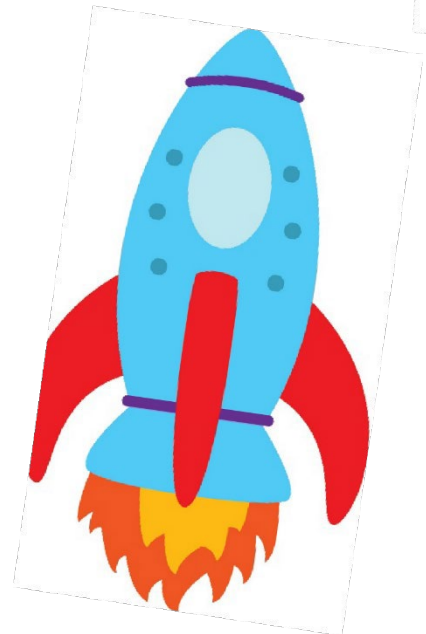
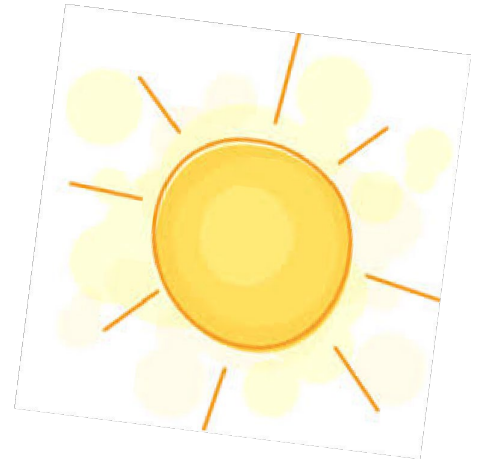
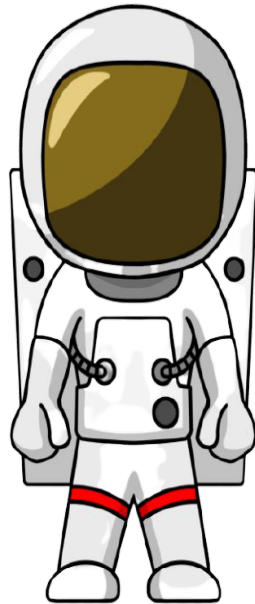


LaPorte County

Mini 4-H



Sun, Stars & Space



Adapted from: Purdue Extension Hendricks County 4-H

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Mini 4-H Parent's Page

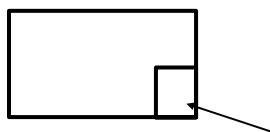
We welcome you and your child to the LaPorte County Mini 4-H program. Mini 4-H is for youth who are in kindergarten, first or second grade during the 4-H year (October 1-September 30). This program is designed to encourage positive development, give youth the opportunity to explore interests, practice small and large muscle control, and introduce you to the LaPorte County 4-H program.

As a Mini 4-H parent or guardian, please support your child through the activities in this handbook. Encourage and praise your child as they have fun learning and sharing with you. Please avoid completing activities for them. Learning by doing is the best educational tool that we can provide for youth.

Mini 4-H exhibition, held annually at the LaPorte County Fair, is an exciting time for all 4-H members, families and friends. It is a week that allows youth to showcase their talents, interests and enthusiasm for learning.

Where Do I Begin?

1. Mini 4-H is open to any youth who is enrolled in either kindergarten, first or second grade on January 1st of the current year.
2. Enroll your Mini 4-H youth on v24honline.com and pay the annual \$5 program fee to be an active Mini 4-H member. Once registered, you will receive a bimonthly email bulletin keeping you informed of Mini 4-H and 4-H opportunities. Any questions can be answered by LaPorte County Purdue Extension at 219-324-9407.
3. Mini 4-H participants complete activities and projects found in this guide. Activities and projects are completed at home.
4. One (1) project from this handbook can be exhibited at the Mini 4-H exhibition. Please complete the Mini 4-H Exhibit tag and attach it to your project, as well as a record sheet (both are included in this manual). Watch your email for dates of exhibit check-in.
5. Some projects require a poster to exhibit. Following are **POSTER EXHIBIT guidelines**:
 - A. Stiff backing 14" high by 22" wide. (This can be cardboard or foam core board.)
 - B. Position poster board **HORIZONTALLY**.



Mini 4-H Exhibit Tag

What Do the H's in 4-H Mean?

Head, Heart, Hands, and Health

4-H Symbol: A four-leaf clover with an "H" on each leaf

4-H Colors: Green and White

4-H Motto: "To make the best, better!"



4-H PLEDGE

I pledge my **HEAD** to clearer thinking,

I promise to use my head to make good choices.

my **HEART** to greater loyalty,

I promise to use my heart to be a good friend.

My **HANDS** to larger service,

I promise to use my hands to do helpful things for others.

And my **HEALTH** to better living,

I promise to take care of my body and to show others to live in a healthy way.

For my club, my community,

I promise to help my group, my community,

My country, and my world.

Mini 4-H Sun, Stars, & Space Exhibition

Have you ever thought about traveling into space? Not many people get the chance to leave the planet Earth, but some do. In this project, you will learn about the sun, moon and planets. You will learn to read and follow directions, choose an activity, be neat, and be creative.

Kindergarten and 1st Grade Project Options:

Poster: Sun Clock, Poster: Night Skies, or Poster: Outer Space Art

Completed Record Sheet

2nd Grade Project Options:

Notebook: Shadow Science, Poster: If I Were An Astronaut..., or Planet Mobile

Completed Record Sheet

Emails and the biweekly 4-H bulletin will note the date and time for Mini 4-H exhibit check in.

You may exhibit 1 project from this handbook. Remember to include the completed Record Sheet and Mini 4-H Exhibit Tag with your exhibit.

Your questions can be answered by calling Purdue Extension at 219-324-9407.

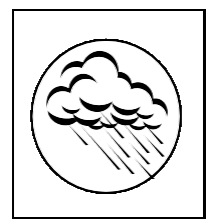
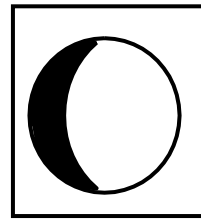
MINI 4-H EXHIBIT		
Project: (Circle One)		
Arts & Crafts	Bicycle Safety	Bugs
Collections	Cookie Decorating	
Farm Animals	Foods	Gardening
Little Peeps	Models	Nature/Plants/Trees
Pets	Recycling	Sewing
Sun, Stars & Space	Wearable Art	
NAME: _____		GRADE: _____

Kindergarten & First Grade

Poster: Sun Clock

Needed Materials:

- Pencil
- White Paper
- Large Bowl
- Sunny Day
- Poster Board (see page 3)
- Glue



Directions:

Trace a circle on the paper using the bowl as a pattern.

Lay the paper on the ground in a sunny spot. Poke the pencil through the middle of the paper, so it is standing straight up.

Mark on the edge of the circle where the sun is making a shadow. Do this every hour or two. Write down the hour next to that spot (ex. 2:00 P.M.).

If the circle is left in the same spot, you will be able to tell what time it is each day by checking the shadow on the circle.

Clean up your work area.

Mount the paper on poster board.

If this is your exhibit for the county fair, attach the County Tag.

Poster: Night Skies

Needed Materials:

- ***Night Sky Worksheet***, in manual
- White Chalk
- Poster Board (see page 3)
- Glue
- Aerosol Hairspray

Directions:

You will be observing the night sky to see how the Earth and moon move over time.

Pick a time when it is dark outside (8:00 or later if it is Summer). Always check the night sky at the same time of day.

If you can see the moon, color the portion of the moon (circle) that is visible, using the white chalk.

Once you have finished your chart using chalk, have an adult help you spray the page with aerosol hairspray. This will keep the chalk from smearing.

Write the date under each picture.

