



Any Age

# Stars and Constellations

## Express Lapbook

Mini Lapbook, Study Guides, Weblinks, Activities, and Crafts



A Journey Through Learning  
[www.ajourneythroughlearning.com](http://www.ajourneythroughlearning.com)

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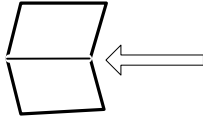
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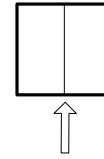
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## Things to Know

**Hamburger Fold**-Fold horizontally



**Hotdog Fold**-Fold vertically

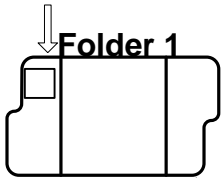


**Dotted Lines**-These are the cutting lines.

**Accordion Fold**-This fold is like making a paper fan. Fold on the first line so that title is on top. Turn over and fold on next line so that title is on top again. Turn over again and fold again on the next line so that title is on top. Continue until all folds are done.

**Cover Labels**-Most of the booklets that are folded look nicer with a label on top instead of just a blank space. They will be referred to as “cover label.”

**How do I know where to place each template in the folder?**

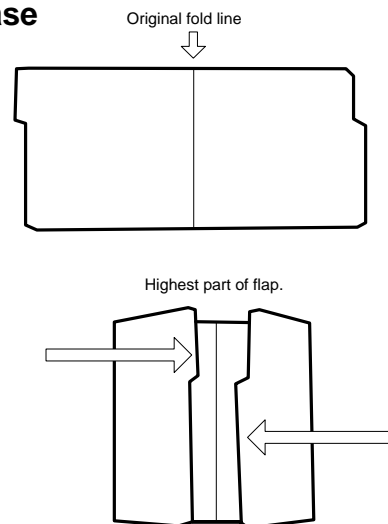


This placement key tells you the template goes in the first folder at the top of the left flap.

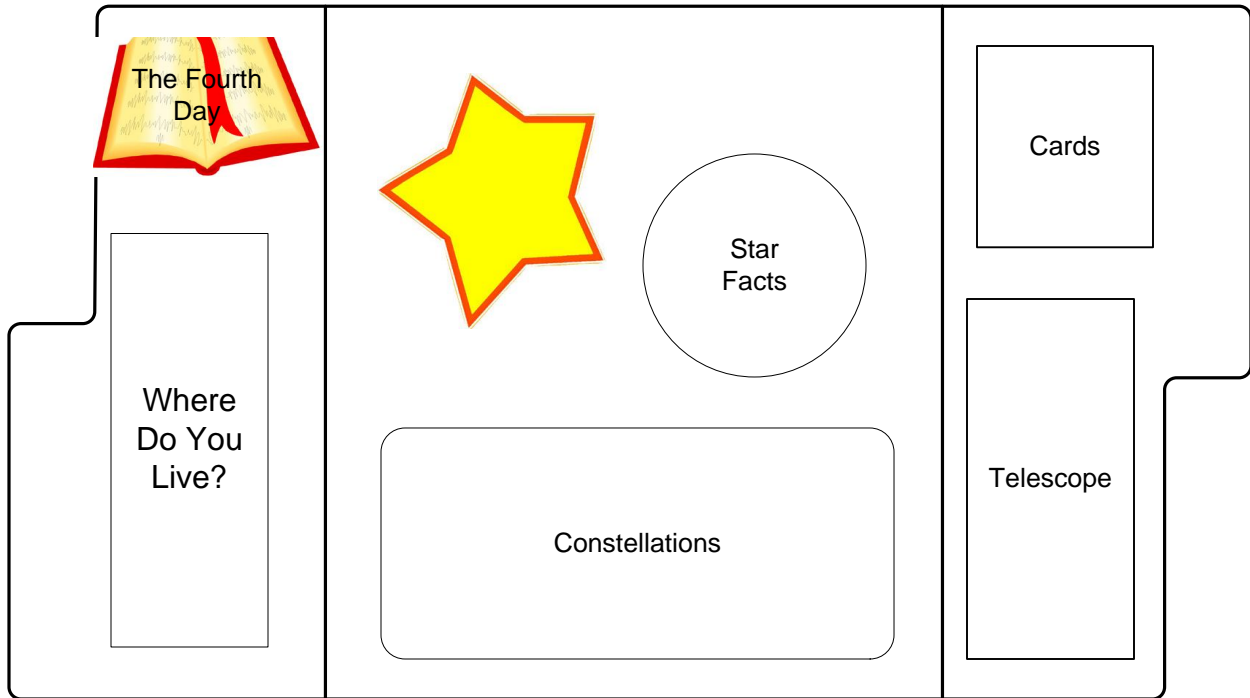
**Folding a Lapbook Base**

Gather the number of folders required for the project. Fold them flat as seen here.

For each folder, fold the left and right sides inward toward the original line to create two flaps. Crease so that the highest part of each flap is touching the original line. It is important not to let the two flaps overlap. *You may want to take a ruler and run it down each crease to make it sharper.*

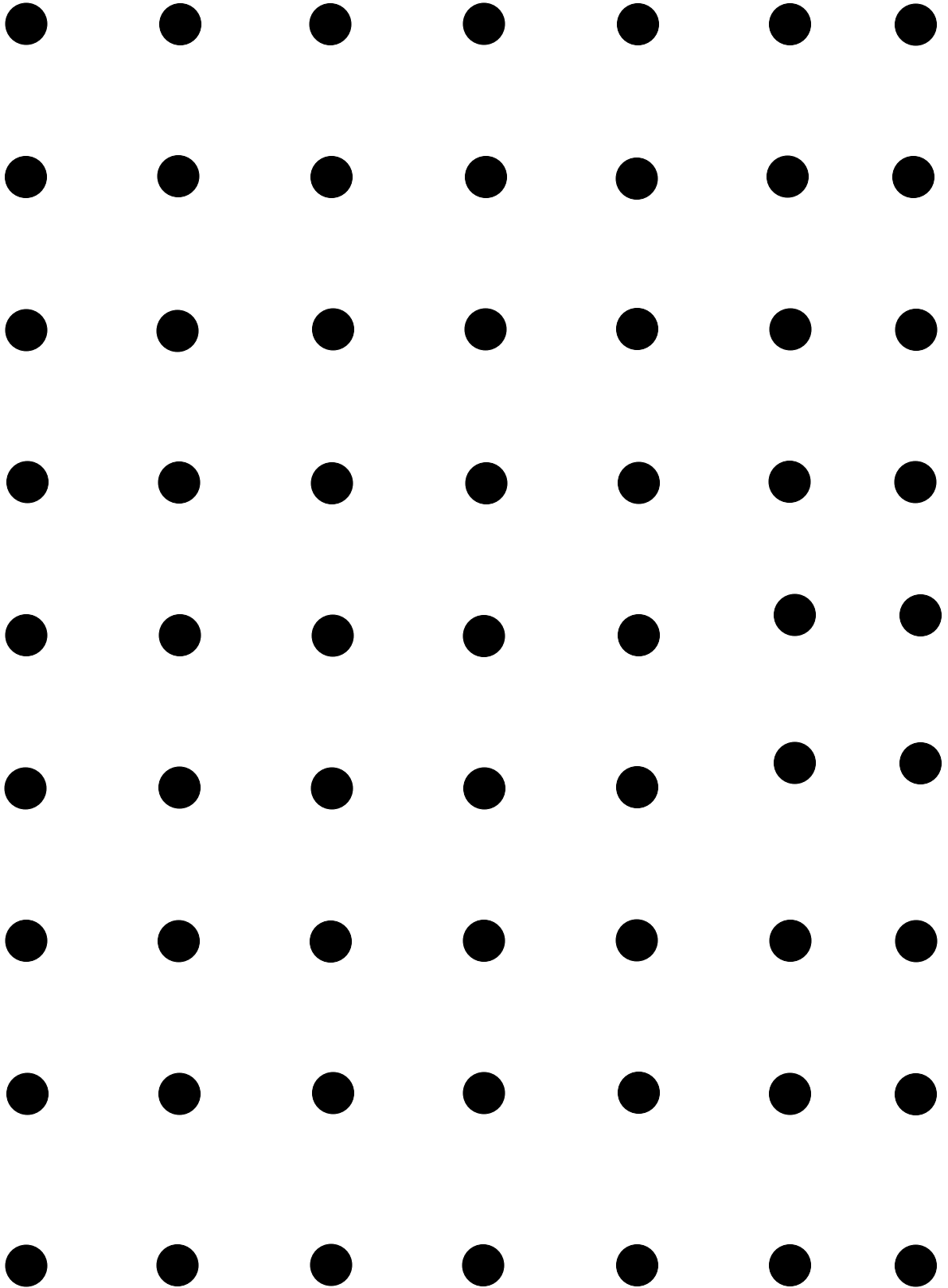


# Booklet Placement Guide



Cut out the page around the dotted lines. Glue to the back of your closed lapbook.  
Connect the dots to design constellations.

# Constellations



## **The Fourth Day**

### **Genesis 1:14-19**

14 Then God said, “Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years;

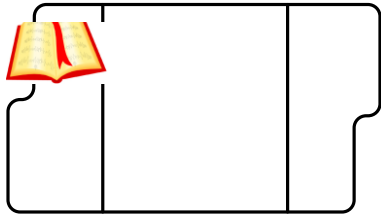
15 and let them be for lights in the firmament of the heavens to give light on the earth”; and it was so.

16 Then God made two great lights: the greater light to rule the day, and the lesser light to rule the night. He made the stars also.

17 God set them in the firmament of the heavens to give light on the earth,

18 and to rule over the day and over the night, and to divide the light from the darkness. And God saw that it was good.

19 So the evening and the morning were the fourth day.



Hamburger fold on the middle line. Cut around the shape of the Bible. Do not cut the fold. Now you have a Bible-shaped booklet. Glue into lapbook.

**Directions:** Write what God created on the fourth day.



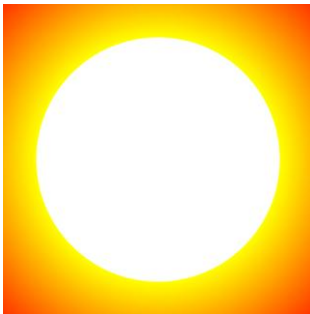
# Where Do You Live!

Did you know that you live on a planet that revolves around the sun?

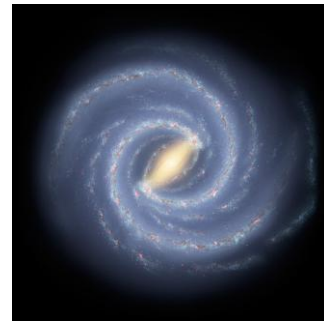


The Earth

And that the sun is just one of billions of stars in the Milky Way galaxy.



The Sun



The Milky Way

And the Milky Way galaxy is just one of billions of galaxies in the universe!

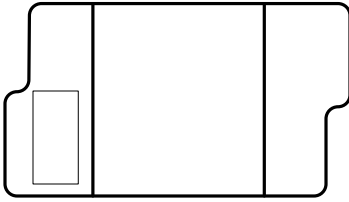


Galaxy



Universe





Cut out as one piece. Glue into lapbook.

**Directions:** Write the name of your planet, universe, and galaxy in the boxes.

# Where Do You Live?

Planet

Universe

Galaxy

## Stars

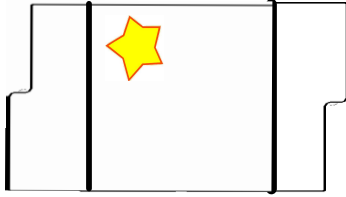
If you gaze up at the night sky, you are able to see about 2000 stars at a time! Most of these, you can see without the need of a telescope. You may even be able to see more if you are in an area without a lot of city lights and on a night with little moonlight.

Stars are made from gas and debris. A large cluster of stars is called a galaxy. Our sun and earth are a part of the Milky Way Galaxy. The reason that we can see stars more clearly at night than in the daytime is that the stars show up clearer against the darkness of the night sky. During the day, the sunlight makes the sky so bright that it out shines the light of the stars. If you live in the city, you may never see stars up in the sky. The many lights of street lamps and buildings make it difficult to see because the dirt in the air and the glare of the lights blocks out the stars. The only time that we can see stars during the day is during a total eclipse. An eclipse occurs when sunlight is temporarily blotted out.

When we stare up at the stars in the sky, it seems that they are twinkling. What is actually happening is that air is passing through the light. When the starlight points at you, you can see it. Then the light bends and you can no longer see it. This bending or refracting of the light is what makes it look like stars are twinkling. Space is full of stars in all different stages of development. All stars begin as concentrated masses of gaseous material. The younger a star is the brighter it shines. When a star begins to die out, it turns into a red star. This is known as the final stage of a star. In this stage, it may explode or simply fade away into the mysterious black hole of space.



Stars

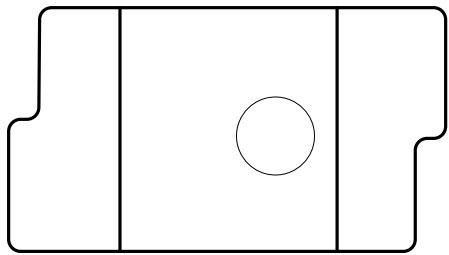


Read **The Stars**.

Fold in half along middle line. Cut around star shape but do not cut fold at the top. Glue into lapbook.

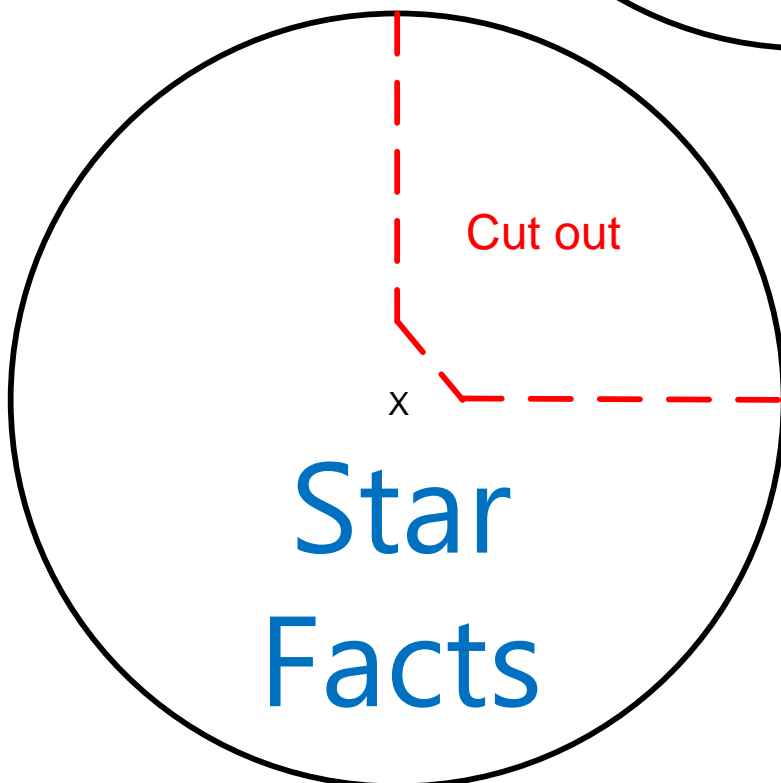
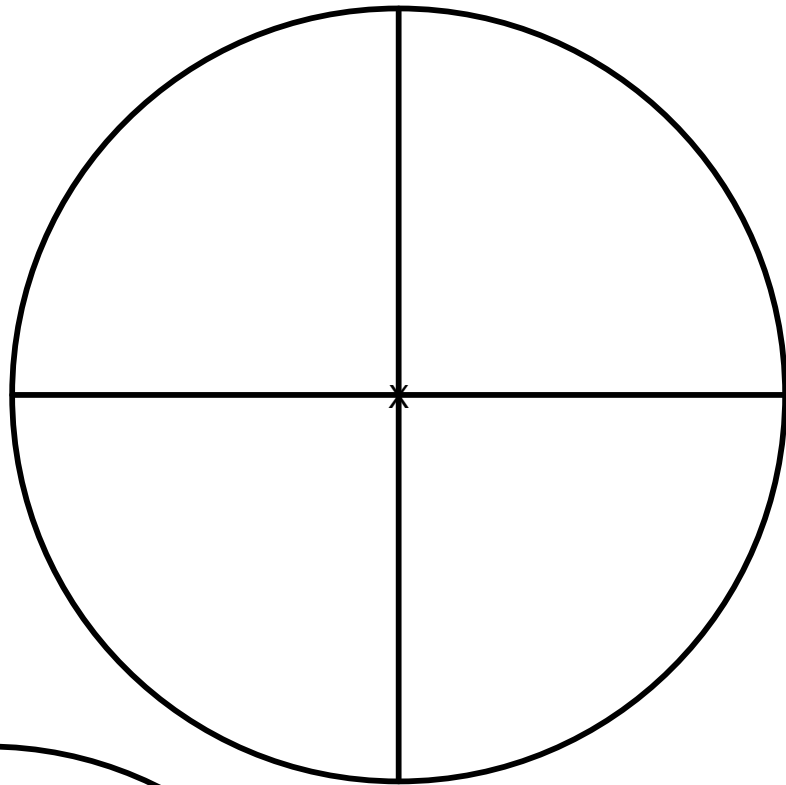
**Directions:** Inside, write how many stars we can see when we look up at the sky.





Cut out both circles. Cut out red wedge on title circle. Stack title circle on top of circle with wedges. Connect with a brass fastener in the middle so that "wheel" will turn. Glue into lapbook.

**Directions:** Write four facts about stars in the wedges.

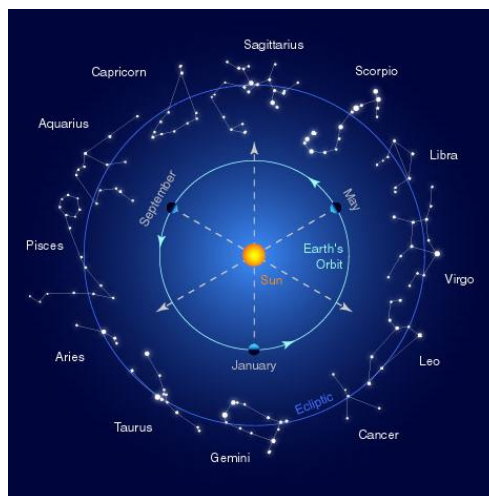


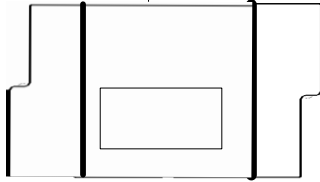
# Constellations

When you look at the night sky, you see thousands of stars. These stars are placed into groups known as constellations.

A constellation is a group of stars we can see in the night sky. The word constellation means “the part of the sky in which one group of stars is seen.” Scientists who study the skies are called Astronomers. They have divided the sky into 88 areas, or constellations. Each star is in one and only one constellation.

