ICEBREAKER AND WELCOME: MAKE YOUR SPACE BADGE AND JOIN THE MISSION

Welcome kids to this out-of-this-world program by having them create a space badge with their name on it. You can use stick-on name tags or create custom paper nametags. This website has a free printable badge template: [http://verydarkhorse.blogspot.com/search/label/free%20printables](http://verydarkhorse.blogspot.com/search/label/free%20printables)

After kids have created their badges upon entry, explain that you will be going on a space adventure. Now that they have entered the Astronaut Training Academy, they will be assigned their first mission. First we need to make an Astronaut Pledge. Brainstorm a list of acceptable astronaut behaviors. This list will act as your group’s guide to encourage teamwork, listening skills, and respectful behavior. Examples might include, “work together to solve problems” or “treat everyone with kindness.”

READ ALOUD

Next we need to learn about how to be an astronaut. Choose one or more books to read aloud:

- *A Trip Into Space: An Adventure to the International Space Station* by Lori Haskins Houran
- *The Astronaut Handbook* by Meghan McCarthy
- *The Astronaut Who Painted the Moon* by Dean Robbins
- *Life on Mars* by Jon Agee
- *Mae Among the Stars* by Roda Ahmed
**ACTIVITY: SPACE HOP BRAIN BREAK**

To give kids a chance to move around, do a quick movement activity such as this space hop. Before the program begins, layout a model of the solar system using everyday objects such as a marble, a ball, a piece of LEGO, etc or cut out circles from coloured paper. Try to mimic the scale of the solar system as best you can in your space. This website provides ratios for a small scale model: https://www.education.com/science-fair/article/scale-model-planets-solar-system/

![Solar system model](image)

Have kids begin at the sun, then practice jumping from planet to planet. How many jumps does it take to cross the whole solar system? Now pretend you’re walking in space. How does it change your gait?

**ACTIVITY: SOLVE A SPACE PROBLEM CREATIVELY**

Have the kids pretend to get in the space shuttle and buckle up! Take them on a very quick journey to outer space when all of a sudden a problem occurs. Alternatively, present them with a space challenge. Here are some examples:

- Part of your ship broke, how would you fix it with these craft items?
- Your ship runs on ice cream. Invent something to prevent the ice cream from melting during lift off.
- Your ship crash-landed on an asteroid. Build a device to test the climate and a shelter to keep you safe from the elements.
- Design an alien-capturing device that will hold 3 different types of alien.
- Make something you might find in space and share with the group.

Provide kids with different materials - leftover craft items such as Popsicle sticks, elastics, pipe cleaners, paper scraps work great. Or if you have a set of LEGO they can build something using the blocks. As kids build, encourage them to work together with a space buddy. You can also encourage them to rethink their designs after they present them to you based on additional challenges that arise.
ACTIVITY: SPACE ROCK SCAVENGER HUNT

Once they’ve completed their space challenge, it’s time to go hunting. Before the program, take tinfoil and crunch it up into the shape of moon rocks. Inside each moon rock you can hide a piece of paper with a letter on it. Then label each moon rock with a number and hide them around the library. Divide the kids into pairs or teams and have them hunt around for all of the moon rocks. Once they’ve found them all help them put the moon rocks in order by number and reveal the letters inside to read the secret message. You can create any message you want – an answer to a space joke, an inspirational message, or a famous astronaut quote.

Another option is to hide space facts inside each moon rock. Have kids find a moon rock that is hidden in the library and bring it back to share a space fact with the group.

WRAP-UP AND CLOSING

It’s time to head home. Get back in your space ship and land back on earth. Encourage kids to check out a space book to continue their astronaut training at home.

ADDITIONAL ACTIVITY OPTION

Make a DIY astronaut glove box!

From Katie (Gift of Curiosity): An astronaut glove box is “a special box astronauts and scientists use to study (1) objects that may be harmful to humans if handled directly or (2) objects that may be damaged if touched directly by human hands. I wanted to give my kids a better understanding of the glove box and its role in scientific research. So I figured, what better way to help them understand the glove box than to build one of our own?”

SUPPLIES

- Cardboard box with top cut off
- Rubber gloves
- Duct tape
- Plastic wrap
- Things to observe
- Magnifying glasses
- Plastic tongs and bowls

Link with instructions (paste into browser): https://www.giftofcuriosity.com/diy-astronaut-glove-box/