If you cannot see the moon, draw what you are able to see. It might be clouds, or rain.

Mount worksheet on poster board.

If you have enough space on your poster, write down what you observed in the night sky during the month.

If this is your exhibit for the county fair, attach the County Tag.

Poster: Outer Space Art

Needed Materials:

- Black Construction Paper
- Bright Colored Chalk (no dark colors)
- Water
- Poster Board (see page 3)
- Glue

Directions:

Research the sun, moon, stars and universe.

Draw pictures of things found in space by dipping the chalk in water, then drawing on your paper.

Clean up your work area.

Mount on poster board.

If this is your exhibit for the county fair, attach the County Tag.

Second Grade

Notebook: Shadow Science

Needed Materials:

- Pencil
- White Paper
- Mini-Child, in manual
- Large Bowl
- Sunny Day
- Notebook that will hold an 8 1/2" X 11" paper
- ***My Shadow Observations Sheet***, in manual
- Tape

Directions:

In a notebook, tape ***My Shadow Observation Sheet*** to one of the pages. Write down your thoughts on what makes your shadow dance around and change its shape. Your guess is called a **hypothesis**.

Cut out mini-child, in manual, and tape it so it is standing along the top of the pencil.

Trace a circle, using the bowl, on the white paper and cut it out.

Place the paper on the ground, and push the pencil through the middle of it.

Trace the shadow of your person on the paper.

Each hour or two, continue tracing the shadow of your person.

Make your last shadow tracing when the sun starts to set.

Record the following on the ***My Shadow Observation*** Sheet:

What difference do you see in the shadow as the day goes on?

What time of day did you trace the shadow?

How big is the shadow?

Is the shadow tall and skinny or short and squashed?

Where is the sun, close to the ground or high in the sky?

Notebook: Shadow Science (continued)

How did the shadows change?

Did the shadows change the way you thought they would?

Why do you think your shadow almost disappears when the sun is straight over the pencil in the middle of the day?

When your drawings are finished, tape them to the pages in your notebook.

Put a title on the outside of your notebook

Clean up your work area.

If this is your exhibit for the county fair, attach the County Tag.

Mini-child used for Shadow Science:



If I Were An Astronaut ...

Needed Materials:

- *If I were an astronaut...*, in manual
- Pencil
- Poster Board (see page 3)
- Colored Pencils or Crayons
- Glue

Directions:

Research the sun, moon, stars and our galaxy.

Use your imagination and write a story about what you would do or find if you were an astronaut using *If I were an astronaut...*, in manual

Mount story on a poster board.

Draw a picture or pictures to go with your story and mount it to the poster board.

If this is your exhibit for the county fair, attach the County Tag.

Planet Mobile

Needed Materials:

- Cardboard
- Scissors
- Pencil
- Circle Objects to Trace (bowls, mugs, cups, plates etc.)
- Hole Punch
- Yarn, String or Fishing Line
- Tempera Paint and Paint Brush
- 9" (or greater) Heavy Paper Plate, Frisbee or similar item

Directions:

Look at pictures of planets to learn more about each planet and its order in our solar system.

Find a cardboard box or scraps that can be used for the planets. Trace around circular items to create the circles for the planets. Large planets should have larger circles.

Make a large circle for the sun!

Cut out the circles. Ask an adult to help.

Cover table with newspaper and paint the circles so they look like each planet. Let them dry. Paint the other side if you wish. Let dry.

Punch a hole in the center of your plate. If you used a Frisbee or something hard, let an adult make holes with a nail.

Punch holes in the top of each planet and tie a string to each one. Knot the string to stay attached.

Tie a longer string to the sun. Pull the string up through the bottom of the plate. Make a knot on the bottom side of the plate to help keep the string in place. The long string on the top side of the plate can be looped and knotted so you can hand your mobile.

Attach the planets around the sun by punching holes around the outer edge of the plate. You may need to pull the strings to different lengths to balance the planets. Experiment! Tie knots to secure.

