20
Rainforest Extras Mini-Lapbook Cover	T21-T26
Tundra Mini-Lapbook Cover	T27-T32
Deciduous Forest Mini-Lapbook Cover	T33-T38
Coastal Forest Mini-Lapbook Cover	T39-T44
Desert Mini-Lapbook Cover	T45-T50

## INTRODUCTION

*Lapbooking through the Botany with the Sassafras Twins* is a unique and versatile program that leads you through a survey of plants using a series of eight mini-lapbooks to document the journey. The program is centered around the living book, *The Sassafras Science Adventures Volume 3: Botany*. It is designed to be a gentle approach to homeschool science education based on the Unit Study method suggested in *Success in Science: A Manual for Excellence in Science Education* by Bradley and Paige Hudson.

### WHAT IS A LAPBOOK?

Lapbooks are educational scrapbooks that fit into the lap of a student. Typically they are a collection of related mini-books on a certain subject that have been glued into a file folder for easy viewing, but they can also include pictures or projects that the students have completed. In the same way that notebooking does not require regurgitation of facts; lapbooking causes the students to interact with the materials instead of just responding to comprehension questions.

Lapbooks are extremely versatile because they can be used in conjunction with any subject the students are learning about. They are excellent tools to use with elementary students as a way of reinforcing what they are learning because this age group tends to prefer a more creative format of notebooking.

The heartbeat of the lapbook is the mini-books that are placed inside. Each of these booklets contains information on topics related to the main subject of the lapbook. They can be in a variety of shapes and sizes, but the cover should have a picture related to the subject as well as a title. The interior of each booklet should contain several sentences detailing what the students have learned about the topic in their own words. The mini-books will each pertain to different sub-topics of the main topic. So for instance, for this lapbook your main topic is plants and your related mini-books are on the types of leaves, the kinds of flowers, the parts of a seed and more.

Lapbooks serve as beautiful scrapbooks that the students can continue to learn from for years to come, which makes them a beneficial addition to a student's science education. A mini-lapbook is simply a smaller version of a full-sized lapbook.

### WHAT IS INCLUDED IN THIS PROGRAM?

*Lapbooking through Botany with the Sassafras Twins* includes all of the basic components of elementary science education that are explained in *Success in Science*.

- 1. Science-Oriented Books** – Elementary students are an empty bucket waiting to be filled with information and science-oriented books are a wonderful way to do that. These books can include appropriate children's science encyclopedias, living books for science, and/or children's non-fiction science books. In this program, the reading assignments are from the living book, *The Sassafras Science Adventures Volume 3: Botany*. I have also included a list of additional books from the library with each lesson.
- 2. Notebooking** – The purpose of the notebooking component for elementary science education is to verify that the students have placed at least one piece of information into their knowledge bucket. You can use notebooking sheets, lapbooks, and/or vocabulary words to fulfill this

requirement. This unit includes all the templates and pictures you will need to complete a series of mini-lapbooks as well as vocabulary words to coordinate with each lesson.

- 3. Scientific Demonstrations or Observations** – Scientific demonstrations and observations are meant to spark the students' enthusiasm for learning science, to work on their observation skills, and to demonstrate the principles of science for them. This component of elementary science education can contain scientific demonstrations, hands-on projects, and/or nature studies. Each lesson in this guide includes a suggested scientific demonstration to fulfill this section of elementary science instruction.

These concepts are more fully developed in our book, or you can read the following articles from *Sassafras Science* and *Elemental Blogging* to learn more:

- **What Are Living Books?** – This article clearly shares the difference between living books and encyclopedias, especially in the context of science.  
☞ <http://elementalblogging.com/what-are-living-books/>
- **What is Notebooking** – This article details the basic components of notebooking along with how a few suggestions on what notebooking can look like.  
☞ <http://sassafrasscience.com/what-is-notebooking/>
- **Scientific Demonstrations vs. Experiments** – This article explains the difference between scientific demonstrations and experiments along with when and how to employ these methods.  
☞ <http://elementalblogging.com/science-corner-scientific-demonstrations-vs-experiments/>

