# Lapbooking through...

# Plants

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# Lapbooking through Plants

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## Digital Edition

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# Copyright Policy

# Lapbooking through Plants
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# Introduction

*Lapbooking through Plants* is a unique and versatile program that leads you through a survey of plants using a lapbook to document the journey. 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 & Paige Hudson. This study can be used as a stand-alone science program for K-2nd grade or in conjunction with another biology program for an older student.

## What is a lapbook?

Lapbooks are educational scrapbooks that fit into the lap of the 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. In other words, 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 the students' science education.

## What is included in this program?

*Lapbooking through Plants* includes all of the basic components of elementary science education as explained in our book.

1. **Science-Oriented Books —** The elementary student is 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 and additional books scheduled in the lesson fulfill this component. The reading assignments are broken for you into two levels, younger students (K-2nd grade) and older students (3rd-5th grade).
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 lapbook on plants 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 demonstration the principles of science for them. This component of elementary science education can contain scientific demonstrations, hands-on projects, and/or nature studies. The coordinating activities found in this guide fulfill this section of elementary science instruction.

If you would like to read more about the concepts introduced in the above points, check out *Success in Science: A Manual for Excellence in Science Education* and the following articles from Elemental Blogging.

- **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/

- **The Basics of Notebooking —** This article details the basic components of notebooking along with how a few suggestions on what notebooking can look like.

  http://elementalblogging.com/the-basics-of-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 can I use this program?

Each lesson in this program was designed to be completed over several days or up to one week. The lesson contains reading assignments from the selected books. You can choose to break these selections up over the several days or do them all at once. If you are using this program with younger students, read the selected pages to them. If you are using this program with older students, you can choose to have them read the assigned pages on their own or you can read the selected pages to them.

After you complete the reading assignment, have the students tell you what they have learned 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 them 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 picture on the mini-book. Once the mini-book is complete, glue it into their lapbook using the overview sheet on pg. 7 as a guide.

At another time during the week, review the vocabulary with the students. You can have them memorize each of the definitions or just go over each of the words with the lesson before adding the card to the vocabulary pocket. I have also included a set of blank vocabulary cards to use with an older student in the Appendix on pp. 26-27. If you use the blank vocabulary cards, have the students look up the vocabulary words in the science encyclopedia of your choice or dictate the provided definition to them. Then, have them write the definition on the back of each card. I recommend that you print the blank vocabulary cards out on card stock for durability.

Finally, you can finish the week by reading to the students one of the related books from the additional book list. After you finishing reading, do an additional activity with the students. If you would like to record what they have learned, there are two template pages provided for you to use in the appendix of this book on pp. 24-25.

I have also included a possible schedule for each lesson to give you an idea of how to plan out each one. These schedules spread the assigned work for out over four days. If you choose to complete the program in this manner, this lapbook will take you six weeks to complete.

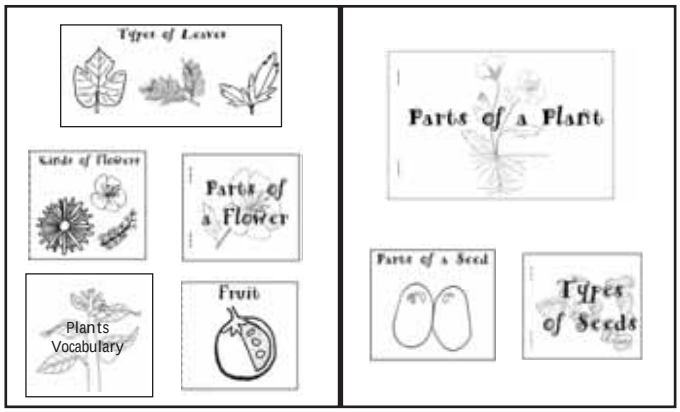
## Final Thoughts

As the author and publisher of this curriculum, I encourage you to contact me with any questions or problems that you might have concerning *Lapbooking through Plants* at 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 Plants*!

