WELCOME & INTRODUCTION [5 min]
Welcome everyone, introduce the theme, and tell everyone that activities can be done by themselves or with a partner.

ICEBREAKER [6 min]
Begin the program by sharing some (awful) silly jokes about space OR give kids the chance to participate by printing the jokes off, putting them in a jar or bag, and asking for volunteers to draw and read aloud the jokes.

Jokes:
- Q: What is a spaceman’s favourite chocolate? A: a mars bar!
- Q: Why did the sun go to school? A: To get brighter!
- Q: How do you know when the moon has enough to eat? A: When it’s full!
- Q: What do planets like to read? A: Comet Books!
- Q: Why don’t aliens eat clowns? A: They taste funny!
- Q: Why did the cow go to outer space? A: To visit the Milky Way!

READ-ALOUD (Select 1 - 2) [10-15 min]
Next read a fun and engaging picture book about space and/or the universe. Options for school-age read-alouds include:

- Life on Mars by Jon Agee
- If Pluto Was a Pea by Gabrielle Prendergast
- Llama Destroys the World by Jonathan Stutzman
- Chicken in Space by Adam Lehrhaupt
- Moon’s First Friend by Susanna Leonard Hill
- Oh No, Astro! by Matt Roser
- Hey-ho, to Mars We’ll Go! by Susan Lendroth

After reading a picture book, show off high-interest non-fiction books about the universe and the solar system/planets. This is a great chance to highlight books from your collection and to share fun and surprising facts about space! Some examples include:

- Saturn Could Sail and Other Fun Facts by Laura Lyn DiSiena
- There Was a Black Hole That Swallowed the Universe by Chris Ferrie
- LEGO Man in Space: a True Story by Mara Shaughnessy
- Birthday on Mars! by Sara Schoenfeld
- Space Atlas: A Journey From Earth to the Stars, and Beyond by Tom Jackson
SONGS (Select 1 - 2) [5 min]
The Planets Revolve Around the Sun
Source: Jbrary https://www.youtube.com/watch?v=Io478ihlmuk

Going on a Space Hunt Based on: Going on a Bear Hunt by Michael Rosen
Possible “Uh Oh […] Can’t go over, can’t go under it / Got to go through it” verses include:
- Milky way ahead (sound = vroom / action= driving space ship flying through the galaxy)
- Asteroid belt ahead ( sound= zap /action= shoot at the incoming rocks)
- Exploding star ahead (sound = hot / action= tip toe through the suns hot spots)
- Aliens ahead (sound = excuse me)/ action=motion pushing through a crowd)
Black Hole ahead oh no! Quick head back home to earth “ excuse me excuse me, hot hot, zap zap, vroom vroom, ah back home safe.

MAKE A MODEL OF THE SOLAR SYSTEM  [10 min]

Make your own solar system out of objects that are roughly the right size in relation to each other. Refer to activity guide for If Pluto Was a Pea for ideas for relative size objects available online here:
https://angelhornpages.files.wordpress.com/2019/08/revised-2-card-classroom-activities-for-if-pluto-was-a-pea.pdf

Before the program put down markers for each planet in correct order on a flat surface (floor or table). Put the objects out and have the kids work together to organize them and see if they can get them in correct order! It’s ok if it takes multiple tries---that’s part of the fun of learning!

Fun options for creating a mini model of the solar system:

1. **How Big Is Space**
   Mercury = pea, Venus = grape, Earth = cherry tomato, Mars = blueberry, Jupiter = watermelon, Saturn = large grapefruit, Uranus = apple, Neptune = small apple, Pluto = peppercorn
   https://www.farmersalmanac.com/how-big-is-space-25923

2. **Solar System Scale**
   Sun = exercise ball, Mercury = sesame seed, Venus = small pea, Earth = small pea, Mars = peppercorn, Jupiter = tennis ball, Saturn satsuma, Uranus large marble, Neptune large marble
   https://sizemattersscience.wordpress.com/tag/solar-system-scale/

CRAFTS AND ACTIVITIES [15 min]

**Space STEM Marshmallow Constellations**
http://howtostem.co.uk/blog/space-stem-marshmallow-constellations/

**Pipe Cleaner Constellation**
https://www.123homeschool4me.com/pipe-cleaner-constellations_61/

Explore the starry skies by making your very own constellation out of mini marshmallows and tooth picks. Before the program, cut some toothpicks in to smaller pieces or have scissors on hand for participants to use. Have pre-cut pieces of paper (black is ideal) for participants to use
for labelling and sticking their constellations to. Before you start the craft, discuss constellations and ask if anyone can name one. Book-talk some titles on constellations from your non-fiction collection and be sure to print out reference pictures for the kids to use as a guide. Challenge them to recreate a known constellation! