

White County  
Mini 4-H

# Space



Extension



It is the policy of Purdue University Cooperative Extension that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran.

Purdue University is an Affirmative Action Institution.

# TABLE OF CONTENTS



Mini 4-H Project Requirements	3
Activity #1	4
Activity #2	5
Activity #3	8
Activity #4	9
Additional Resources	11

*White County*  
**Mini 4-H**

# Mini 4-H

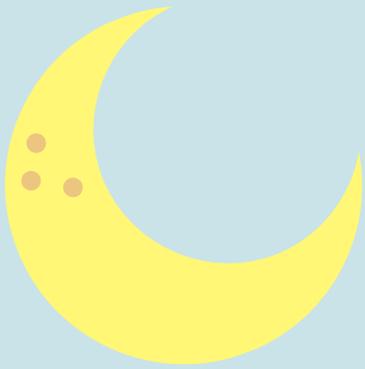
## Project Requirements

- Kindergarten: Exhibit a 22" x 28" stiff-backed horizontal poster, covered in clear plastic, which describes an experiment you completed from this curriculum.
- 1st or 2nd Grade: Exhibit a display based on one activity from this curriculum. Display is to be covered in clear plastic.

# Activity #1

## Space Gear Creation

Astronauts wear a lot of equipment when they go out into space. They have to carry their own oxygen as well as wearing a thick spacesuit to keep them safe and warm. In this activity, we will create our own space gear!



Materials: aluminum foil, construction paper, 2 oatmeal containers, glue, yarn, scissors, markers, masking tape

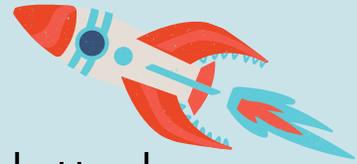
Steps:

1. Fasten two oatmeal containers together side-by-side using masking tape.
2. Cover oatmeal containers with aluminum foil or construction paper.
3. Make backpack type handles by connecting yarn to the top and bottom of each oatmeal container.
4. Decorate the tanks!
5. Have fun around the house wearing your space gear!

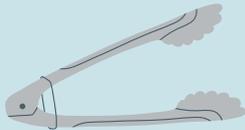
# Activity #2

## Astronaut Training

In order to be an astronaut, your mind and body have to be well trained! Astronauts study a long time before they would go into space. They need to be good at math and figuring out problems. They also need to be healthy and strong. This activity will help you train to be an astronaut!



Materials: four different styles of tongs (ice tongs, slotted spoons, pliers, salad tongs, etc.), four different things to pick up (ball of aluminum foil, a marble, rock, ping pong ball, button), two baskets or bowls, ribbon, markers, glitter, scotch tape, glue, scissors



Steps:

1. Place the 4 items to be picked up in a basket or bowl.
2. Line all of the 'trainees' up along the edge of the activity so they can see each person run and cheer.
3. Call one trainee's name and have them stand about 15 feet from the basket of items. Place an empty basket beside the trainee getting ready to run, skip, or hop.
4. Give the running trainee a pair of tongs and tell them what they must bring back and place in the empty basket.

# Activity #2

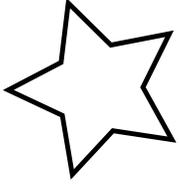
## Continued

5. When you say go, have the trainee run, hop, or skip with the tongs to the full basket and use the tongs to get out the requested item.
6. The trainee brings the item back while holding it with the tongs and drops the item in the empty basket.
7. The trainee then uses the next set of tongs to pick up the next item you request. The trainee continues until all the items are moved from one basket to the other.
8. Once the first trainee finishes, the second trainee repeats the exercise. Continue until all trainees have done the exercise.
9. Cut and color the medal and certificate on the next page when finished with training. Feel free to add glitter, decorative ribbon, etc.

