



Science Chunks: Solar System Sample Packet

Teach your students the basics of our solar system in bite-sized chunks. The following sample packet includes most of the first lesson of the *Science Chunks: Solar System* digital unit study. You will see:

- ✓ The Introduction (*beginning on p. 4*)
- ✓ The Lesson (*beginning on p. 8*)
- ✓ The Lapbooking Templates (*beginning on p. 11*)
- ✓ The Notebooking Templates (*beginning on p. 14*)

If you have questions about what you see, please let us know by emailing support@elementalscience.com. To get started, head to:

🔗 <https://elementalscience.com/products/science-chunks-solar-system-unit>

A Peek Inside a Science Chunks Unit

1. Lesson Topic

Focus on one main idea throughout the week. You will learn about these ideas by reading from visually appealing encyclopedias, recording what the students learned, and doing coordinating hands-on science activities.

2. Information Assignments

Find two reading options—one for younger students, one for older students, plus optional library books.

3. Notebooking Assignments

Record what your students have learned with either a lapbook or a notebook. The directions for these options are included for your convenience in this section along with the vocabulary the lesson will cover.

4. Hands-on Science Assignments

Get the directions for coordinating hands-on science activities that relate to the week's topic.

5. Lesson To-Do Lists

See what is essential for you to do each week and what is optional. You can check these off as you work through the lesson so that you will know when you are ready to move on to the next one.

6. Lapbook Templates

Get all the information you need to create a lapbook on the subject.

7. Notebook Templates

Have all the sheets you need to create a notebook on the subject, including a glossary for the vocabulary terms.

In the appendix you will find a blank activity sheet, a blank lab report sheet, and a review sheet (or quiz).

The collage consists of seven overlapping pages from a science unit on light:

- Page 1:** "Science Chunks - Light" header, "Lesson 1: Light" title, "Information" section with reading assignments (Younger and Older Students), optional books, and notebooking instructions.
- Page 2:** "Notebooking" section with instructions for creating flashcards and a glossary.
- Page 3:** "Writing Instructions" section with detailed steps for creating a lapbook and a notebook.
- Page 4:** "Hands-on Science Assignments" section with instructions for a "Light Camera" activity.
- Page 5:** "To-Do List" section with essential and optional tasks for the lesson.
- Page 6:** "Lapbook Template" showing a template for a lapbook with a sun illustration and the word "Light".
- Page 7:** "Notebook Template" showing a notebook page with a lightbulb illustration and a writing area.

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Unit Introduction

Science Chunks - Solar System is a unique and versatile unit study that leads you through a survey of the solar system. It is designed to be a gentle approach to homeschool science 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 unit for elementary science.

What Is Included in This Unit

Science Chunks - Solar System includes the three keys to teaching science. With each lesson you will be doing the following:

- ✓ Listening to (or reading) **scientific information** from visually appealing encyclopedias
- ✓ Dictating (or writing down) what the students have learned and seen using **lapbooking or notebooking**
- ✓ Watching (and doing) **hands-on science** through a variety of science activities

Here is how this works for a lesson.

Section 1 - Information

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 age-appropriate children's science encyclopedias, living books for science, and/or children's nonfiction science books.

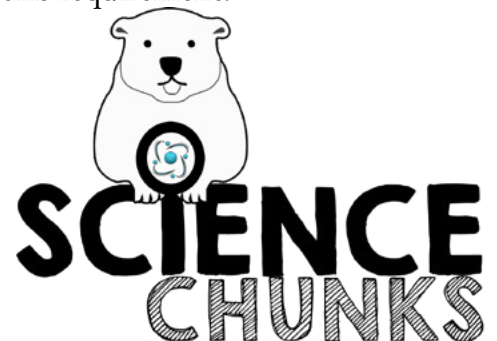
In this program, the reading assignments and additional books scheduled in the lesson fulfill this component. The reading assignments are broken for you into two levels: younger students (1st to 3rd grade) and older students (4th to 6th grade).

Our idea is that you will read these selections with your students, pausing to ask questions or discussing the information once you are done reading.

Section 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.

In this program, we have included two writing options, a lapbook and a notebook, for you to use with your students. In the lapbook section, you will find all of the templates and pictures you will need to complete a lapbook on the solar system. In the notebook section, you will find all the pages you need to create a simple notebook on the solar system, including notebooking sheets and a glossary.



Section 3 - Hands-on Science

Scientific demonstrations and observations are meant to spark 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.

In this program, the coordinating activities at the end of each lesson fulfill this section of elementary science instruction. If you would like to record what you have done, you can use one of the templates in the appendix pp. 79-80.

