

**BC SRC 2018: Motion Commotion!**  
**Program (Ages 5-8), Theme 5: Blast Off!**

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**ICEBREAKER** [5 – 10 min]

**“I’m Going on a Space Mission and I’m Taking...”**

The first person starts the game by saying the phrase and naming an item beginning with the letter "A". The second person repeats the first part of the sentence, repeats what the first person is bringing and then adds something starting with the letter "B", and so forth with the rest of the alphabet. For an added twist, make every letter into a tongue twister, for example, "I'm going on a space mission and I'm bringing Aunt Annie's absolutely awesome apples!" You can also play, where each person brings an object that starts with the first letter of their name.

**READ-ALOUD BOOK** [5 – 10 min]

Share one of these or any other space-themed book

- ***Mousetronaut*** by Mark Kelley
- ***The Darkest Dark*** by Chris Hadfield
- ***The Magic School Bus Presents: Our Solar System*** by Tom Jackson and Carolyn Bracken
- ***Mr. Wuffles!*** by David Wiesner

**ACTIVITY #1** [10 min]

**Moon Rock Treasure Hunt**

Before the program, hide scrunched up tin foil balls or foil-wrapped plastic eggs containing slips of paper with astronomical facts. During the program, ask the kids to see how many moon rocks they can find. Bring the group back together and get them to share some of the facts they found.

**ACTIVITY #2** [10-15 min]

**Craters on the Moon**

Why are there craters on the moon? Discover together with this simple demonstration. Children will have fun dropping rocks on the moon.

Supplies needed:

- 4 cups of flour

- 1/2 cup of baby oil
- Round cake pan
- Small rocks or pebbles

Before the program, make the “moon” in a cake pan by stirring together the flour and baby oil in a round cake pan.

During the program, ask children to drop the pebbles onto the pan. If they want to get really high and stand on a chair, make sure someone is there to help them balance. Observe the “craters” left by the pebbles. Explain how the moon is more susceptible to craters from space rocks than Earth since Earth’s atmosphere will burn most meteorites and asteroids before they come in contact with Earth’s surface. The moon, however, does not have an atmosphere to protect it!

Some space facts that tie in with this project:

- A meteorite is a rock, iron, and/or icy body that hits another body in space.
- The Earth’s atmosphere causes most meteors that are headed our way to burn up before they can hit our planet.
- The moon doesn’t have an atmosphere to protect it from meteors.
- Because the moon doesn’t have an atmosphere there is also no wind on its surface, so craters and even astronauts footprints from 40 years ago are still there!

### **ACTIVITY #3** [10 – 15 min]

#### **Constellation Cards**

Make mini constellation cards to project against the wall, with flashlight in a darkened room. This can be done individually or in pairs.

Supplies needed:

- Black cardstock pre-cut into circles
- Single hole punchers
- Pencils or silver pens
- Flashlight for demonstration
- Examples of constellation patterns and/or books about stars such as:
  - ***Night Sky Atlas*** by Robin Scagell

Instructions:

1. On each card, draw the dots that make up the constellation using a pencil or silver pen and write the name. You can make up your own or use an existing constellation.
2. Using the dots you just drew, use a hole punch to punch out the dots.
3. Take your constellation to a dark room and use a flashlight to project your constellation onto a wall!



### **EXTRA/ALTERNATE ACTIVITY** [10 – 15 min]

#### **Salt Dough Planets**

Supplies needed:

- 2 cups of flour
- 2 cups of salt
- 1 cup of warm water (add more if too dry)
- Glitter in different colours

Before the program, mix the dry ingredients together in a large bowl then stir in the warm water slowly. The mixture should be a little sticky but as you continue to mix it thoroughly, it will become more like normal dough. At this stage, turn it out onto a counter top and begin to knead it for a couple of minutes until it is soft, smooth and not sticky at all. Kid can then form balls to create all eight planets.

### **RESOURCES**

#### ***NASA Extreme Space Facts***

[https://www.jpl.nasa.gov/edu/pdfs/ss\\_extreme\\_poster.pdf](https://www.jpl.nasa.gov/edu/pdfs/ss_extreme_poster.pdf)

#### ***Constellation Patterns by Art Love Light***

[http://artlovelight.com/wp-content/uploads/2012/12/constellation\\_patterns.jpg](http://artlovelight.com/wp-content/uploads/2012/12/constellation_patterns.jpg)

#### ***Rainbow Glitter Salt Dough Recipe***

<http://theimaginationtree.com/2014/03/rainbow-glitter-salt-dough-recipe.html>