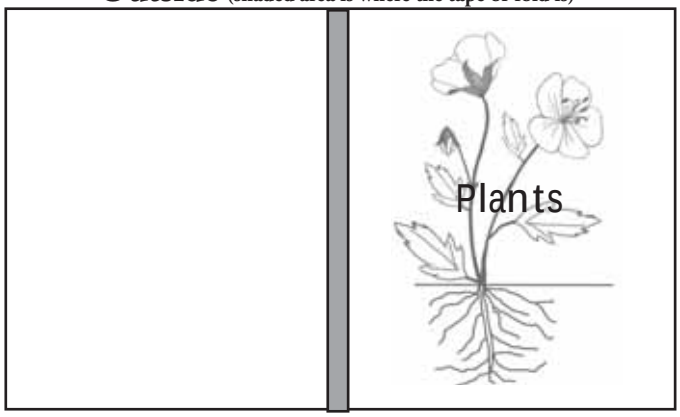
# Lapbook Overview

You will need 2 sheets of card-stock or one file folder. Begin by taping the two sheets together on the longest edge, to look like this:

**Inside**




**Outside** **(shaded area is where the tape or fold is)**




## Overall Directions

For each mini-book have the students color the pictures. Then, write the narration sentences for the students or have them copy the information into the inside of the mini-book. Finally, glue the mini-books onto the lapbook. You can use the cover template provided or allow the students to decorate the cover as they choose.

# Books and Materials List

## Books Scheduled

The following books are what I used while planning the reading assignments for this curriculum:

Younger Students
- 🕮 *Plant Parts (Life of Plant Series)*

Older Students
- 🕮 *Usborne Science Encyclopedia*

However you could certainly use the encyclopedias you already have on hand or books from the library. Simply look up the topic assigned for the day, read about it and complete the section in your lapbook.

## Additional Materials Needed

The following materials will be needed to complete the lapbook:
- ✂ 2 sheets of 8 ½ by 11 cardstock OR 1 file folder
- ✂ Colored pencils or crayons
- ✂ Markers for decorating the cover
- ✂ Glue stick
- ✂ Scissors
- ✂ Stapler

Additional materials will vary according to the activities you choose to do.

## Overview of Study

- **Lesson 1:** Leaves
- **Lesson 2:** Flowers
- **Lesson 3:** Seeds, Part 1 ~ Fruits and Seeds
- **Lesson 4:** Seeds, Part 2 ~ Nuts, Cones, and Spores
- **Lesson 5:** Stems
- **Lesson 6:** Roots

# Lapbooking through Plants

## Lessons

# Lesson 1: Leaves

## Science-Oriented Books

### Reading Assignments

**Younger Students**

- 🕮 *"Leaves" Plant Parts pp. 6-9*
- 🕮 *"Needles & Spines" Plant Parts pp. 10-11*

**Older Students**

- 🕮 *"Leaves" Usborne Science Encyclopedia pp. 258-259*
- 🕮 *"Leaf Structure" Usborne Science Encyclopedia pp. 260-261*

**Additional Books from the Library**

- 🕮 *Why Do Leaves Change Color? (Let's-Read-and-Find... Science, Stage 2)* by Betsy Maestro
- 🕮 *Leaves (Designs for Coloring)* by Ruth Heller
- 🕮 *Leaf Jumpers* by Carole Gerber
- 🕮 *Leaves* by David Ezra Stein

## Notebooking

### Vocabulary

Have the students cut out and glue the vocabulary pocket on pg. T-10 into their lapbook. Then, have them cut out and add the following card to their vocabulary pocket.

- ✍ **Leaf —** The part of the plant that makes the food for the plant. (Completed card on pg. T-10, Blank card on pg. 26)

### Mini-book Assembly Instructions

1. **Types of Leaves Sheet —** Have the students cut out and color the leaf pictures and then have them label the types of leaves. Younger students should label the leaves with either broad leaf or needle, while older students label the leaves with maple leaf, pine needle and simple flower leaf. (pg. T-6)
2. **Parts of a Plant Tab-book (multi-week) —** Have the students cut out and color the cover page for the "Parts of a Plant" tab-book. Ask the students what they have learned about leaves this week and then add their narration to the leaves page of the "Parts of Plants" tab-book. Have them color the pictures on the leaves sheet. Save these two pages for when they assembles the tab-booklet in lesson 6. (pg. T-3)

## Scientific Demonstrations or Observations

### Coordinating Activity

- ✂ **Leaf Rubbings —** Have the students make a leaf rubbing booklet. Go on a nature walk and collect several different kinds of leaves — try to include pine needles in the collection. Once at home, use the samples to make a booklet of leaf rubbings. Begin this process by identifying the leaves you have collected. Then, place each leaf under a piece of paper and rub on the top of the same paper with a crayon until the shape of the leaf appears. Label the page with

the type of leaf and set it aside. Once you have created a page for each of the leaves, bind the book together and create a cover.