What You Need in Addition to This Guide

Books Scheduled

The following books are what we used to plan the reading assignments for this unit:

-  **Younger Students** - *DK Children's Encyclopedia*
-  **Older Students** - *Kingfisher 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.

You will need also simple craft supplies and other science materials—see a complete list of essential items on p. 9.

How This Unit Works

We have included a to-do list with each lesson to give you an idea of what is essential and what is optional. There are several ways you can schedule this unit. Here is a quick look at a few of the options.

Possible Schedules for Your Week

- **One Day** – You can set aside about an hour to an hour and a half each week to complete all the essential tasks in one day.
- **Two Days** – You can set aside about 30 to 40 minutes twice a week to complete all the essential tasks, plus a few more, in two days. On the first day, you can complete the reading assignments and either the lapbook or notebook assignments. On the second day, you can complete the coordinating activity and the vocabulary assignments as well as read any library books.
- **Three Days** – You can set aside about 30 minutes three times a week to complete all the essential tasks, plus a few more, in three days. On the first day, you can complete the reading assignments and either the lapbook or notebook assignments. On the second day, you can complete the coordinating activity and write a lab report using one of the templates. On the third day, you can do the vocabulary assignments as well as read any library books.

- **Four Days** – You can set aside about 20 to 30 minutes four times a week to complete all the essential tasks, plus a few more, in four days. On the first day, you can complete the reading assignments and either the lapbook or notebook assignments. On the second day, you can complete the coordinating activity and write a lab report. On the third day, you can do the vocabulary assignments as well as read any library books. On the fourth day, you can do the optional coordinating activity as well as read any library books.

If you choose to complete one lesson per week, this unit will take you twelve weeks to complete.

Final Thoughts

Read Further

If you would like to read more about philosophy behind the Science Chunks series, check out *Success in Science: A Manual for Excellence in Science Education* and the following articles from our website.

- **The Three Keys to Teaching Science** – This article shares the three keys to teaching science, including a free session that walks you through what each key can look like.
<https://elementalscience.com/blogs/news/3-keys>
- **The Basics of Notebooking** – This article details the basic components of notebooking along with how a few suggestions on what notebooking can look like.
<https://elementalscience.com/blogs/news/what-is-notebooking>
- **Lapbooking versus Notebooking** – This article takes a look at the differences between lapbooking and notebooking.
<https://elementalscience.com/blogs/news/lapbook-or-notebook>
- **Scientific Demonstrations versus Experiments** – This article explains the difference between scientific demonstrations and experiments along with when and how to employ these methods.
<https://elementalscience.com/blogs/news/89905795-scientific-demonstrations-or-experiments>

Last Words

As the author and publisher of this curriculum, I encourage you to contact me with any questions or problems that you might have concerning *Science Chunks - Solar System* by emailing us at support@elementalscience.com. I, or a member of our team, will be more than happy to answer them as soon as I am able. I hope that you will enjoy creating memories using *Science Chunks - Solar System*!

~ Paige Hudson

Materials List

Lapbook Materials

You will need the following materials to complete the lapbook:

- ✂ 4 sheets of 8 ½” by 11” card stock OR 2 file folder
- ✂ Colored pencils or crayons
- ✂ Markers for decorating the cover
- ✂ Glue stick
- ✂ Scissors
- ✂ Stapler

Notebook Materials

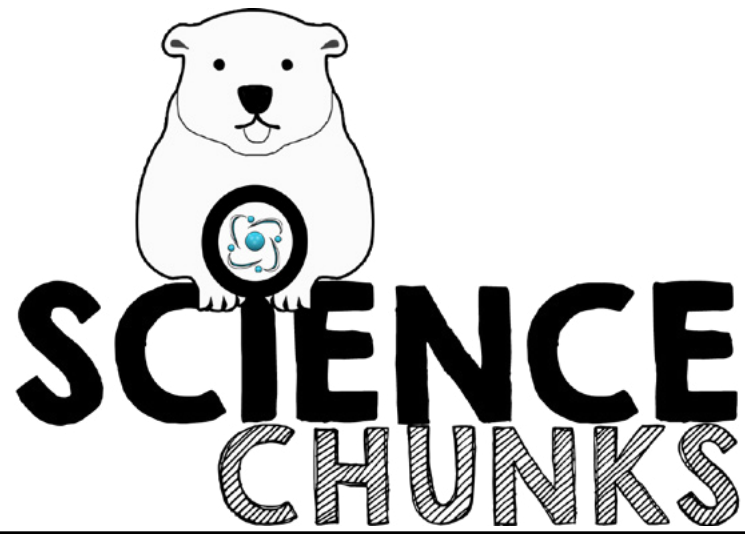
You will need the following materials to assemble the notebook:

- ✂ Hole punch and 3 brad fasteners or string OR
- ✂ Staples

Coordinating Activity Materials

You will need the following materials to complete the essential coordinating activities:

- ✂ **Lesson 1:** Paper, string, and clothes hanger
- ✂ **Lesson 2:** Photo sensitive paper
- ✂ **Lesson 3:** Paint, picture of Mercury, and styrofoam ball or paper-mâché materials (balloon, newspaper, 1 cup of flour, ½ cup of water, and 2 tbsp of salt)
- ✂ **Lesson 4:** Paint, picture of Venus, and styrofoam ball or paper-mâché materials (balloon, newspaper, 1 cup of flour, ½ cup of water, and 2 tbsp of salt)
- ✂ **Lesson 5:** Eight sandwich-style cookies
- ✂ **Lesson 6:** Paint, picture of Mars, and styrofoam ball or paper-mâché materials (balloon, newspaper, 1 cup of flour, ½ cup of water, and 2 tbsp of salt)
- ✂ **Lesson 7:** Paint, picture of Jupiter, and styrofoam ball or paper-mâché materials (balloon, newspaper, 1 cup of flour, ½ cup of water, and 2 tbsp of salt)
- ✂ **Lesson 8:** Paint, picture of Saturn, and styrofoam ball or paper-mâché materials (balloon, newspaper, 1 cup of flour, ½ cup of water, and 2 tbsp of salt)
- ✂ **Lesson 9:** Paint, picture of Uranus, and styrofoam ball or paper-mâché materials (balloon, newspaper, 1 cup of flour, ½ cup of water, and 2 tbsp of salt)
- ✂ **Lesson 10:** Paint, picture of Neptune, and styrofoam ball or paper-mâché materials (balloon, newspaper, 1 cup of flour, ½ cup of water, and 2 tbsp of salt)
- ✂ **Lesson 11:** Paper and pencil or pen
- ✂ **Lesson 12:** Three feet of curling ribbon, a tennis ball, foil, and a straight pin





Lessons







Lesson 1: Our Solar System

Information

Reading Assignments

-  **Younger Students** – *DK Children's Encyclopedia* p. 167 Milky Way, p. 233 Solar System
-  **Older Students** – *Kingfisher Science Encyclopedia* pp. 390-391 Galaxies, pp. 398-399 The Solar System


(Optional) 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

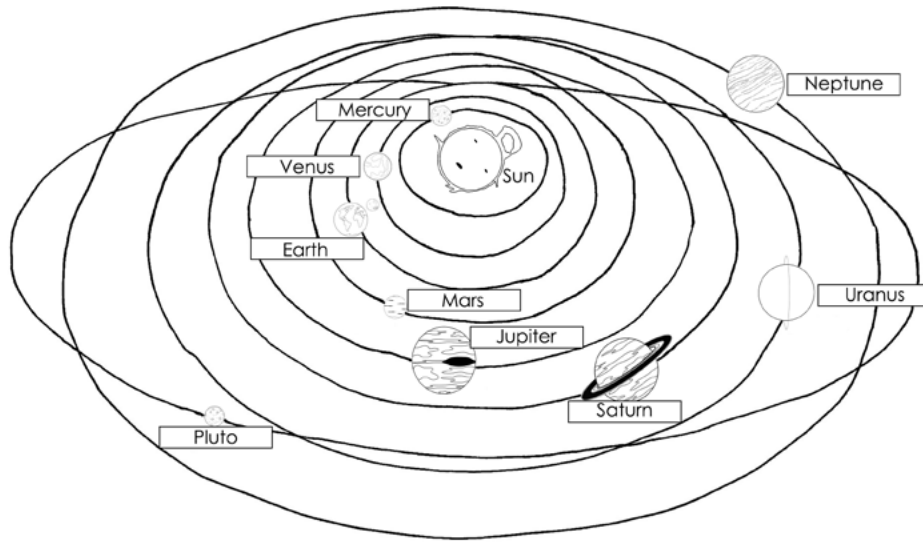
Vocabulary

Go over the following word with your students. Then, have them create a flashcard or copy the definition into the glossary.