We often use Latin names for constellations. Latin was the language of the ancient Romans. It was during this era that the Romans were busy studying the night sky. To remember all the different stars, they created shapes and patterns out of the stars. Using these picture-shapes made it easier to find one group of stars among the thousands of stars in the sky. The groups of stars were named for gods, animals, and even characters from stories





Read **Constellation**.

Cut out large square. Glue into lapbook. Cut out four small booklets. Hamburger fold in half and fold the excess part up over the top like a matchbook. Glue onto square.

**Directions:** Answer the questions under the flaps.

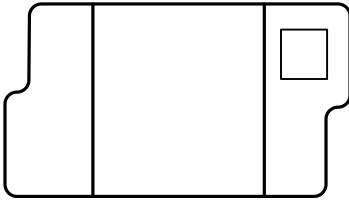
# Constellations

What is a constellation?

What does the word mean?

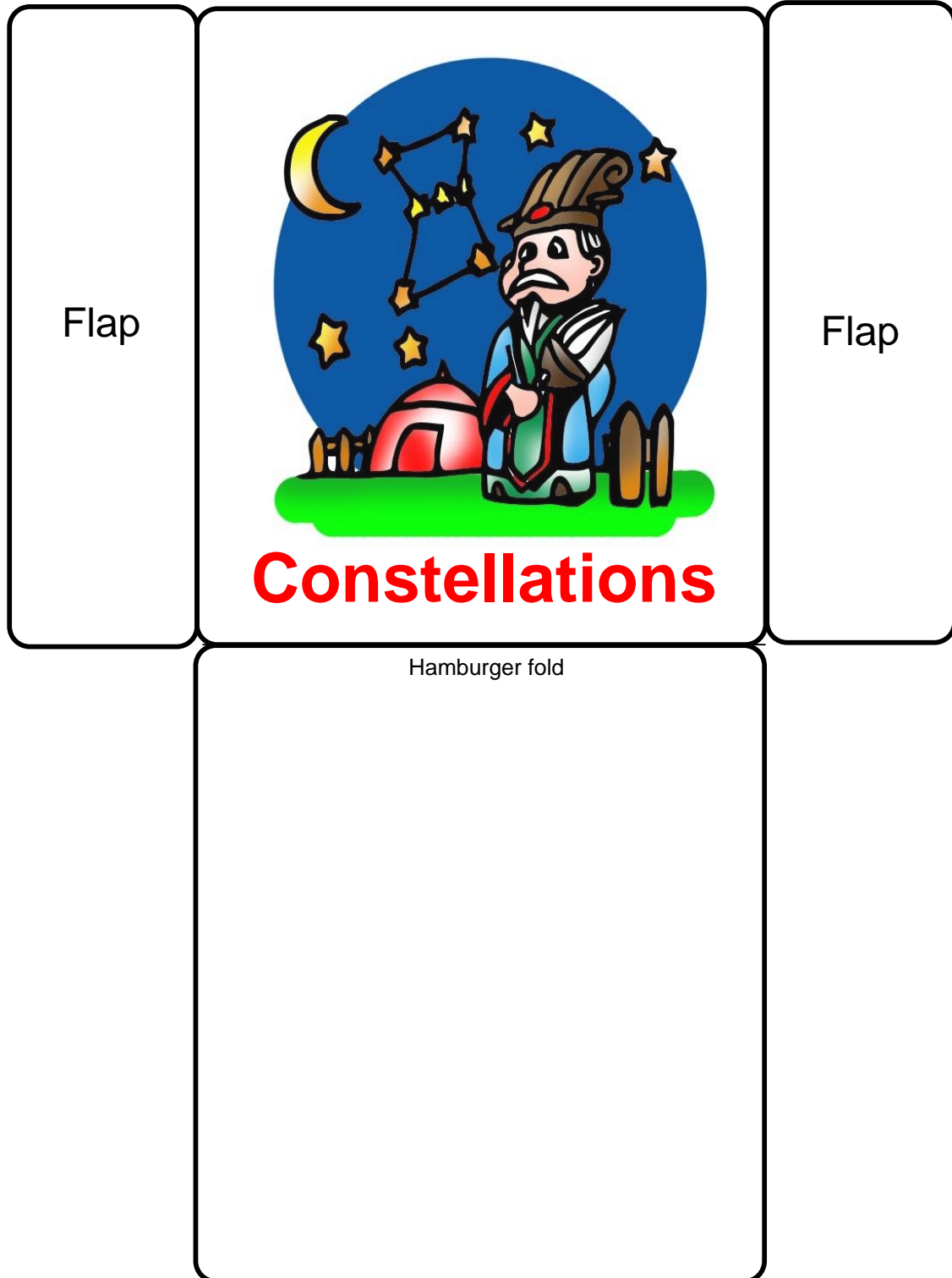
What do you call the people who study the skies?

How do we remember where all the stars are located?



Cut out booklet as one piece. Fold the back bottom section up in back. Then fold the flaps back and glue to make a pocket. Cut out the cards on the next page.

**Directions:** On the next page you will find cards with a picture of a constellation on each. Study and talk about them. Store the constellation cards in the pocket when done.