## Possible Schedule

| Day 1 | Day 2 | Day 3 | Day 4 |
|---|---|---|---|
| ☐ Read the section on Leaves<br>☐ Complete the Leaves Page from the Parts of a Plant Tab-book | ☐ Read the section on Needles and Spines (or Leaf Structure)<br>☐ Complete the Types of Leaves Page and add it to the lapbook | ☐ Complete the "Leaf Rubbings" activity<br>☐ Choose one or more of the additional books to read | ☐ Go over the vocabulary word and add the card to the vocabulary pocket<br>☐ Choose one or more of the additional books to read |

**Notes**

# Lesson 2: Flowers

## Science-Oriented Books

### Reading Assignments

**Younger Students**

- 🕮 *"Buds" Plant Parts pp. 12-13*
- 🕮 *"Flowers" Plant Parts pp. 14-15*
- 🕮 *"Kinds of Flowers" Plant Parts pp.16-17*

**Older Students**

- 🕮 *"Flowering Plants" Usborne Science Encyclopedia pp. 270-273*

**Additional Books from the Library**

- 🕮 *The Reason for a Flower (World of Nature)* by Ruth Heller
- 🕮 *A Weed Is a Flower* by Aliki
- 🕮 *Flower (Life Cycle of A…)* by Molly Aloian

## Notebooking

### Vocabulary

Have the students cut out and add the following cards to their vocabulary pocket.

- **Bud —** A swelling on a plant stem containing tiny flower part ready to burst into a bloom. (Completed card on pg. T-11, Blank card on pg. 26)
- **Flower —** The reproductive parts of a plant. (Completed card on pg. T-11, Blank card on pg. 26)

### Mini-book Assembly Instructions

1. **Kinds of a Flower Mini-book —** Have the students cut out the "Kinds of a Flower" mini-book. Ask them what they have learned about the different kinds of flowers. Write their narration sentence on the inside of the book and have them color the flowers. (pg. T-6)
2. **Parts of a Flower Mini Tab-book —** Have the students cut out and color the pages of the "Parts of a Flower mini tab-book. Then, have them label the bud page with bud and stem, and the flower page with pistol, stamen, and petals. Finally, have the students staple the pages together and glue the mini tab-book into their lapbook. (pg. T-7)
3. **Parts of a Plant Tab-book (multi-week) —** Have the students cut out and color the flowers page of the "Parts of Plants" tab-book. Ask the students what they have learned this week about flowers and then write their narration on the page. Save this page for when you assemble the tab-booklet in lesson 6. (pg. T-4)

## Scientific Demonstrations or Observations

### Coordinating Activity

- ✂ **Flower Dissection —** Dissect a flower with the students. Purchase a lily or other flower with clearly visible parts. As you dissect the flower, be sure to point out the various parts to the

students. For a more detailed explanation of this project, visit the following website:

http://elementalblogging.com/flower-dissection/

## Possible Schedule

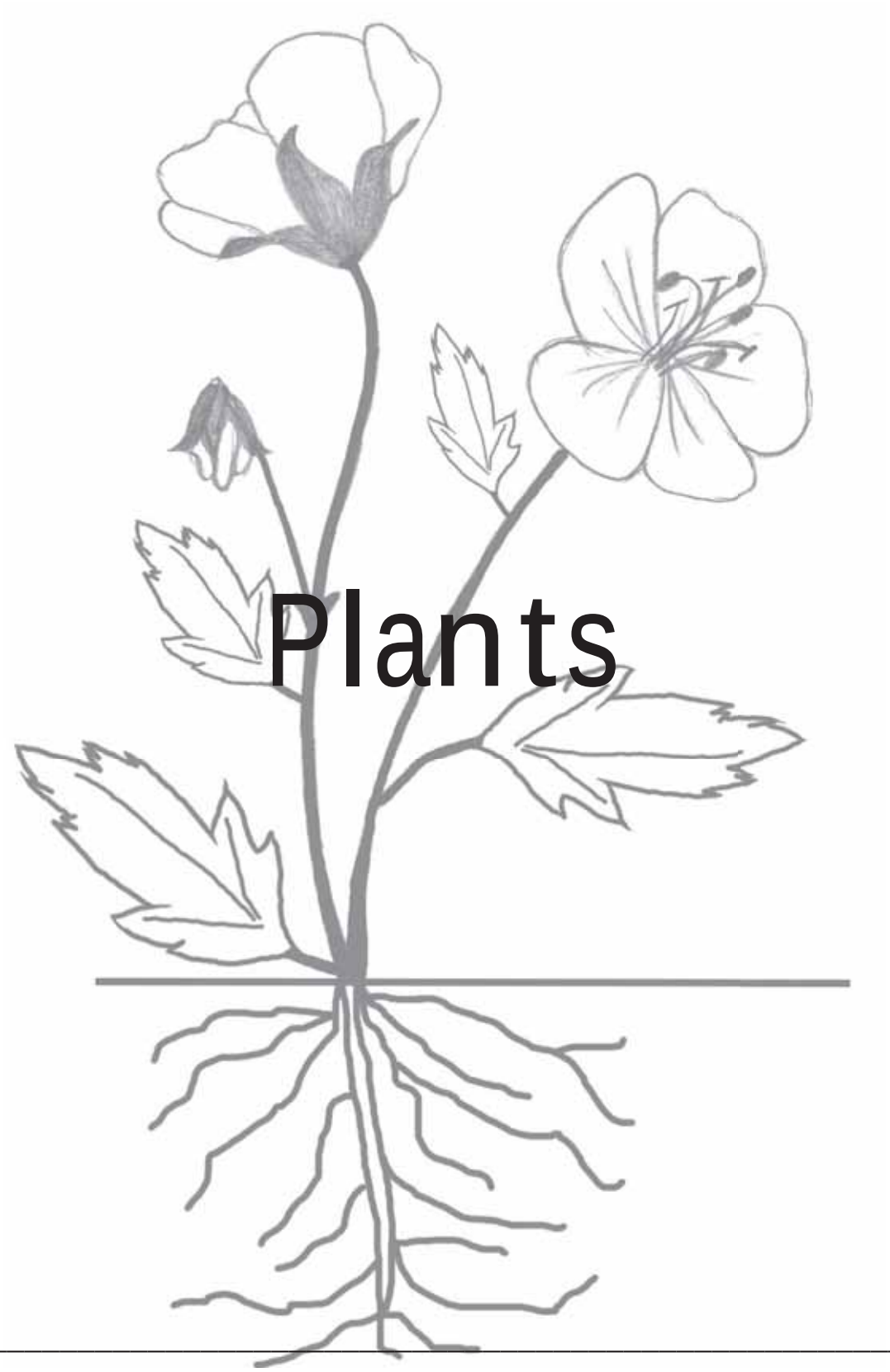
| Day 1 | Day 2 | Day 3 | Day 4 |
|---|---|---|---|
| ☐ Read the sections on Buds and Flowers ( or the 1st part of Flowering Plants)<br>☐ Complete the Parts of a Flower Mini Tab-book and add it to the lapbook | ☐ Read the section on Kinds of Flowers (or the 2nd part of Flowering Plants)<br>☐ Complete the Kinds of Flowers Page and add it to the lapbook<br>☐ Complete the Flower Page from the Parts of a Plant Tab-book | ☐ Complete the "Flower Dissection" activity<br>☐ Choose one or more of the additional books to read | ☐ Go over the vocabulary words and add the cards to the vocabulary pocket<br>☐ Choose one or more of the additional books to read |