Planet Mobile (continued)

Tie a longer string to the sun. Pull the string up through the bottom of the plate. Make a knot on the bottom side of the plate to help keep the string in place. The long string on the top side of the plate can be looped and knotted so you can hang your mobile.

Attach the planets around the sun by punching holes around the outer edge of the plate. You may need to pull the strings to different lengths to balance the planets. Experiment!

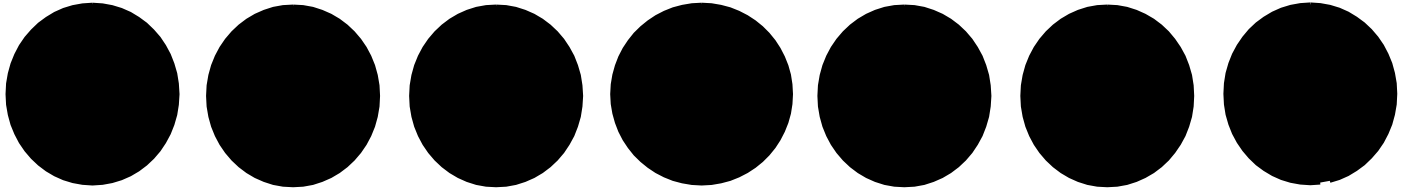
Tie knots to secure.

Clean up your work area.

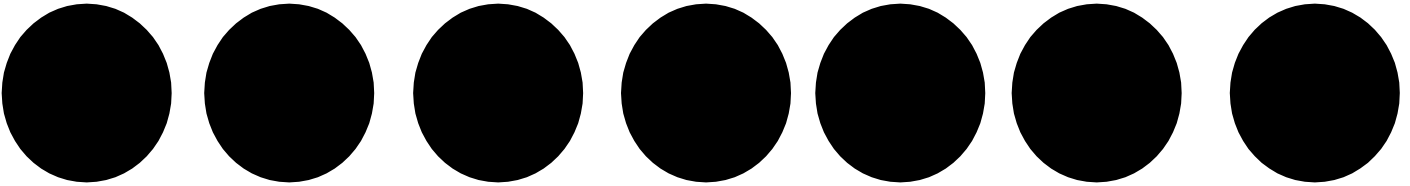
If this is your exhibit for the county fair, attach the County Tag.



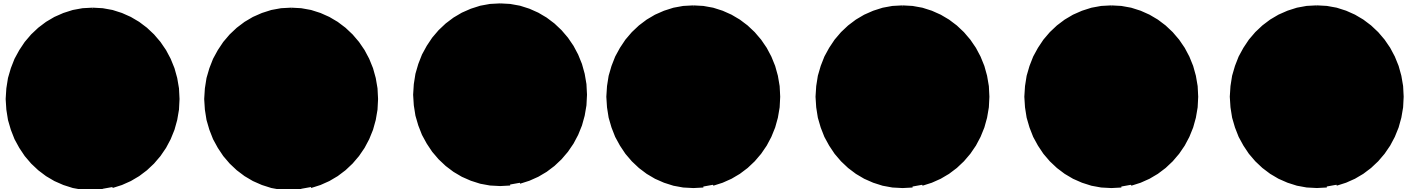
Night Sky Worksheet



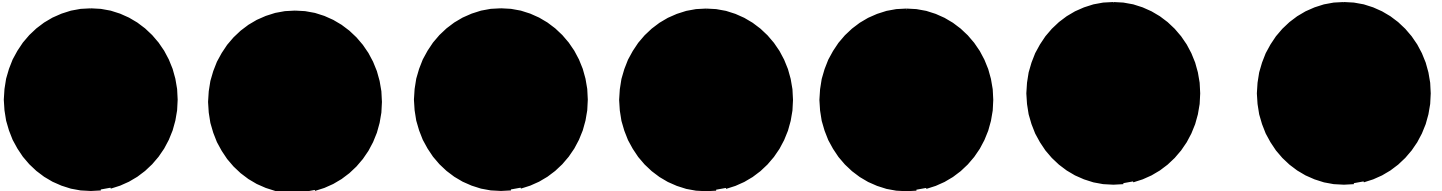
Seven empty rectangular boxes for labeling the moon phases in the row above.