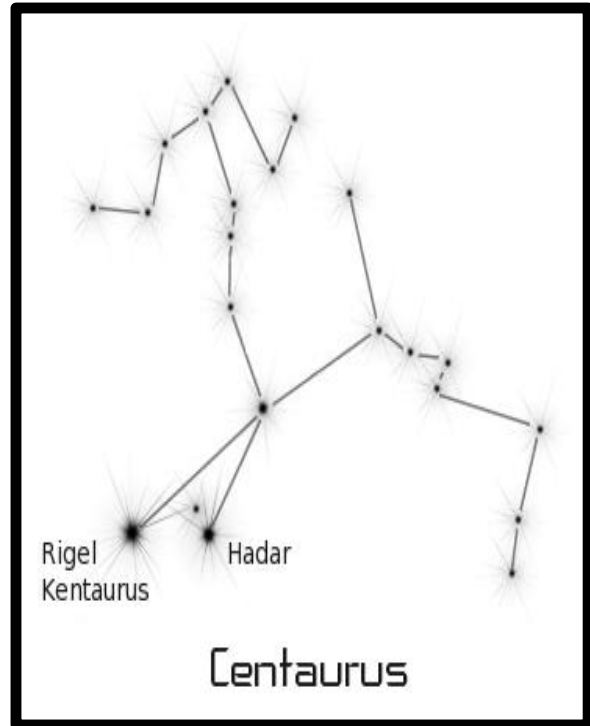
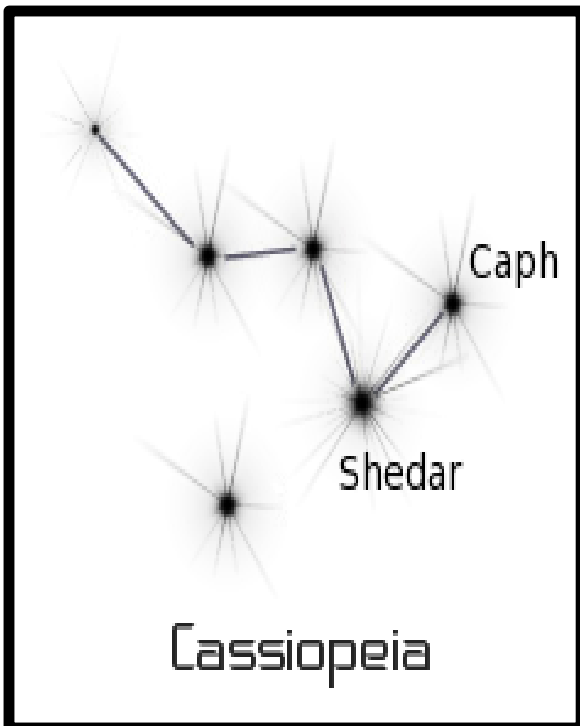
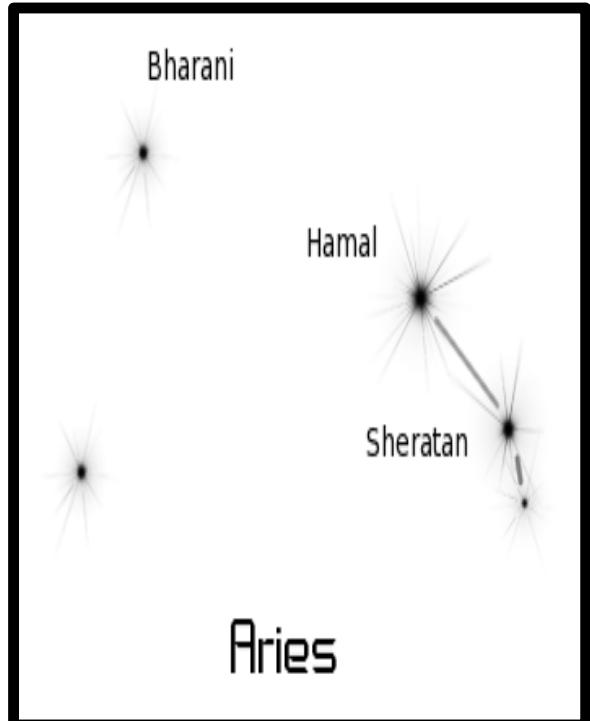
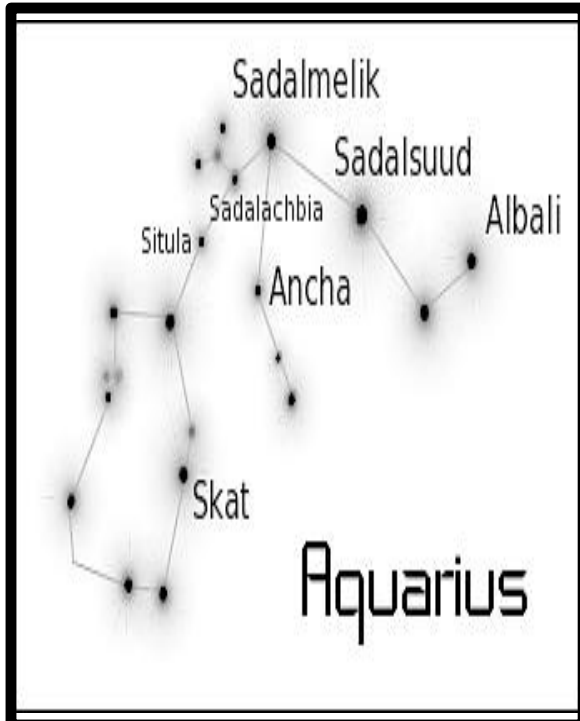