## HOW TO USE THIS PROGRAM

Each lesson is designed to be completed over several days or up to one week. The lesson contains reading assignments from *The Sassafras Science Adventures Volume 3: Botany*. You can choose to break each chapter up over two days or read it all at once. If you are using this program with younger students, read the selected chapters to them. If you are using this program with older students, you can choose to have them read the assigned chapters on their own or you can read the selected pages to them. (**Note**—Chapter 1 and 18 of *The Sassafras Science Adventures Volume 3: Botany* are not scheduled as a part of this program. You will need to read chapter 1 before beginning and chapter 18 after you finish.)

After you complete the reading assignment, have the students tell you what they have learned about the plants and biome from the selection. This can simply be what they found to be the most interesting or something new that they have learned from the reading. You can choose to write the sentences for them or have them copy the words into the mini-book. If you are using this program with older students, I recommend that you have them do all their own writing. Once the students have finished writing, have them color the related pictures. When the mini-book is complete, glue it into their lapbook using the overview sheet as a guide.

At another time during the week, review the vocabulary words with the students. You can have them memorize each one or just go over the words with the lesson. I have included a set of blank vocabulary cards to use with an older students in the Appendix on pp. 50-53. If you use the blank vocabulary cards, have the students look up the vocabulary words in the science encyclopedia of your choice or the glossary included in the Appendix on pp. 54-55. You can also dictate the

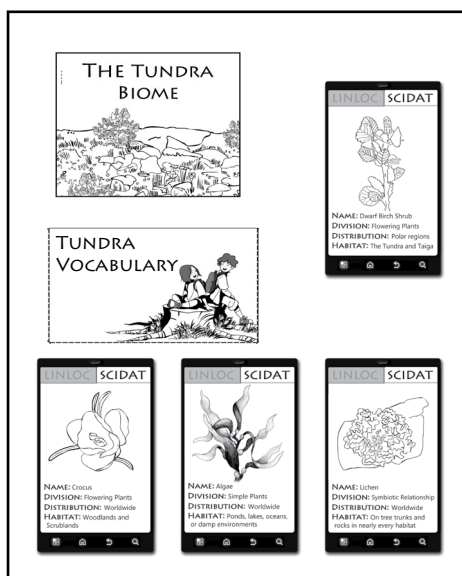
provided definition to them. I recommend that you print the vocabulary cards out on card-stock for durability.

Finally, you can finish the lesson by doing the related scientific demonstration. If your students are older and you would like to have them write a lab report, I have included a template for you in the Appendix on pp. 47-48. After you finishing the demonstration, you can finish the week by reading to the students one of the related books from the additional book list. If you would like to record what they have learned from these books, I have included a book narration sheet in the Appendix on pg. 49.

I have included possible schedules for completed each mini-lapbook. These schedules spread the work for each lesson out over four days. If you choose to complete the program in this manner this program will provide you about a semester of material.

### ONE FULL LAPBOOK

If you would like to create one full lapbook instead of a series of eight mini-lapbooks, simply arrange the interior components of each onto one full sheet of card-stock or one side of a file folder like below:



I have included a cover for a full lapbook in the Appendix on pg. 46.

### FINAL THOUGHTS

As the author and publisher of *Lapbooking through the Botany with the Sassafras Twins*, I encourage you to contact me with any questions or problems that you might have concerning this program 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 will enjoy creating memories using *Lapbooking through the Botany with the Sassafras Twins*!

Paige Hudson

# SUPPLY LIST

The following supplies will be needed to complete the scientific demonstrations suggested in this guide.