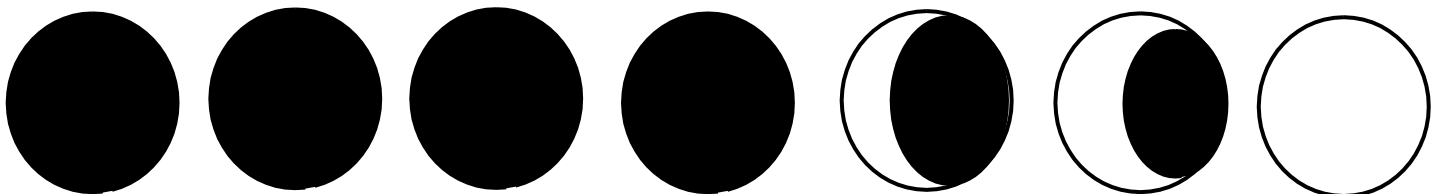
Seven empty rectangular boxes for labeling the moon phases in the row above.



Seven empty rectangular boxes for labeling the moon phases in the row above.



Seven empty rectangular boxes for labeling the moon phases in the row above.



Seven empty rectangular boxes for labeling the moon phases in the row above. The last three boxes contain the text "Example".

My Shadow Observation Sheet

My hypothesis:

What difference in the shadow do you see as the day goes on?

What time of day did you trace the shadow?

How big is the shadow?

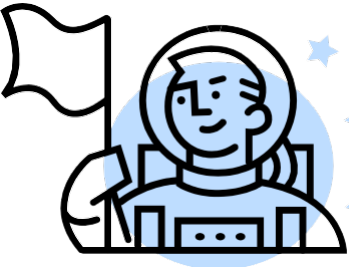
Is the shadow tall and skinny or short and squashed?

Where is the sun, close to the ground or high in the sky?

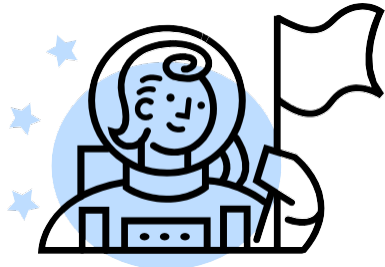
How did the shadows change?

Did the shadows change the way you thought they would?

Why do you think your shadow almost disappears when the sun is straight over the pencil in the middle of the day?



If I were an astronaut ...



Our Solar System

Find the words listed below in the word search.



A	X	M	U	H	S	J	B	L	O	K	U
J	N	V	E	G	N	R	U	T	A	S	M
O	J	R	A	R	O	P	L	D	B	T	W
G	V	E	R	F	C	H	S	K	U	Q	N
S	N	T	T	O	Q	U	W	M	J	S	E
A	U	B	H	L	G	M	R	L	P	J	P
O	Y	P	H	S	A	V	S	Y	C	A	T
K	M	S	R	V	E	N	U	S	P	L	U
P	L	A	K	S	T	U	N	T	V	E	N
C	M	O	E	X	I	R	A	K	Q	P	E
W	A	T	S	P	O	C	R	Z	N	W	B
Y	O	R	E	T	I	P	U	J	S	N	J

JUPITER

URANUS

VENUS

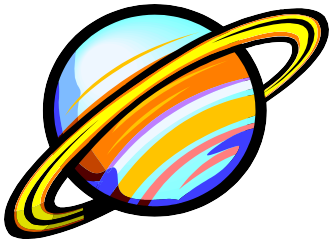
MERCURY

EARTH

NEPTUNE

MARS

SATURN



Mini 4-H Sun, Stars, & Space Record Sheet

My favorite part of this project was _____

I learned _____

If I could go in to space, I would fly _____

Name: _____ Date: _____