**Notes**

# Lapbooking through Plants

## Templates

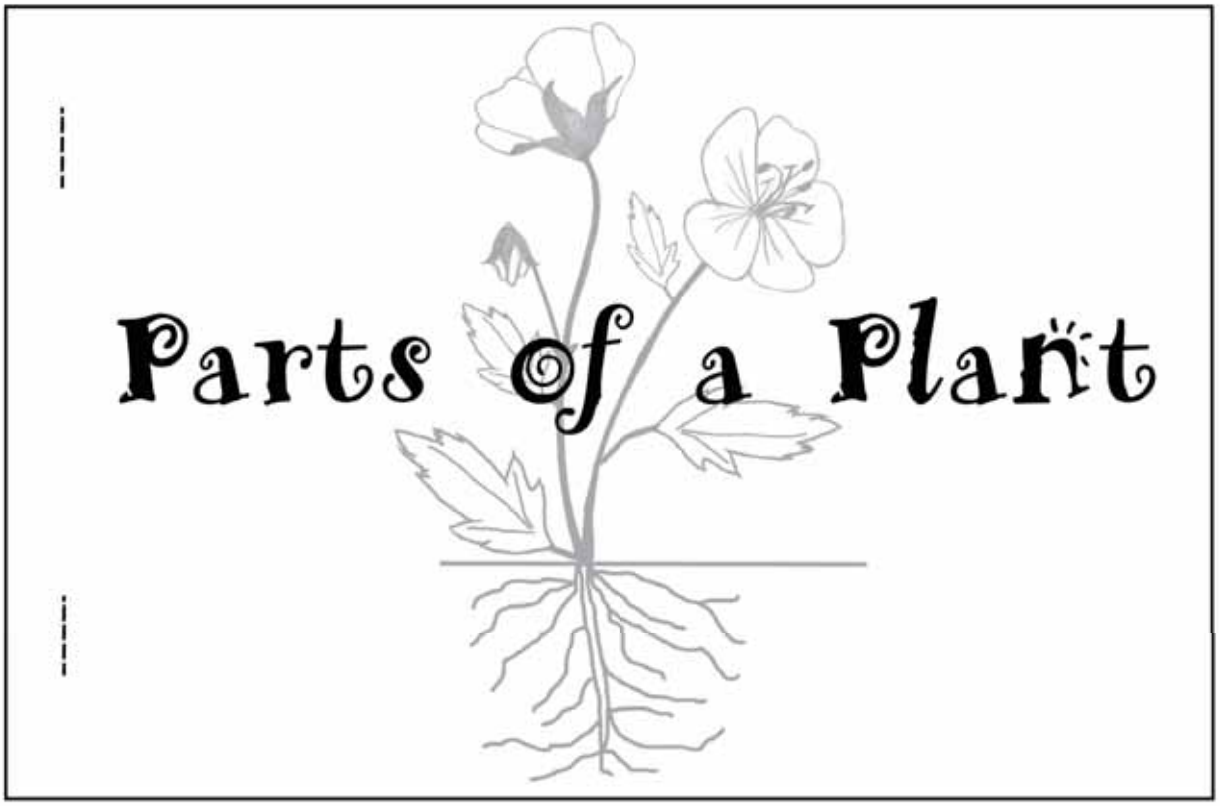
# Plants Lapbook Cover Page Template