Flap

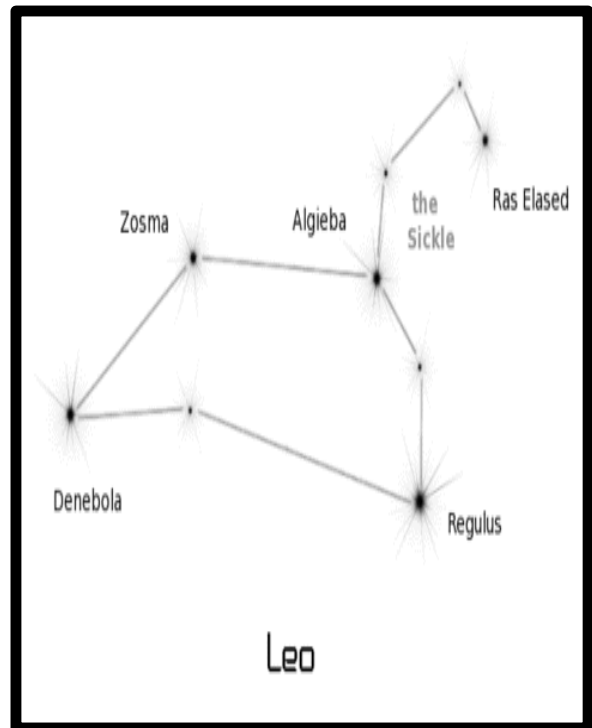
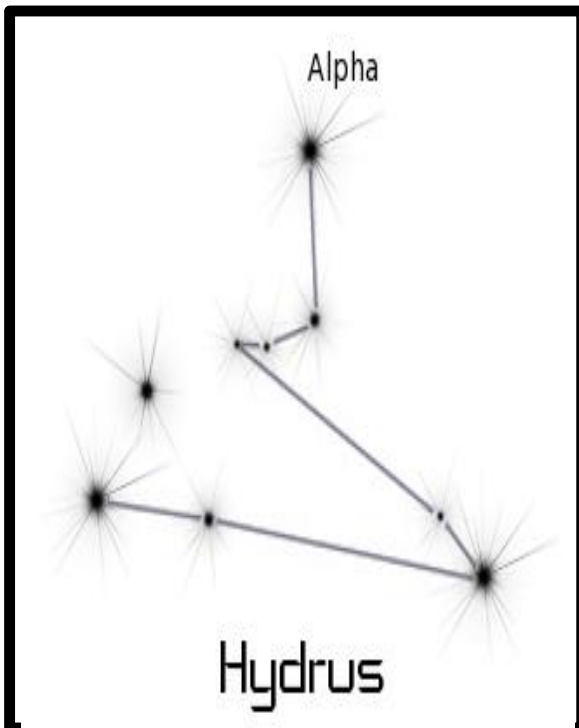
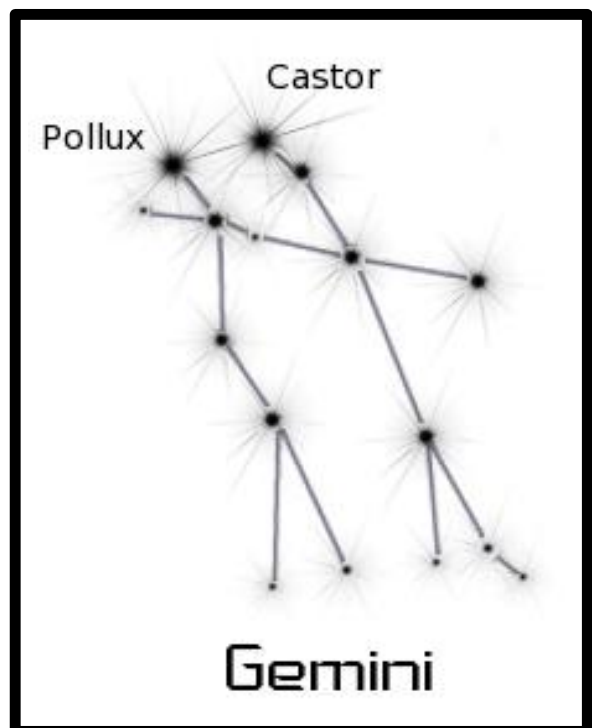
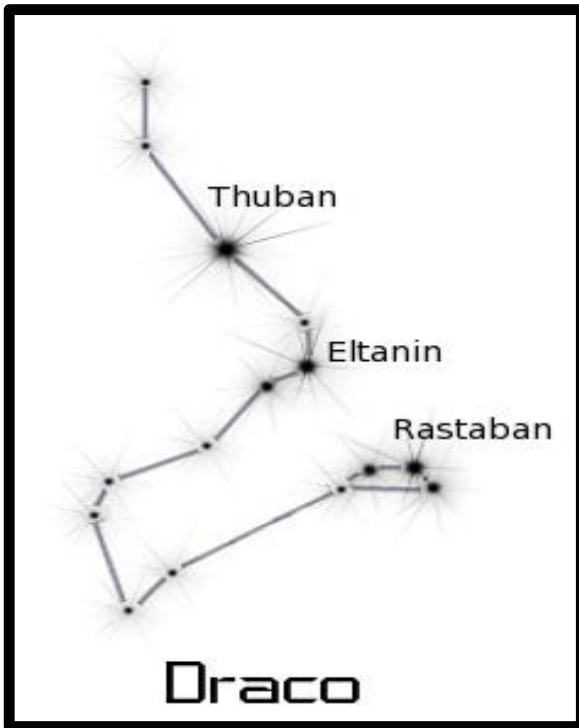
Flap

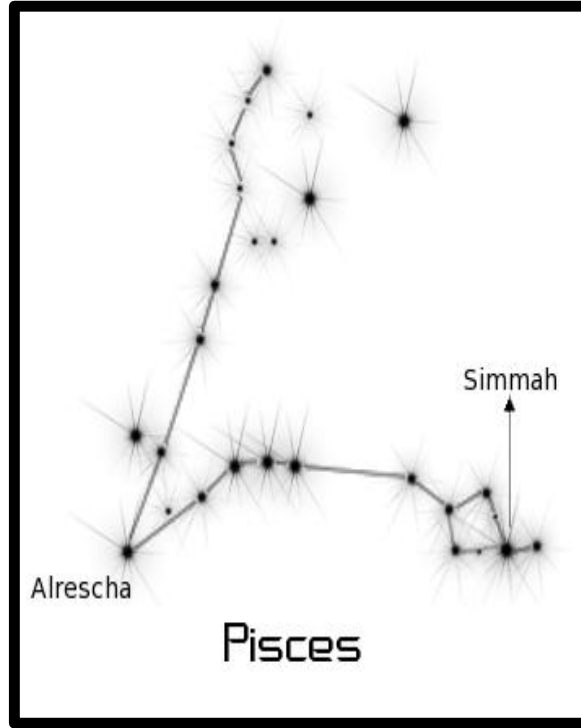
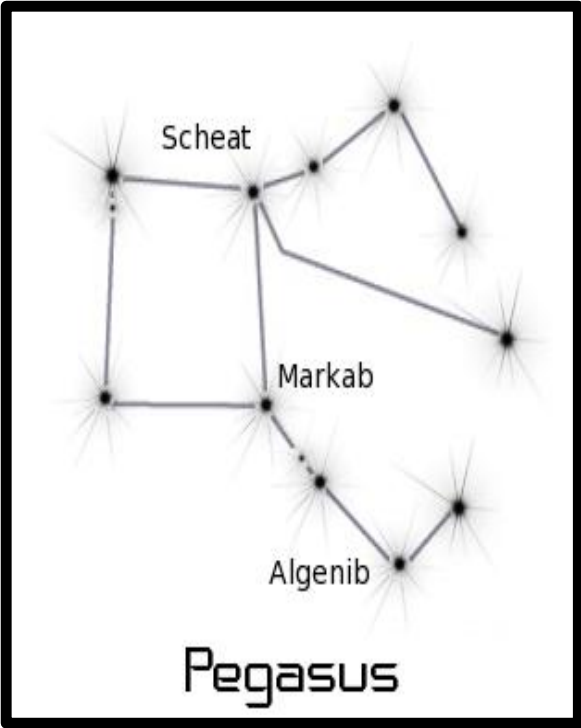
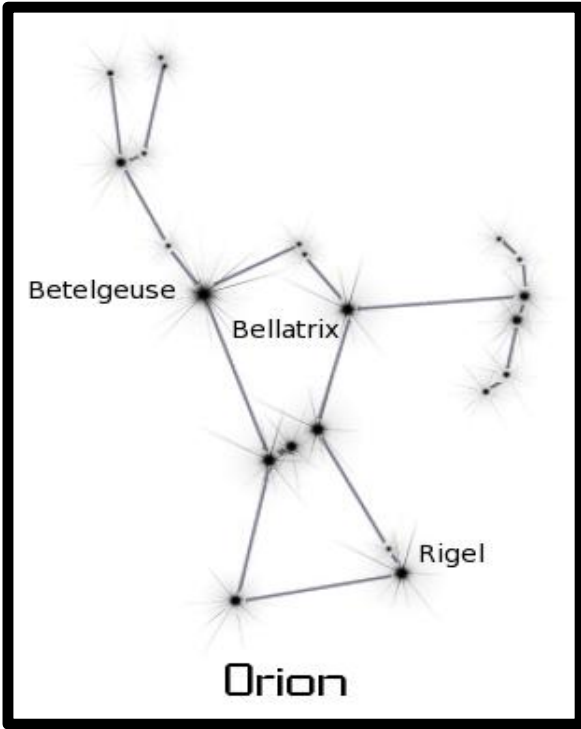
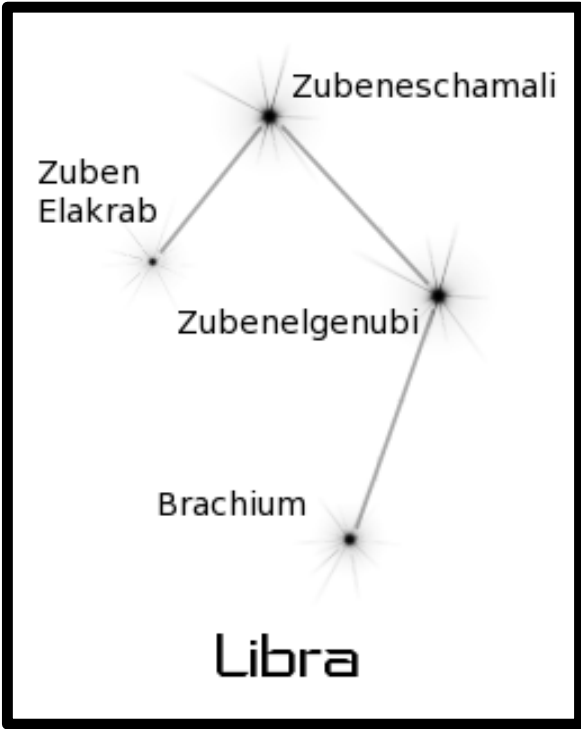
# Constellations