## RAINFOREST LESSON 1

*Fern Frond*  
*Magnifying Glass*

## RAINFOREST LESSON 2

*Magnifying Glass*  
*Gloves*

## PEAT BOG & GARDENS LESSON 1

*Rose*  
*Magnifying glass*  
*Knife*

## PEAT BOG & GARDENS LESSON 2

*Magnifying glass*  
*Putty knife*

## GRASSLANDS LESSON 1

*Dirt*  
*A 2" by 2" square of sod*  
*2 Aluminum pans*  
*Water*

## GRASSLANDS LESSON 2

*Several pieces of fruit*  
*Knife*  
*Magnifying glass*

## RAINFOREST EXTRAS LESSON 1

*Cup*  
*Apple cider vinegar*  
*Liquid dish soap*

## RAINFOREST EXTRAS LESSON 2

*Ripe piece of fruit*  
*Plastic container with a lid*

## TUNDRA LESSON 1

*Bulb*  
*Knife*  
*Magnifying glass*

## TUNDRA LESSON 2

*Magnifying glass*  
*Putty knife*

## DECIDUOUS FOREST LESSON 1

*Jell-O*  
*Green jelly beans*

*Grapes*  
*A banana slice*  
*A small ziploc bag*  
*A small square plastic container*

## DECIDUOUS FOREST LESSON 2

*Paper clips*  
*Foil*  
*Small house plant*

## COASTAL FOREST LESSON 1

*Pine cone (tightly closed)*  
*Magnifying glass*

## COASTAL FOREST LESSON 2

*Magnifying glass*  
*Plastic spoon*

## DESERT LESSON 1

*Sponge*  
*Flashlight*  
*10 Toothpicks*  
*Shallow dish*

## DESERT LESSON 2

*Construction paper*  
*Crayon*  
*2 Straws*  
*2 Coffee stirrers*  
*Tape*  
*Shallow dish*  
*Modeling clay*  
*Board*  
*Permanent marker*

## RAINFOREST MINI-LAPBOOK OVERVIEW

You will need one sheet of card-stock or construction paper. Begin by folding the sheet in half and cutting out all of the templates. As you read through Chapters 2 and 3 of *The Sassafras Science Adventures Volume 3: Botany*, have the students add the information that they have learned about orchids, ferns, peace lilies, shelf fungi, and the rainforest biome. Once they have completed the inside of the booklets, have the color the pictures and glue them into the mini-lapbook using the guide below.



Once you have finished reading the chapter, go over the vocabulary cards and add them to the vocabulary pocket. Finally have the students cut out the cover for the mini-lapbook, color it, and glue it on the front. (NOTE – *The Sassafras Twins visit the rainforest biome once again during chapters 8 and 9 of The Sassafras Science Adventures Volume 3: Botany.*)

## RAINFOREST BIOME MINI-LAPBOOK: LESSON 1

### SCIENCE-ORIENTED BOOKS

#### Reading Assignments

📖 Read Chapter 2 (Return to the Jungle) of *The Sassafras Science Adventures Volume 3: Botany*.

#### Additional Books from the Library

📖 *Orchids (Let's Investigate. Plants)* by Derek Fell

📖 *The Great Kapok Tree: A Tale of the Amazon Rainforest* by Lynne Cherry

📖 *A Rainforest Habitat (Introducing Habitats)* by Molly Aloian and Bobby Kalman

### NOTEBOOKING

#### Vocabulary

- 📖 EPIPHYTE – A plant, such as a moss or an orchid, that can sprout and grow on the branches of a tree.
- 📖 SPORE – A microscopic package of cells produced by a fungus or plant; it can grow into a new individual.

#### Mini-Lapbook Directions

- ✂️ ORCHID SCIDAT MINI-BOOK – Have the students add the information they have learned about the orchid on pg. T6 to the mini-book and glue the booklet into their lapbook.
- ✂️ FERN SCIDAT MINI-BOOK – Have the students add the information they have learned about the fern to the mini-book on pg. T6 and glue the booklet into their lapbook.
- ✂️ RAINFOREST BIOME TAB-BOOK – Have the students add the information they have learned about the rainforest to the tab-book on pp. T4 - T5. Be sure to save the tab-book so that the students can add information from the next chapter.
- ✂️ RAINFOREST VOCABULARY – Have the students cut out the rainforest biome vocabulary pocket on pg. T8 and glue it into their lapbook. Then, review the following vocabulary terms with them—epiphyte and spore. Have the students cut out the corresponding cards on pg. T8. After they color the pictures, have them place the cards into their vocabulary pocket.