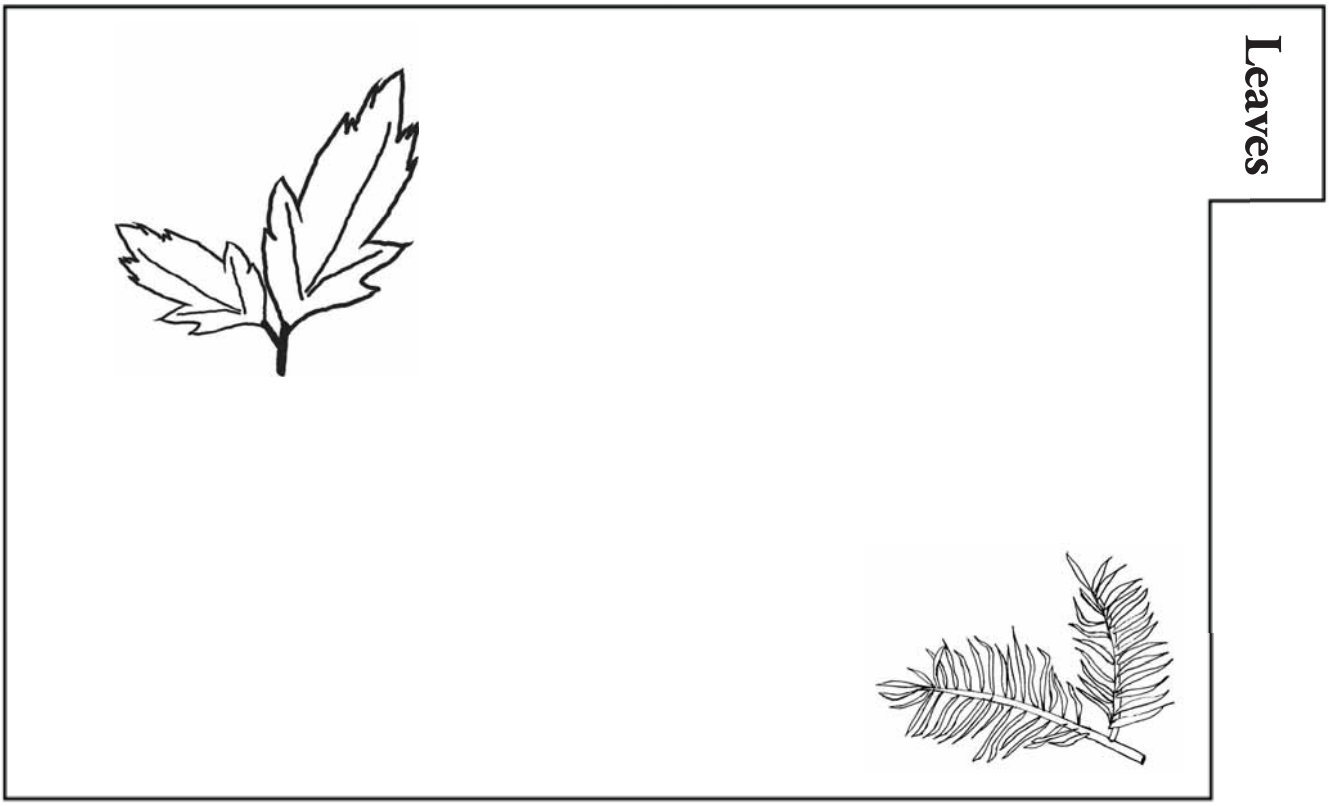


Plants

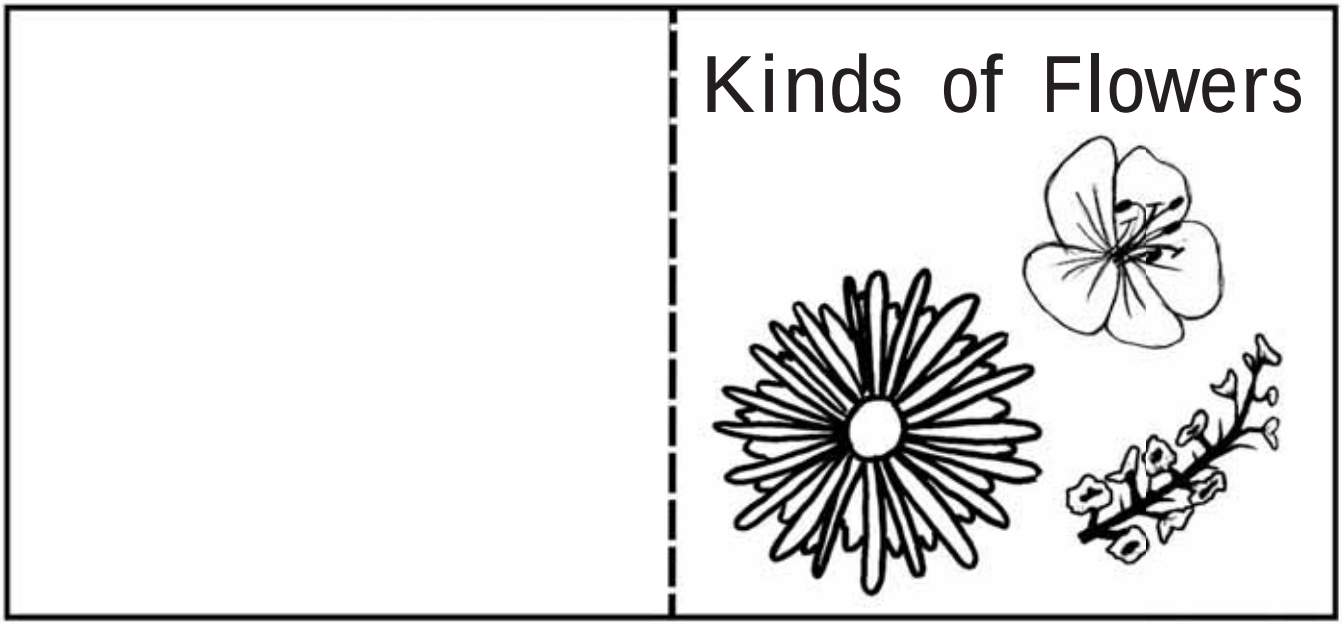
By: _____

# Parts of a Plant Tab-book

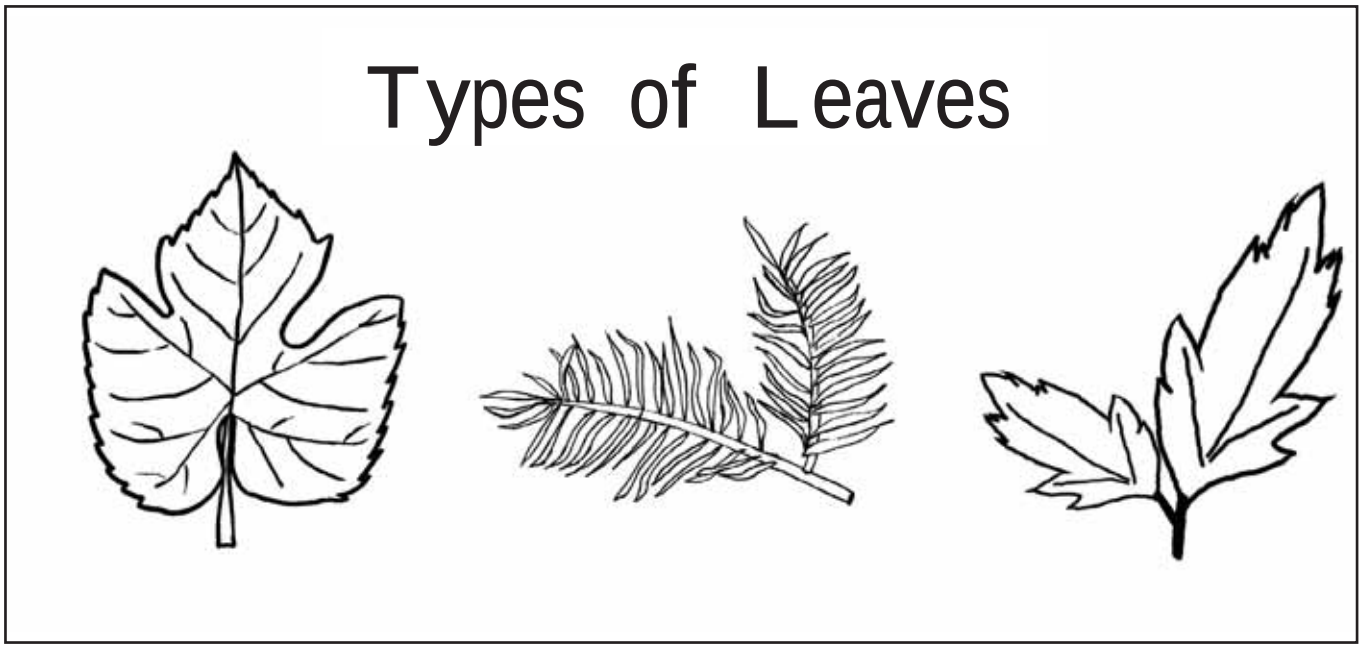


## Kinds of Flowers Mini-book




## Types of Leaves Page



## Parts of a Flower Tab-book

Parts of a Flower

Bud

Flower