-  **Solar system** – A group of planets and other objects all in orbit around the Sun.
(Flashcard p. 55 Glossary p. 77)

Writing Instructions

-  **Lapbook** – Have the students begin the Solar System lapbook by cutting out and coloring the cover on p. 38. Then, have the students glue the sheet onto the front.
-  **Lapbook** – Have the students cut out and color the “The Solar System” poem on p. 39. Once finished, have them glue the poem into the lapbook.
-  **Lapbook** – Have the students cut out the template for the Solar System sheet on p. 39. Have them color the pictures and label each of the planets in our solar system. (*See the next page for a completed version.*) Have the students also fill in “Milky Way” for the name of our galaxy. Then, glue the sheet into the lapbook.
-  **Notebook** – Have the students dictate, copy, or write one to four sentences on the Milky Way and our solar system on p. 63.



Hands-on Science

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. 81-82 for your project.
- ✂ **(Optional) 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.



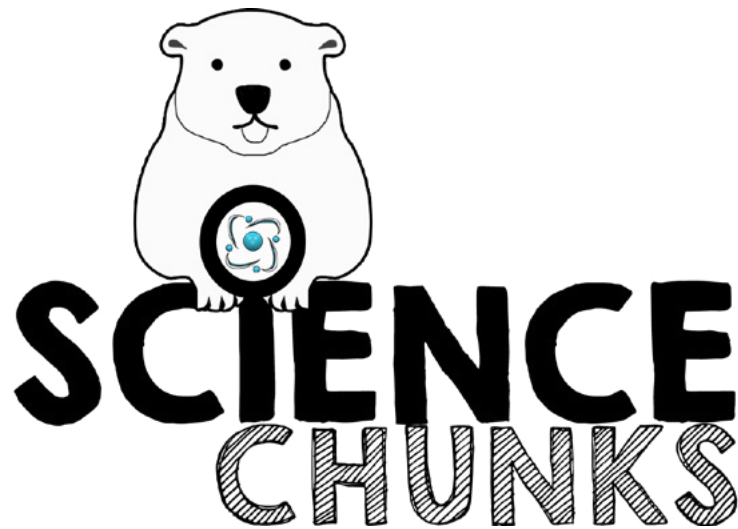
To-Do List

Essential

- Read the appropriate reading assignment.
- Define solar system.
- Complete the lapbook or notebook assignments.
- Do the “Solar System Mobile” activity.

Optional

- Get one or more of the library books to read.
- Fill out a lab report sheet (p. 80) for one of the activities.
- Do the “Milky Way Art” activity



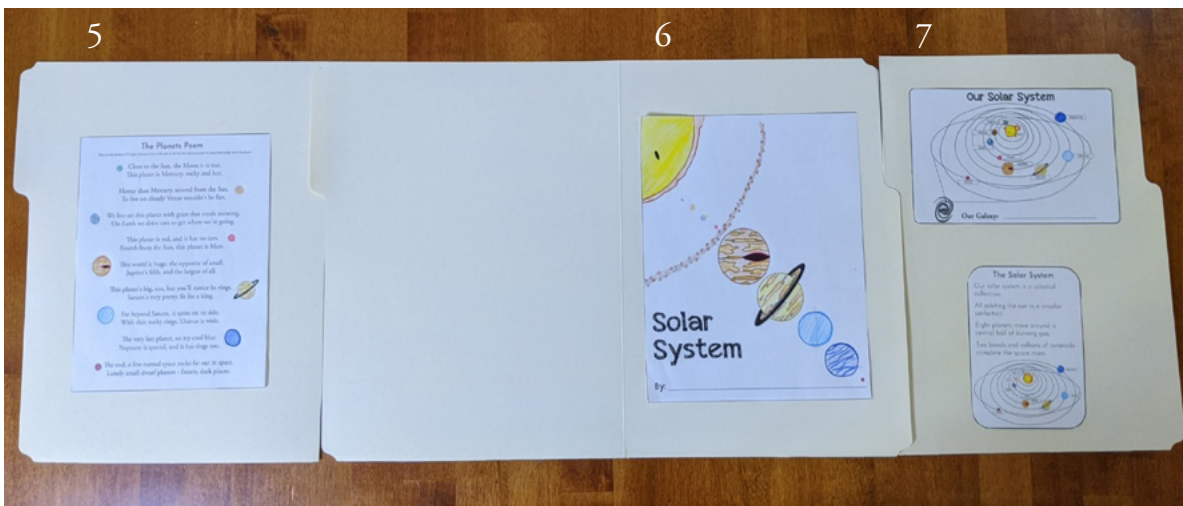
**Student
Lapbook Templates**

Solar System Lapbook

You will need four sheets of card stock or two file folders. If you are using card stock, begin by taping the sheets together on the longest edge. If you are using the file folders, cut one of the folders in half, and then tape one half of the left side of the remaining folder and one half on the right side of the remaining folder. The completed lapbook will look like this on the inside:

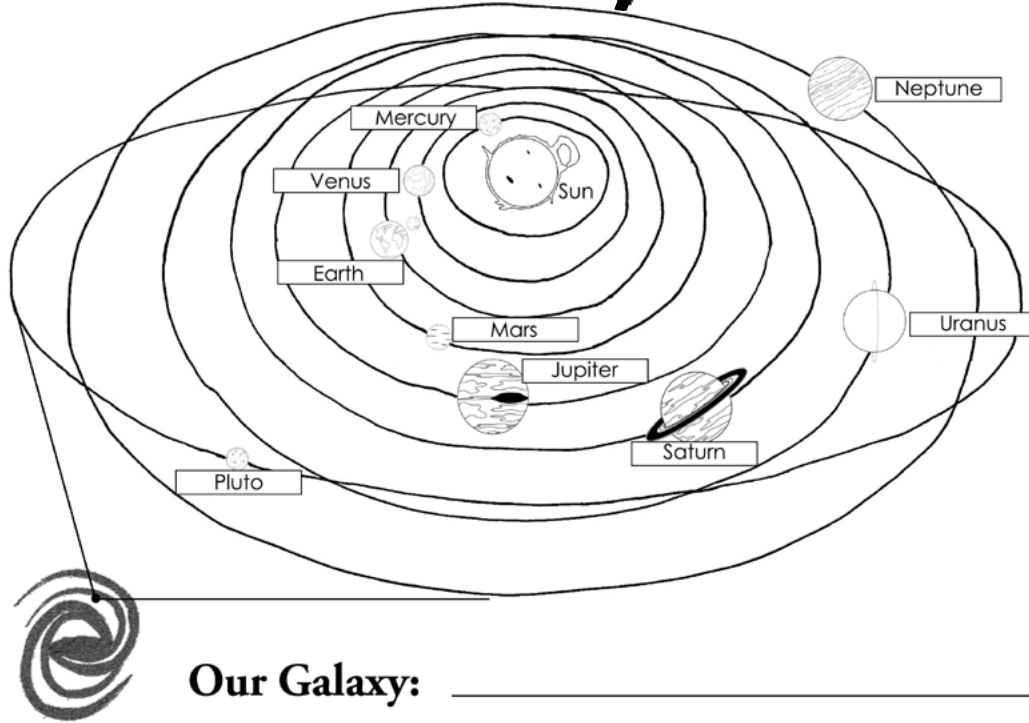


and the completed lapbook will look like this on the outside:



Solar System Sheet

Our Solar System



Instructions: Cut out along the solid lines.

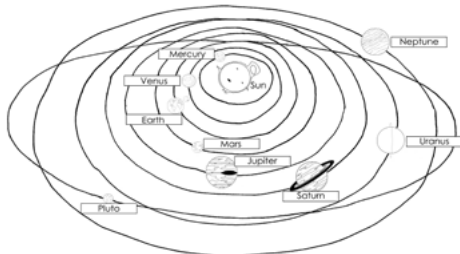
The Solar System

Our solar system is a celestial collection,

All orbiting the sun in a circular perfection.

Eight planets move around a central ball of burning gas,

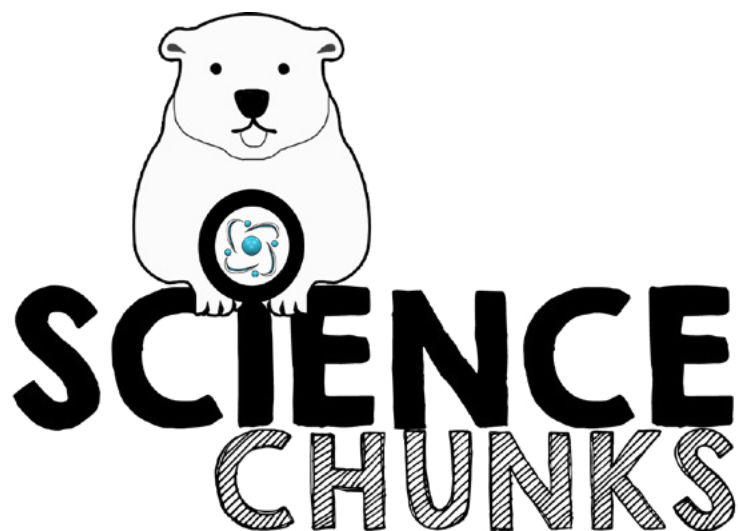
Two bands and millions of asteroids complete the space mass.



The Solar System Poem

Instructions: Cut out along the solid lines.





**Student
Notebook Pages**