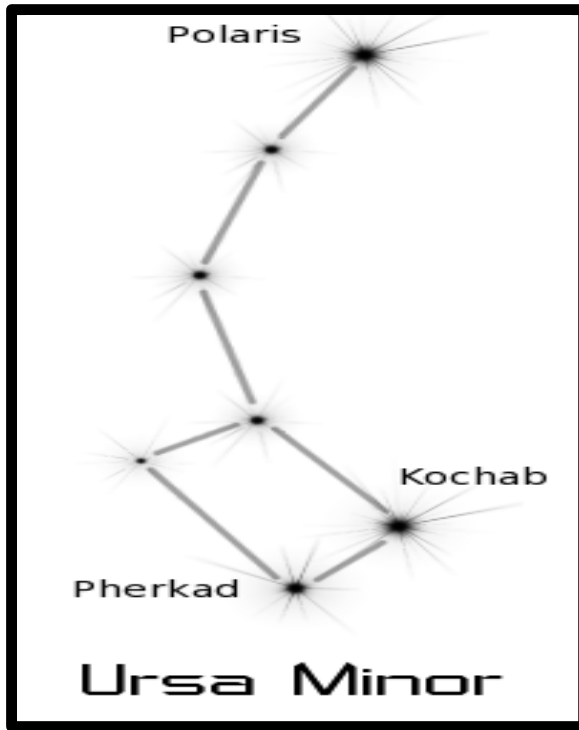
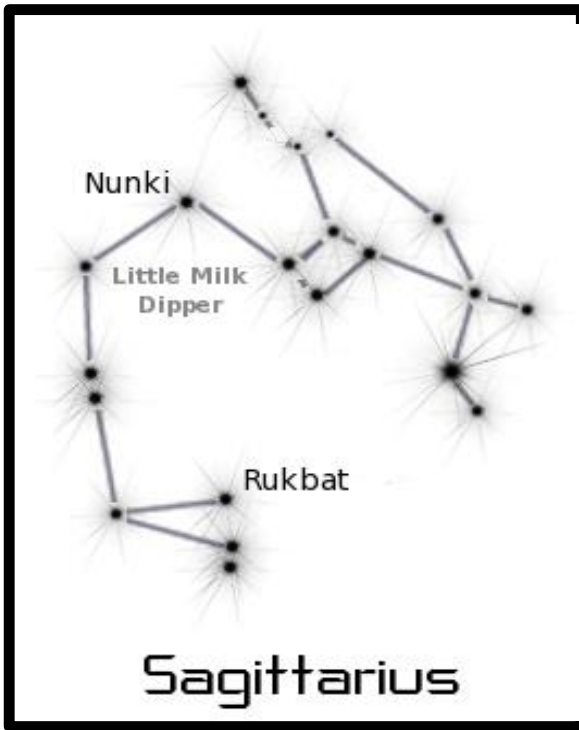
Hamburger fold











# Telescopes

The invention of the telescope enabled us to see objects that would be too far away to be seen with our eyes. In other words, it allowed us a closer view of objects that are far away. The first telescope was invented by a Dutch scientist named Hans Lippershey in 1608. It was made of two glass lenses in a slender tube. Later that same year, Galileo, an Italian astronomer, built a telescope like Lippershey's. However, Galileo went a step farther and used his telescope to observe the sky. With Galileo and his new invention, he discovered that there were moons going around the planet Jupiter.

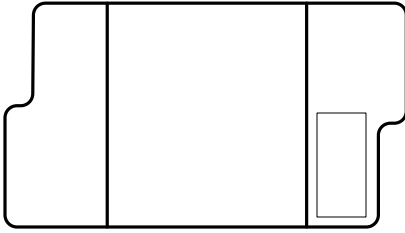
In 1668, Isaac Newton built a telescope that used a mirror. As technology grew, so did research in the field of astronomy. In the 1930s, Grote Reber built the first radio telescope that was operated by a distance remote from his backyard. With this new invention, scientists could now study space using radio waves coming from the sun.

