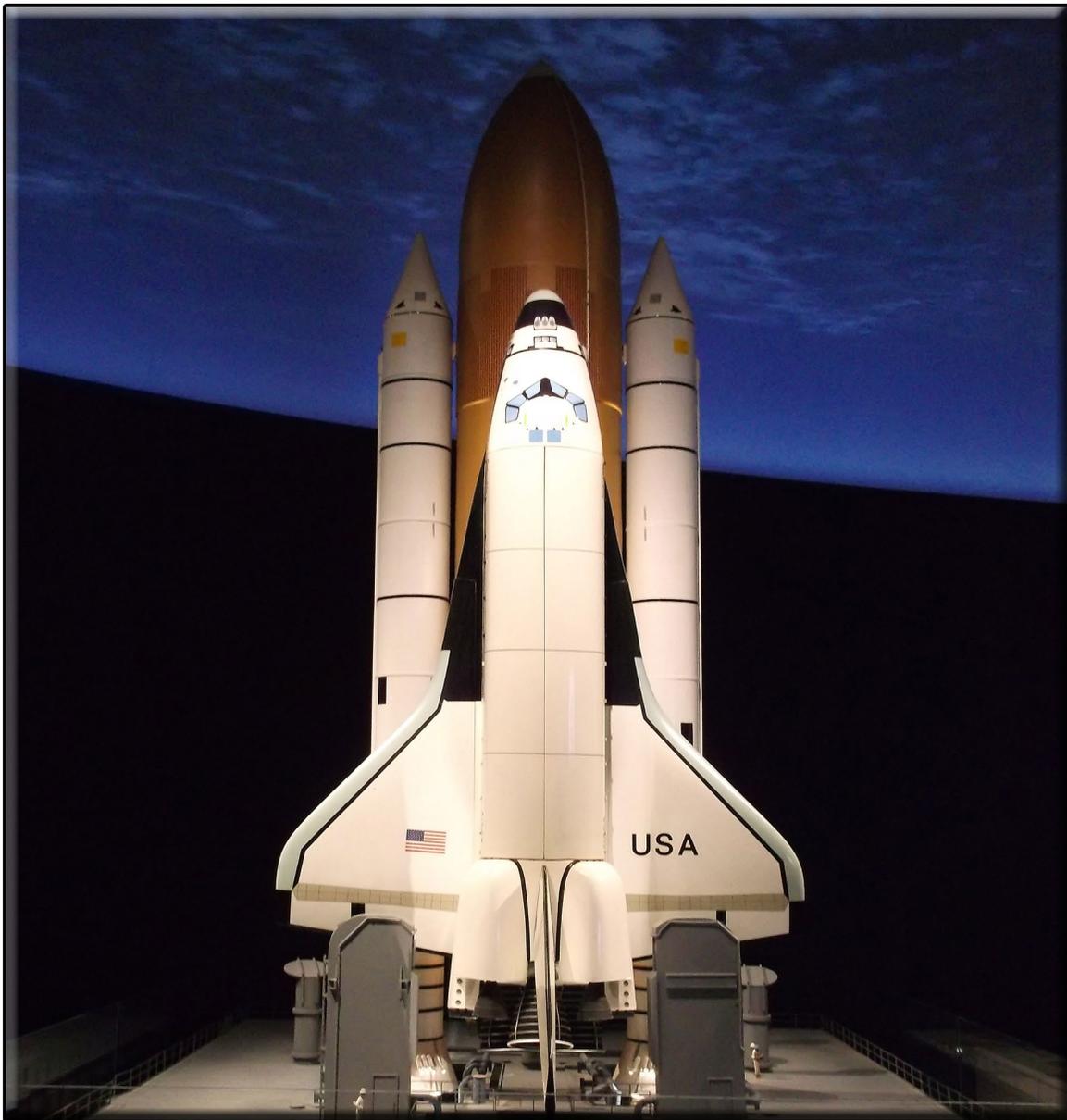


Lapbooking through...



the Solar System

Written by Paige Hudson

Lapbooking through the Solar System

Second Edition 2018

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Digital Edition

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Lapbooking through Solar System

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introduction

Lapbooking through the Solar System is a unique and versatile program that leads you through a survey of the planets in our solar system 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 and Paige Hudson. This study can be used as a stand-alone science program for K-2nd grade or in conjunction with another earth science 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 our solar system and your related mini-books are on Mars, Venus, Jupiter, 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 the Solar System 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 demonstrate 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. _____. 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. ___.