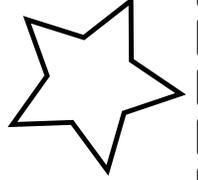


# Activity #2

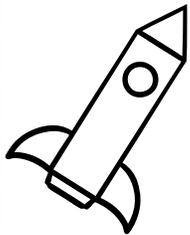
## Certificate & Medal



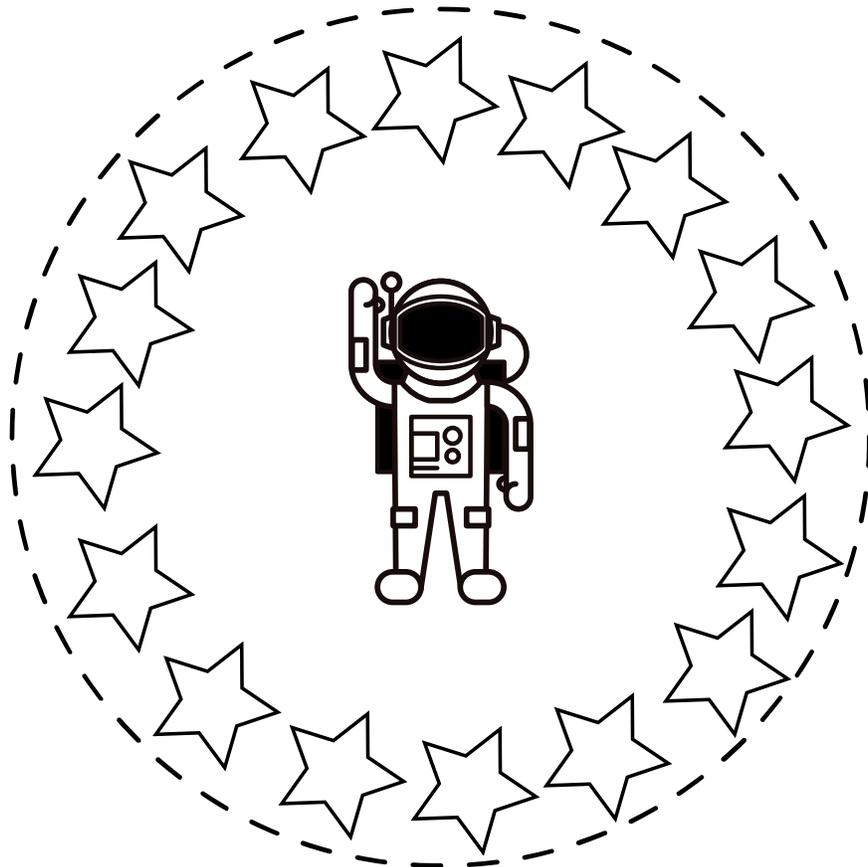
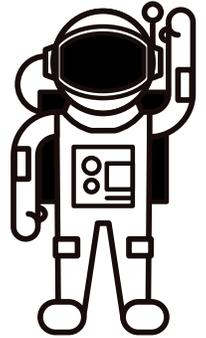
This is to certify that



-----



has successfully completed  
Mini 4-H  
Astronaut Training



# Activity #3

## The Shape & Color of Stars

Do you know what shape a star is? Some people think a star has five, six, or more points on it and looks like these



examples:



Stars do not really have points like the pictures. Stars are really round balls of burning gas. Stars can be several different colors, which gives scientists called astronomers a clue to how old the star is. In this activity, you will make your own star!

Materials: 8.5" x 11" sheet of black or dark blue construction paper, tissue paper (red, orange, yellow, white or blue), hole punch, glue, colored chalk, hairspray

Steps:

1. Fold the construction paper into fourths.
2. Use the hole punch to punch several holes in the folded paper.
3. Unfold the paper. Tear small pieces of tissue paper and glue them on the back of the paper to cover all the holes. Add planets and other things to your picture using colored chalk. Spray your picture lightly with hairspray to keep the chalk from smearing. Hang your picture in a window so the light can make your stars shine.

# Activity #4

## Blast Off!

It is a lot of work to get a shuttle off the ground and into space. The shuttle can't launch itself! The shuttle is hooked to a large fuel tank. There are two booster rockets next to the tank. The booster rockets are dropped into the sea after the shuttle takes off from the launch pad. Do this activity to send your own shuttle into the air!