### SCIENTIFIC DEMONSTRATION: FERN OBSERVATION

#### Materials

- Fern leaf
- Magnifying glass

#### Procedure

1. Have the students observe a fern frond. (NOTE – *You can purchase one from the local florist or look for a fern plant while on a nature walk.*)
2. Have them observe the stalk and fronds with and without a magnifying glass. If you have access to a microscope, have the students look at the leaves up close.
3. Have the students look, feel, and smell the leaf as they make observations. Have them also look for evidence of spores.



## RAINFOREST BIOME MINI-LAPBOOK: LESSON 2

### SCIENCE-ORIENTED BOOKS

#### Reading Assignment

📖 Read Chapter 3 (Kidnapped) of *The Sassafras Science Adventures Volume 3: Botany*.

#### Additional Books from the Library

📖 *The Rainforest Grew All Around* by Susan K. Mitchell and Connie McLennan

📖 *Nature's Green Umbrella (Mulberry books)* by Gail Gibbons

📖 *Fungi (Kid's Guide to the Classification of Living Things)* by Elaine Pascoe, Janet Powell and Dwight Kuhn

### NOTEBOOKING

#### Vocabulary

📖 FUNGUS – A living thing that absorbs food from living or dead matter.

#### Mini-Lapbook Directions

- ✂ PEACE LILY SCIDAT MINI-BOOK – Have the students add the information they have learned about the peace lily to the mini-book on pg. T7 and glue the booklet into their lapbook.
- ✂ SHELF FUNGUS SCIDAT MINI-BOOK – Have the students add the information they have learned about shelf fungus on pg. T7 to the mini-book and glue the booklet into their lapbook.
- ✂ RAINFOREST BIOME TAB-BOOK – Have the students add the information they have learned about the rainforest biome to the tab-book on pp. T4 - T5. Then, staple the pages together and glue the tab-book into their mini-lapbook. (*See the following page for the map-tab information.*)
- ✂ RAINFOREST VOCABULARY – Review the following vocabulary term with them—fungus. Have the students cut out the corresponding card on pg. T8. After they color the pictures, have them place the card into their vocabulary pocket.
- ✂ RAINFOREST BIOME MINI-LAPBOOK COVER – Have the students cut out the cover page on pg. T3, color it, and glue it on the front of their mini-lapbook.

### SCIENTIFIC DEMONSTRATION: FUNGUS WALK

#### Materials

- Magnifying glass
- Gloves

#### Procedure

1. Have the students take a walk in your local woods to look for examples of fungi. Be sure to check fallen logs for signs of fungi.
2. Have them observe the fruiting body with and without a magnifying glass. If you know that the fungus is non-toxic, have them touch and smell it. NEVER touch a fungus that you are not familiar with.
3. If you find a shelf or bracket fungus, have the students put on their gloves and break off the fruiting body or dig around it to see if they can view any of the threads hidden within the fungus's home.
4. Have the students examine the fruiting body closer to look for the pores through which the spores are released.

#### Explanation

The students should spend time observing the fungus that they find. Be sure to remind them that what we see of the fungus is only a small portion of the living organism. (NOTE – *You will be studying mushrooms as a part of Coastal Forest Mini-lapbook.*)

## POSSIBLE SCHEDULE FOR THE RAINFOREST BIOME MINI-LAPBOOK

### RAINFOREST BIOME LESSON 1

DAY 1	DAY 2	DAY 3	DAY 4
<input type="checkbox"/> Read the section entitled “Falling Orchids” of Chapter 2 in <i>The Sassafras Science Adventures Volume 3: Botany</i> <input type="checkbox"/> Complete the Orchid SCIDAT Mini-book and add it to the mini-lapbook	<input type="checkbox"/> Read the section entitled “Fishing for Ferns” of Chapter 2 in <i>The Sassafras Science Adventures Volume 3: Botany</i> <input type="checkbox"/> Complete the Fern SCIDAT Mini-book and add it to the mini-lapbook	<input type="checkbox"/> Add any information the students have learned to the Rainforest Tab-book <input type="checkbox"/> Go over the vocabulary words and add them to the mini-lapbook	<input type="checkbox"/> Do the Scientific Demonstration: Fern Observation <input type="checkbox"/> Choose one or more of the additional books to read

### RAINFOREST BIOME LESSON 2

DAY 1	DAY 2	DAY 3	DAY 4
<input type="checkbox"/> Read the section entitled “Lilies on the Trail” of Chapter 3 in <i>The Sassafras Science Adventures Volume 3: Botany</i> <input type="checkbox"/> Complete the Peace Lily SCIDAT Mini-book	<input type="checkbox"/> Read the section entitled “Fighting Fungi” of Chapter 3 in <i>The Sassafras Science Adventures Volume 3: Botany</i> <input type="checkbox"/> Complete the Shelf Fungus SCIDAT Mini-book	<input type="checkbox"/> Complete the Rainforest Biome Tab-book <input type="checkbox"/> Go over the vocabulary word and add it to the mini-lapbook <input type="checkbox"/> Add the cover to the mini-lapbook	<input type="checkbox"/> Do the Scientific Demonstration: Fungus Walk <input type="checkbox"/> Choose one or more of the additional books to read

## NOTES

**Rainforest Biome Map**



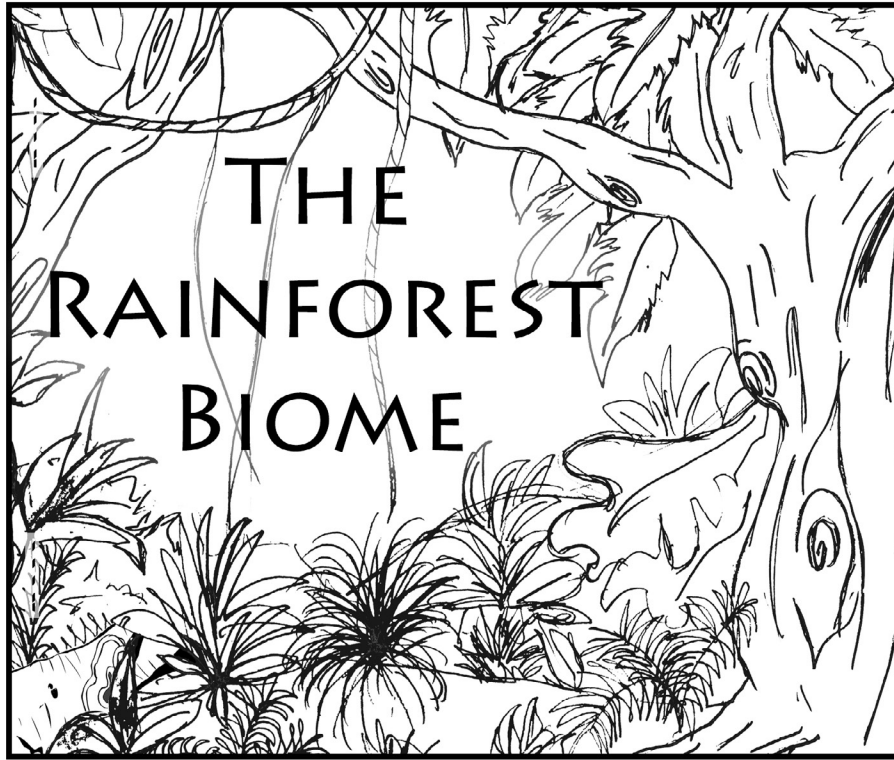
## RAINFOREST MINI-LAPBOOK COVER

# MY GUIDE TO THE RAINFOREST



BY: \_\_\_\_\_  
& THE SASSAFRAS TWINS


# RAINFOREST BIOME TAB-BOOK TEMPLATES




# RAINFOREST BIOME TAB-BOOK TEMPLATES

INTERESTING FACTS ABOUT  
THE RAINFOREST BIOME

FACTS

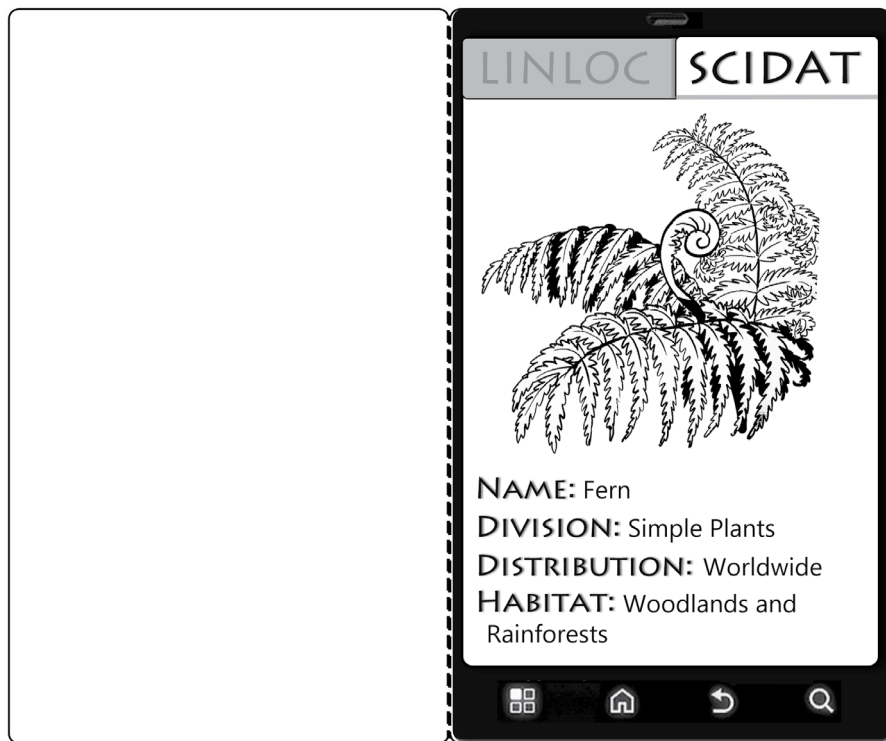
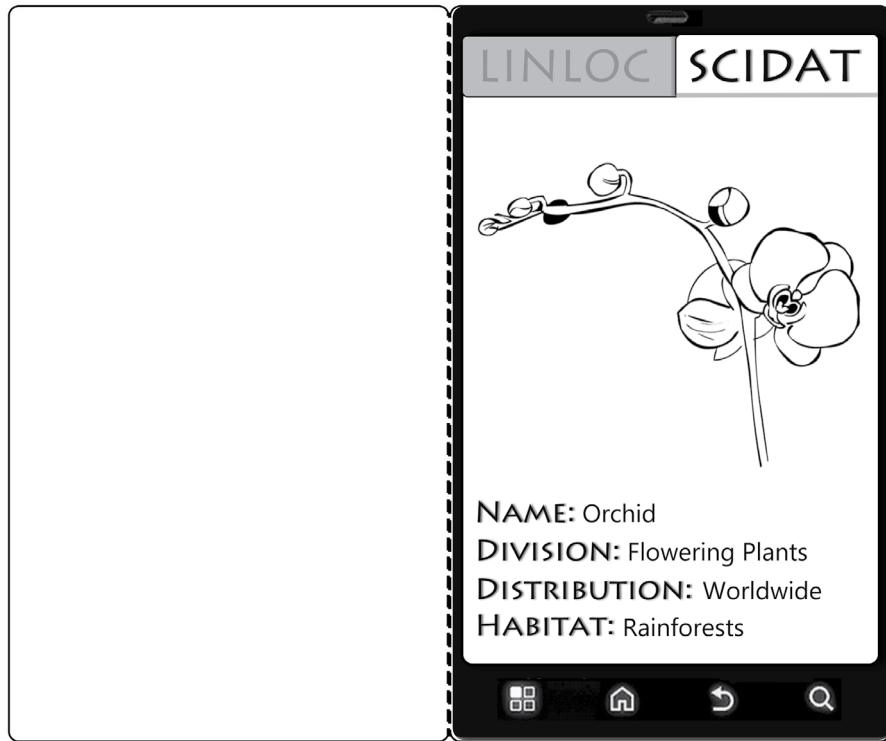