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.

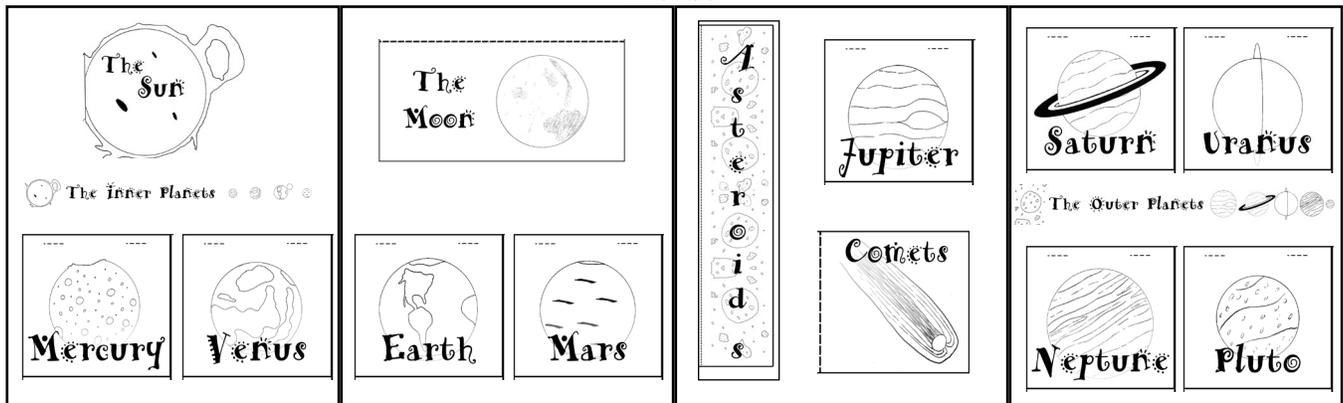
Final Thoughts

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 the Solar System* at support@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 Solar System*!

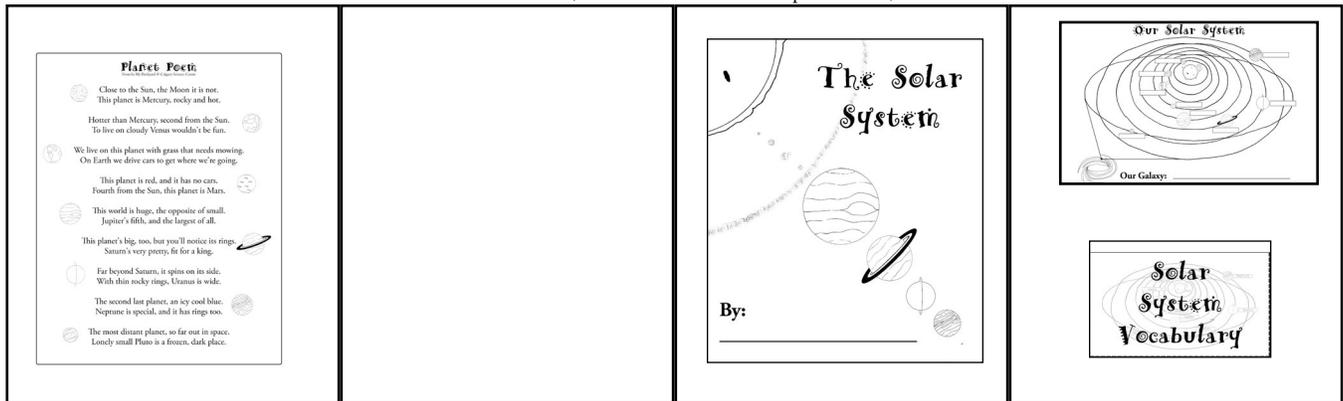
Lapbook Overview

You will need 4 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 and poems 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

 *DK First Space Encyclopedia*

Older Students

 *DK Eyewitness Astronomy*

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:

- ✂ 4 sheets of 8 ½ by 11 cardstock OR 2 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:** Our Solar System
-  **Lesson 2:** The Sun
-  **Lesson 3:** Mercury
-  **Lesson 4:** Venus
-  **Lesson 5:** The Earth and the Moon
-  **Lesson 6:** Mars
-  **Lesson 7:** Jupiter
-  **Lesson 8:** Saturn
-  **Lesson 9:** Uranus
-  **Lesson 10:** Neptune
-  **Lesson 11:** Dwarf Planets
-  **Lesson 12:** Asteroids, Comets, and Meteors

Lapbooking
through the
Solar System

Lessons

Lesson 1: Our Solar System

Science-Oriented Books

Reading Assignments

Younger Students

📖 "The Milky Way" *DK First Space Encyclopedia* pp. 18-19

📖 "The Solar System" *DK First Space Encyclopedia* pp. 50-51

Older Students

📖 "The Solar System" *DK Eyewitness Astronomy* pp. 36-37

📖 "Our Galaxy and Beyond" *DK Eyewitness Astronomy* pp. 62-63

Additional Books from the Library

📖 *The Milky Way (Exploring Space)* by Martha E. H. Rustad and Ilia I. Roussev

📖 *The Milky Way (Galaxy)* by Gregory L. Vogt

📖 *There's No Place Like Space: All About Our Solar System (Cat in the Hat's Learning Library)* by Tish Rabe and Aristides Ruiz

📖 *13 Planets: The Latest View of the Solar System (National Geographic Kids)* by David A. Aguilar

📖 *Scholastic Reader Level 2: Solar System* by Gregory Vogt

📖 *The Planets in Our Solar System (Let's-Read-and-Find... Science, Stage 2)* by Franklyn M. Branley and Kevin O'Malley

Notebooking

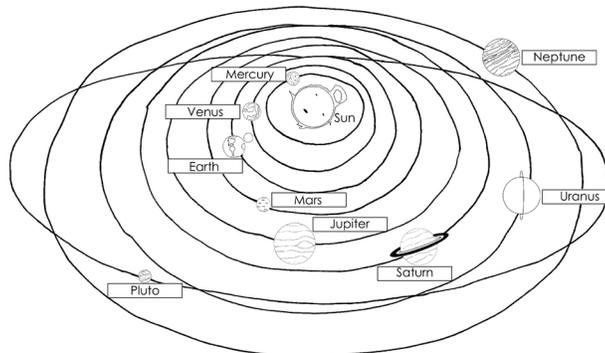
Vocabulary

Have the students cut out and glue the vocabulary pocket on pg. T-11 into their lapbook. Then, have them cut out and add the following card to their vocabulary pocket.

- 📌 **Solar system** – A group of planets and other objects all in orbit around the Sun. (Completed card on pg. T-11, Blank card on pg. 40)

Mini-book Assembly Instructions

1. **Solar System Fact Sheet** – Have the students cut out the template. Have them color the pictures and label each of the planets in our solar system (*see below*). Have the students also fill in "Milky Way" for the name of our galaxy. Then, glue the sheet into the lapbook. (pg. T-3)



Scientific Demonstrations or Observations

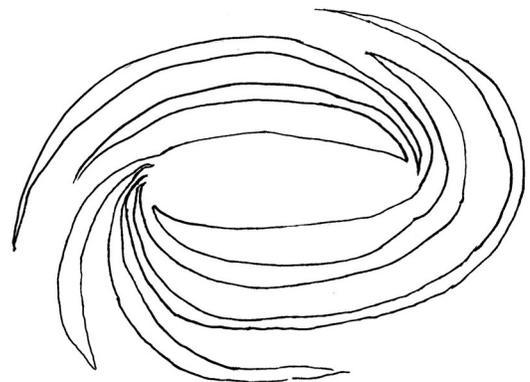
Coordinating Activity

- ✂ **Solar System Mobile** – Have the students make a hanger mobile of the solar system, using paper for your planets. Then, use string to attach the planets to a clothes hanger. You can use the planet templates in the Appendix of this guide on pp. 43-44 for your project.
- ✂ **Milky Way Art** – Have the students make their own Milky Way drawing using a white pastel or crayon on black construction paper. Then, have them use glue to trace the lines and sprinkle silver glitter over it.

Possible Schedule

Day 1	Day 2	Day 3	Day 4
<input type="checkbox"/> Read the section on the Milky Way (Our Galaxy and Beyond) <input type="checkbox"/> Complete the “Milky Way Art” activity	<input type="checkbox"/> Read the sections on The Solar System (or The Solar System) <input type="checkbox"/> Complete the Solar System Mobile and add it to the lapbook	<input type="checkbox"/> Complete the “Solar System Mobile” activity <input type="checkbox"/> Choose one or more of the additional books to read	<input type="checkbox"/> Go over the vocabulary word and add the card to the vocabulary pocket <input type="checkbox"/> Choose one or more of the additional books to read

Notes

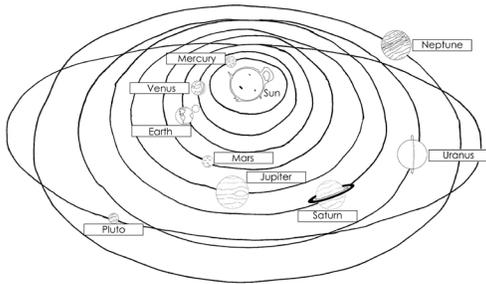


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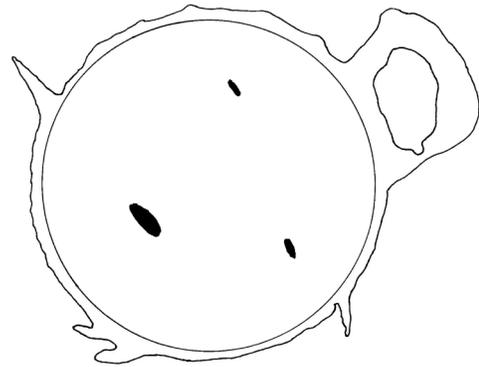
Appendix