Today, astronauts and scientists use huge telescopes to study the planets, stars, and other things from outer space. Without telescopes, we would not be able to see and study objects out of our sight of vision. Telescopes can be found in numerous sizes and shapes. Some telescopes are small enough to carry in your hand, while others can be as large as three football fields.

The Hubble Space Telescope was launched in 1990 to explore the skies while it circles the earth in space. It is controlled by scientists here on earth using radio signals. The signals point the telescope at objects the scientists want to study. The Hubble takes pictures of objects out in space and sends them down to earth to be reviewed and studied.



First telescope



Cut out as one piece. Hotdog fold in half. Cut on dotted lines to make flaps. Glue into lapbook.

**Directions:** Answer the questions under each flap.

GLUE	Who invented the first telescope?
	What are telescopes used for?
	What is the name of the telescope that circles Earth?
	Why do we need telescopes?

# Activities

You can make as many copies of these pages as you need.

## **My Own Constellation**

On a piece of white paper and a piece of black construction paper, use a pencil and plot out your own original constellation on the white paper. Once the constellation has been created, place the white paper on top of the black paper. Using a one hole punch, make a hole in both sheets of paper wherever you have made a pencil mark on the white paper.

## **Constellation umbrella**

Open a large black umbrella. Looking at the underside, let the center of the umbrella represent the North Star. Using glow-in-the-dark stars form the various constellations on the panels of the umbrella.

Great Video on constellations!

<http://www.youtube.com/watch?v=WNDw1qD4jNM>

## Fun Facts

1. Every visible star in the sky is part of a constellation.
2. A pattern in the sky that is widely recognized but not an official constellation is called an asterism. Ex. The Big Dipper or the Plough.
3. Many of the stars that make up constellations are extremely far apart but only appear to be close together.
4. There are 88 named constellations.
5. The Plough is part of the Ursa Major.
6. The Constellation Sextans the Sextant is a Modern Creation.
7. The Pole Star is in Ursa Minor.



## Crafts

### **My Star Journey**

Stack 4 pieces of paper together. Fold in half. Staple down the side. Keep a journal of the stars that you see.

Use a shoe box to create a diorama of a starry night.

### **Driveway Sky**

Use glow in the dark chalk to draw out the constellations on your driveway. Go out at night and “walk” among the stars!

Visit a planetarium!

### **Glowing Star Bubbles**

Cut open glue sticks and pour the contents into a bottle of bubbles. Now you have glowing bubbles to blow at night. Pretend they are stars!

### **Marshmallow Constellations**

Use marshmallows and toothpicks to design constellations.

## **Books To Read**

*Find the Constellations*

By: H. A. Rey

*Zoo in the Sky:*

*A Book of Animal Constellations*

By: Jacqueline Mitton

*Constellations of the Night Sky*

By: Bruce LaFontaine

*The Everything Kids' Astronomy Book:*

Blast into outer space with stellar facts, intergalactic trivia,  
and out-of-this-world puzzles

By: Kathi Wagner

## Products by A Journey Through Learning

### History, Geography, and Social Studies Lapbooks

#### Geography Matters

- ~Paths of Exploration- Volume 1
- ~Paths of Exploration- Volume 2
- ~Paths of Settlement-Volume 1
- ~Paths of Settlement-Volume 2
- ~Trail Guide to U.S. Geography
- ~Trail Guide to World Geography
- ~Trail Guide to Bible Geography
- ~Cantering the Country
- ~Galloping the Globe

An Overview of the 17<sup>th</sup> Century

An Overview of the 18<sup>th</sup> Century

An Overview of the 19<sup>th</sup> Century

An Overview of the 20<sup>th</sup> Century

The Civil War

If You...series-

- ~Life During the Civil War
- ~In the Days of Knights and Castles
- ~Westward Ho
- ~Sailing on the Mayflower
- ~Welcome to Ellis Island
- ~Hey, Paul Revere (American Revolution)
- ~Martin Luther King

Government and the Election Process

America's Greatest Documents and Speeches

Louisiana State Study

Texas State Study

Wright on Time books by Lisa Cottrell-Bentley

- ~Arizona
- ~Utah

American Indians

America's Presidents

I Wanna Be President

Presidential Pockets

Who's that President

Laura's Little House in the Big Woods

Wars of America (1600-1899)

Wars of America (1900-now)

My Favorite Country

America's Historical Landmarks

Circle C Adventure series by Susan K. Marlow

- ~Andrea Carter and the Long Ride Home
- ~Andrea Carter and the Dangerous Decision
- ~Andrea Carter and the Family Secret
- ~Andrea Carter and the San Francisco Smugglers
- ~Andrea Carter and the Trouble with Treasure
- ~Andrea Carter and the Price of Truth

### The Prairie Primer Binder Builder Lapbook

### TruthQuest History Binder Builder, Maps, Notebooking

### Holy Cow Science Lapbooks

### Maestro Classics Lapbooks

**We also have unit studies, copywork books, and notebooking pages.**

### Apologia/Jeannie Fulbright Lapbooks

- ~Flying Creatures of the Fifth Day
- ~Swimming Creatures of the Fifth Day
- ~Land Creatures of the Sixth Day
- ~Exploring Creation with Astronomy
- ~Exploring Creation with Botany

### Science Lapbooks

- Astronomy and Space
- Amphibians
- Reptiles
- Dinosaurs
- The Desert
- Inside my Body
- The Great Inventors
- Women Inventors
- Ocean Animals
- My Favorite Insect
- My Favorite Animal

### Bible Lapbooks

- The Arrival of a King
- The Death and Resurrection of a King
- The Parables of a King
- The New Testament

### Holidays and Seasons Lapbooks

- Fourth of July
- Easter
- Spring
- Autumn
- Harvest Time
- Wonderful Winter
- Thanksgiving
- The First Thanksgiving
- Christmas
- A Polar Christmas (Polar Express)
- Mother's Memories
- Johnny Appleseed
- A Snowy Day

### Preschool Lapbooks

- Letter, Numbers and Shapes
- Learning Basic Skills with Fruit
- Me and my Body
- All About Me
- ABC Pocket Games

### Math Lapbooks

- Addition Pocket Games
- Subtraction Pocket Games
- Multiplication Pocket Games
- Division Pocket Games