MAP

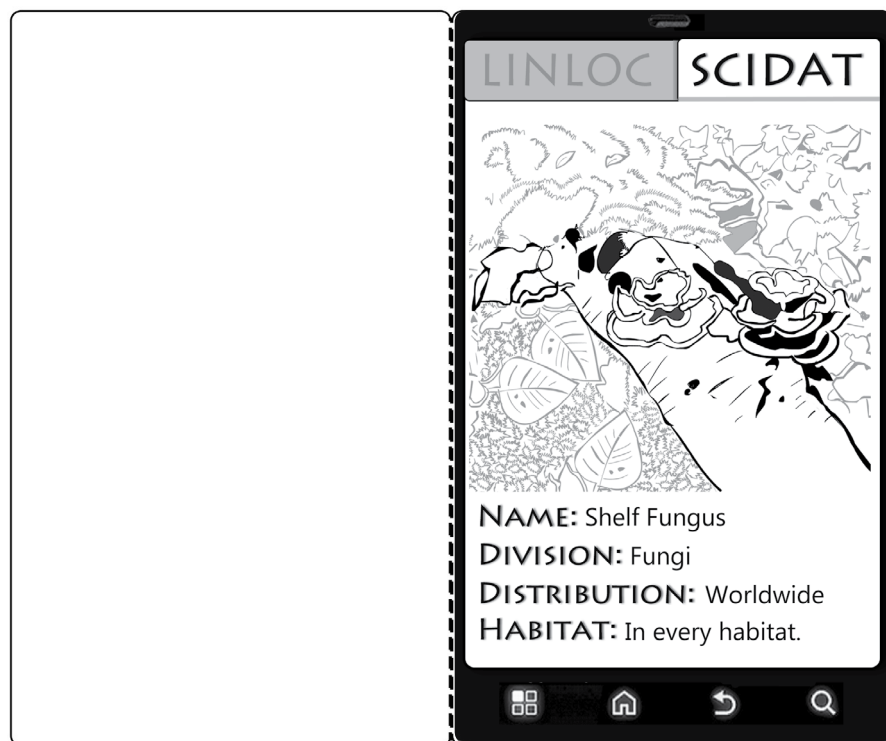
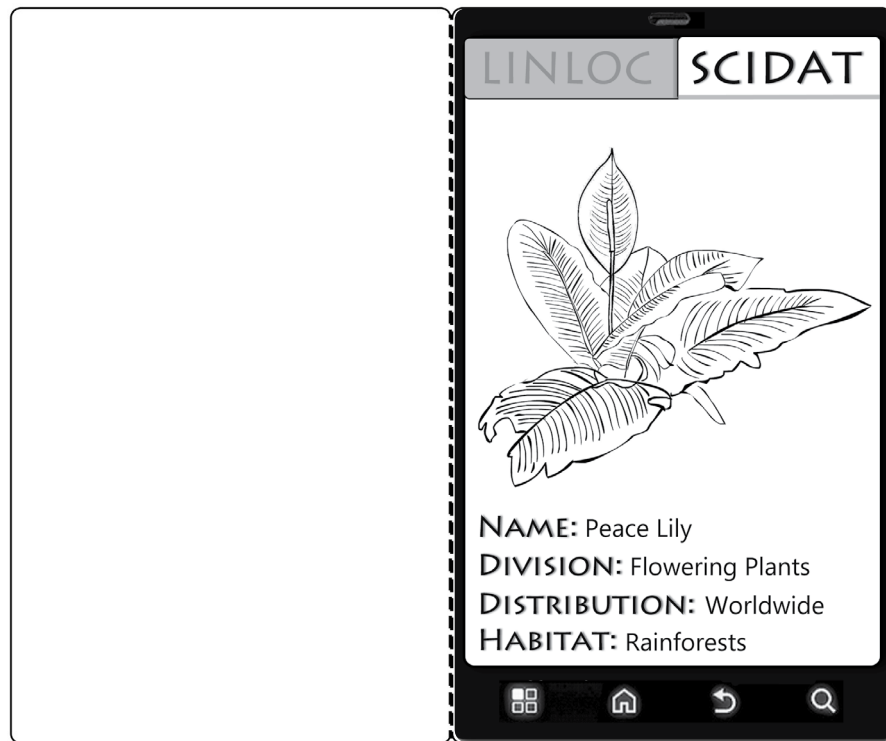