Blank Vocabulary Cards for Older Students

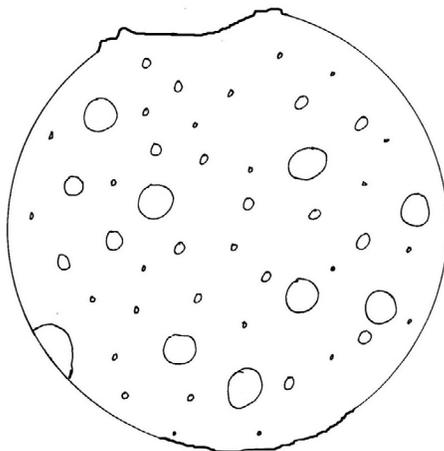
Solar System



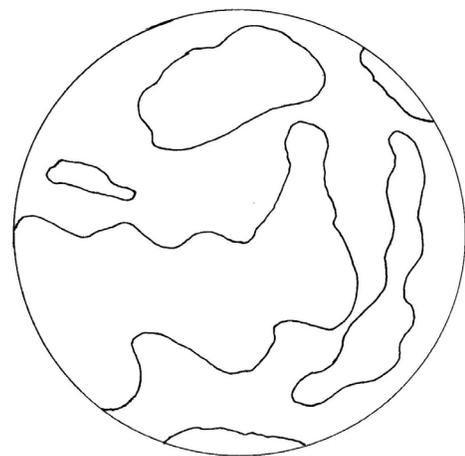
Solar Wind



Planet



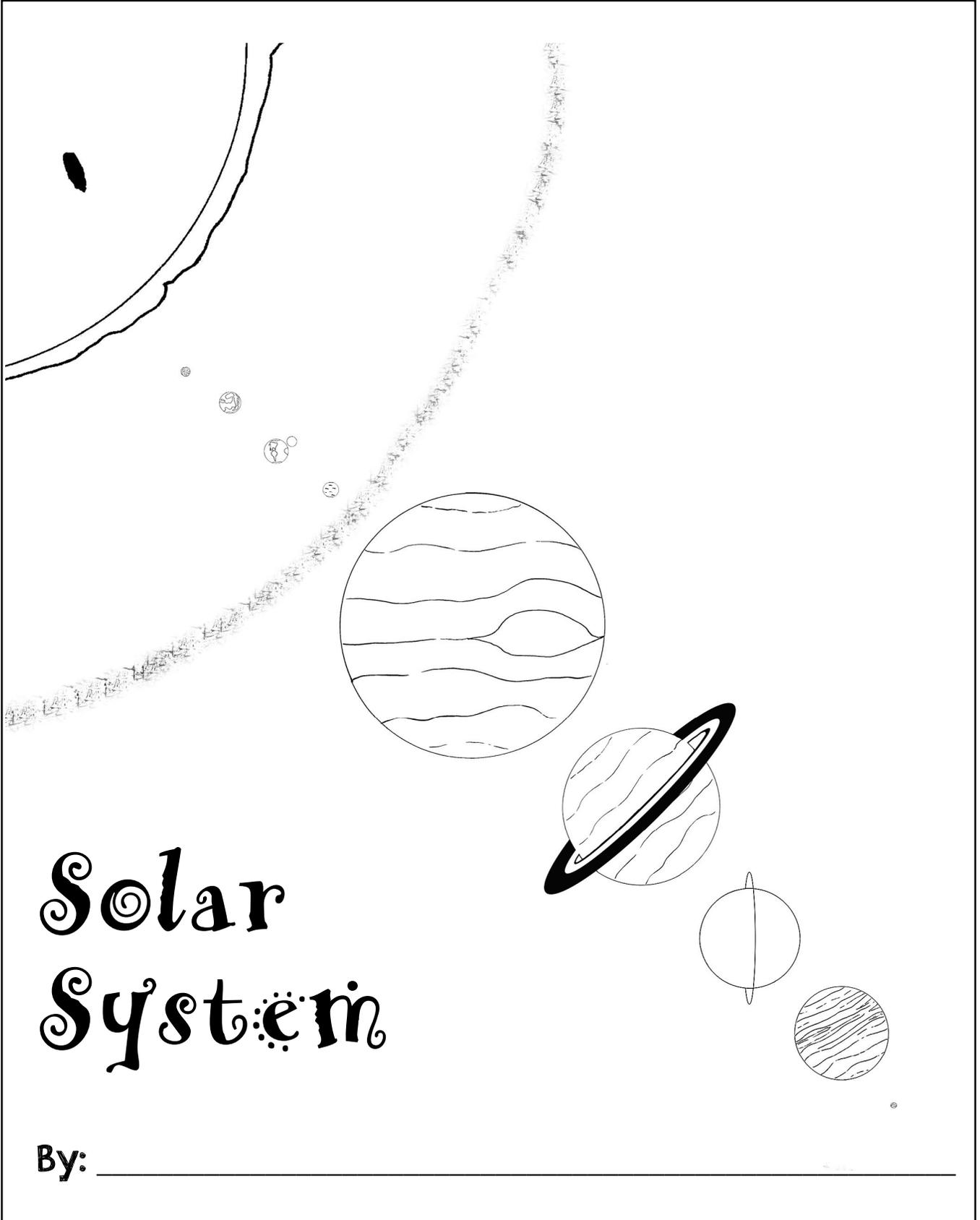
Atmosphere



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through the
Solar System*

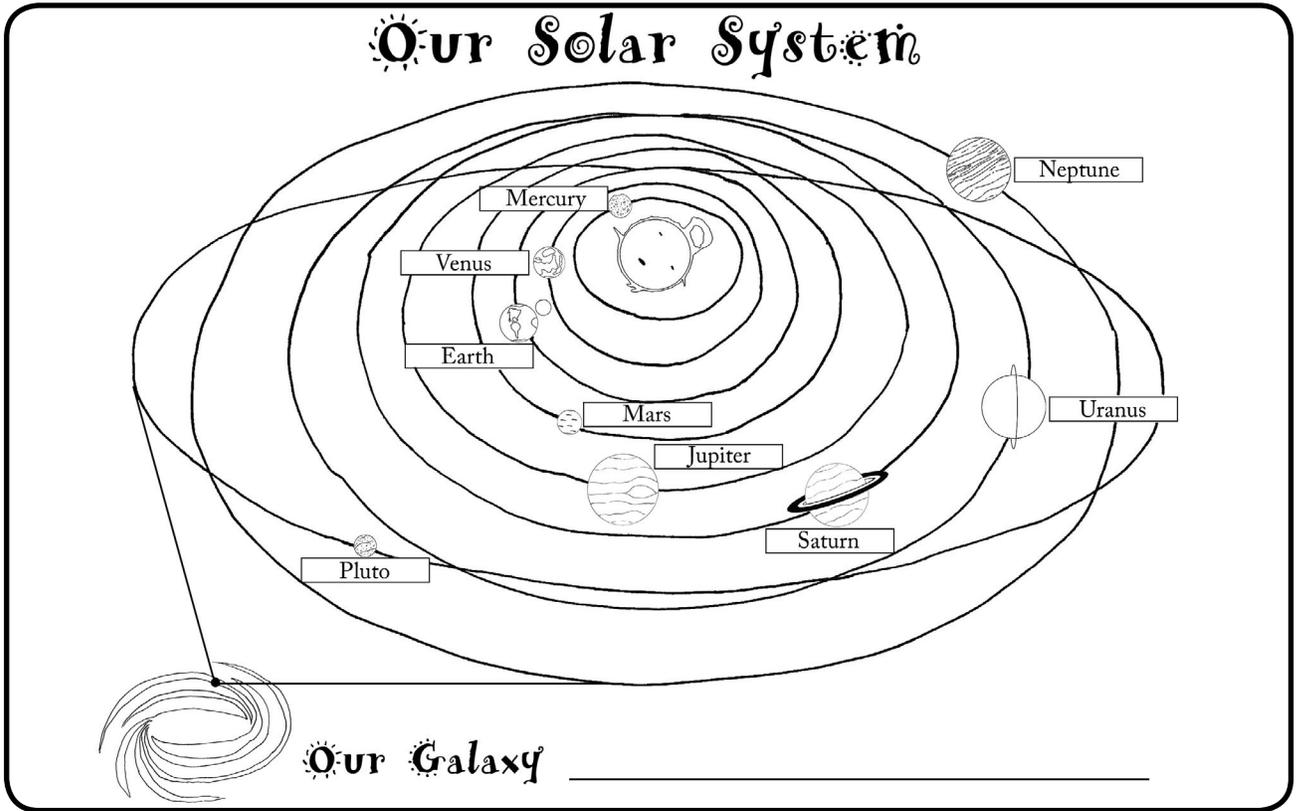
Templates

Solar System Lapbook Cover Page Template

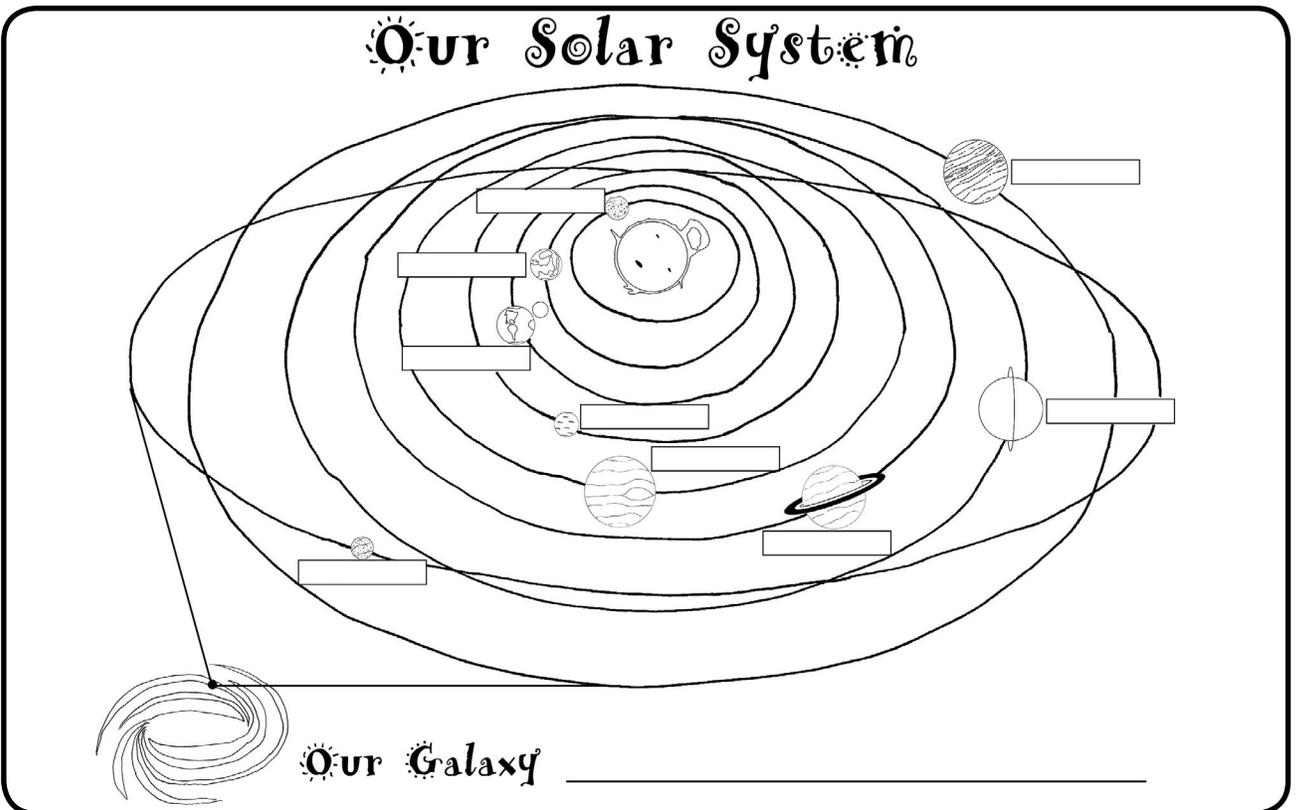


Solar System Sheet

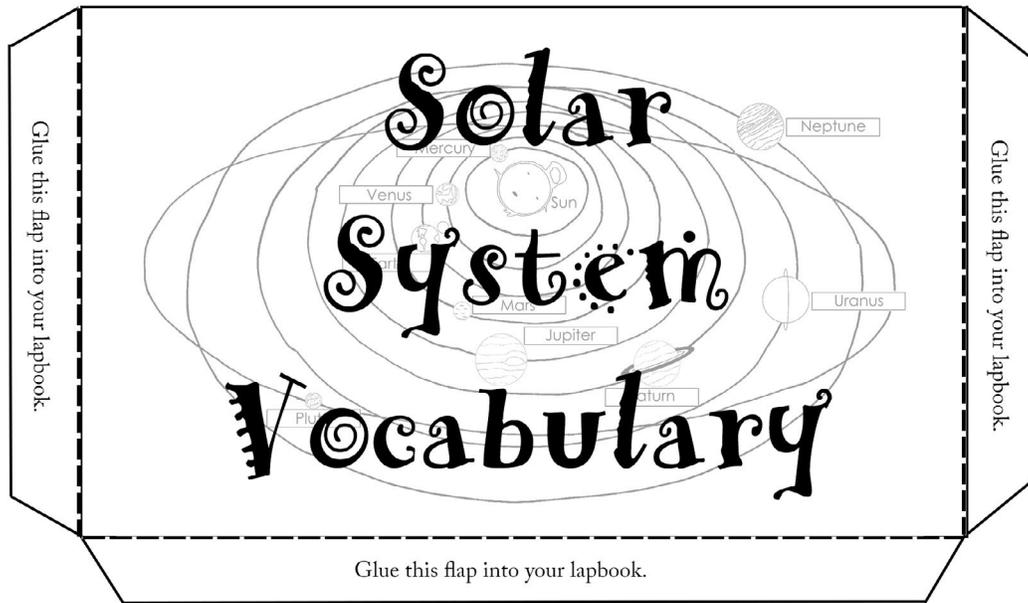
Use with younger students.



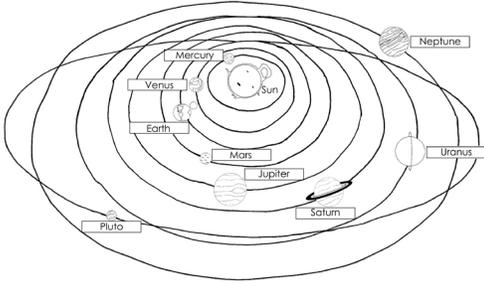
Use with older students.



Vocabulary Cards



Fold each card in half and glue together before adding the card to the vocabulary pocket.

<p>Solar System</p> 	<p>A group of planets and other objects all in orbit around the Sun.</p>
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