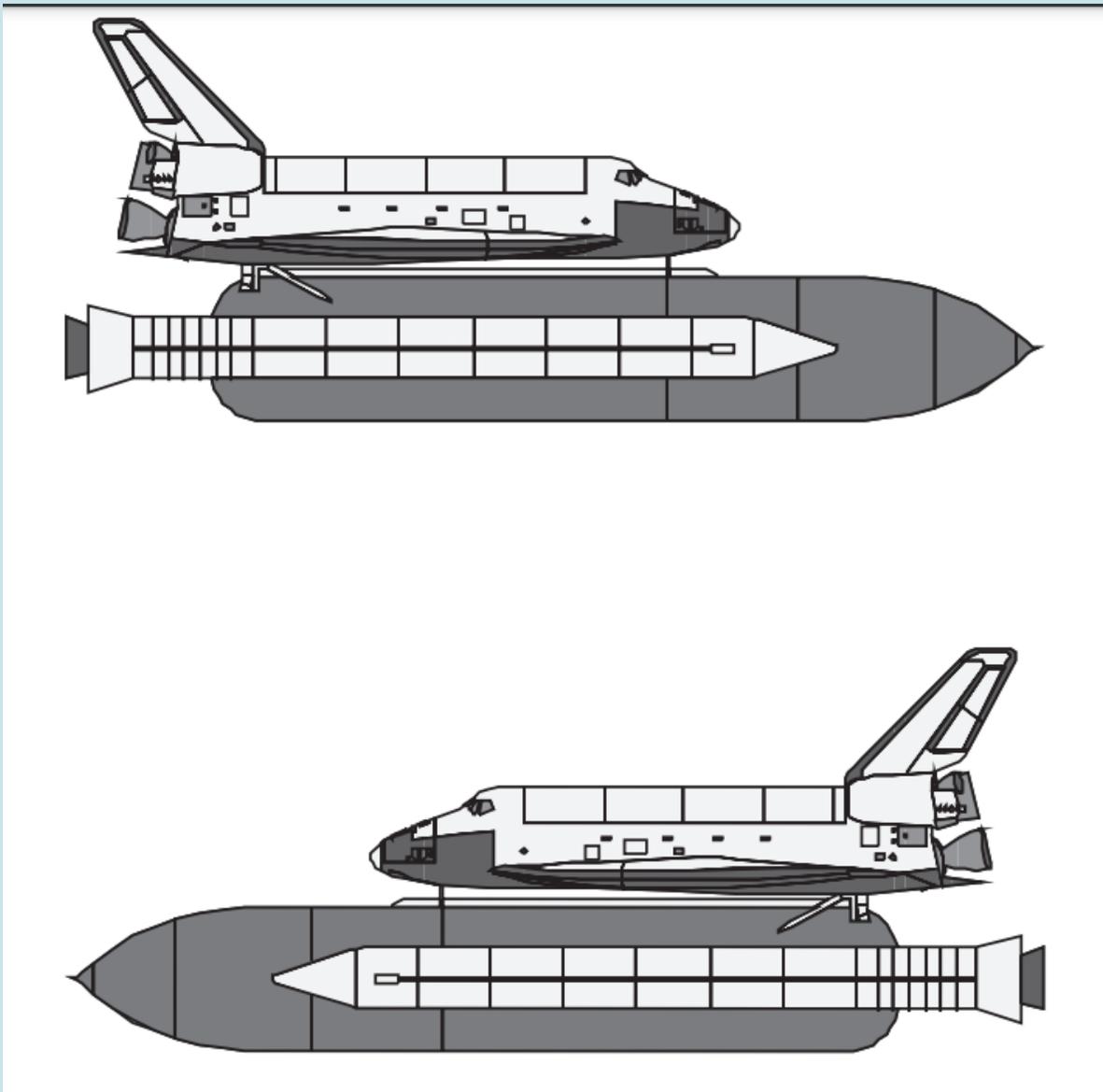
Materials: activity sheet (page 9), 2 ten-foot pieces of string, plastic straw, scissors, scotch tape, four washers

Steps:

1. Cut out both pictures of the shuttle on the activity sheet and lay them to the side.
2. Wrap tape around each end of the straw to reinforce the edges.
3. Tape the two pieces of string together at one end so they can be threaded through the straw. Thread the strings, then remove the tape.
4. Tie each string end to a washer to prevent the string from slipping out off the straw.

# Activity #4 Continued

5. Scotch tape the pictures of the shuttle on both sides of the straw.
6. Have one person hold one set of strings and another person hold the two strings on the other side of the straw.
7. Have one person gently but firmly pull apart the strings on their side. This should force the shuttle up the string toward the other person. Have the other person repeat.



# Additional Resources

Indiana 4-H Mini 4-H Space Curriculum

Climate Kids- NASA

NASA Kids' Club