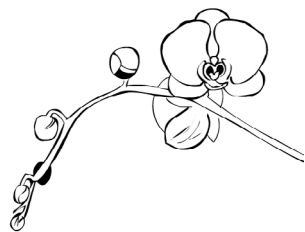
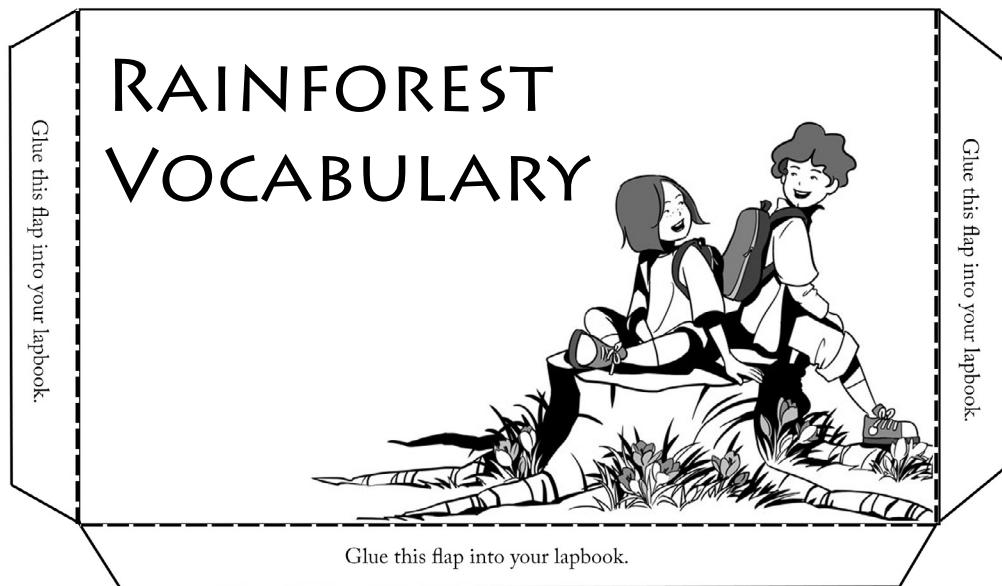
**LINLOC DIGITAL**  
LOCATION: Amazon Rainforest  
CONTACT: Arno  
LATITUDE: 4° 18' 43.82" S  
LONGITUDE: 72° 48' 34.77" W  
INFORMATION NEEDED ON:  
Epiphytes, Ferns,  
Tropical climate, fungi

# RAINFOREST BIOME SCIDAT MINI-BOOK TEMPLATES

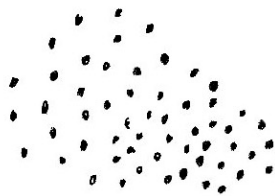


## RAINFOREST BIOME SCIDAT MINI-BOOK TEMPLATES

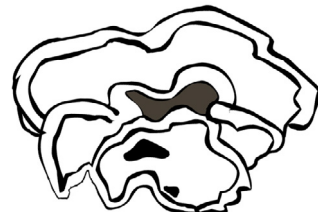




**EPIPHYTE** – A plant, such as a moss or an orchid, that can sprout and grow on the branches of a tree.



**SPORE** – A microscopic package of cells produced by a fungus or plant; it can grow into a new individual.



**FUNGUS** – A living thing that absorbs food from living or dead matter.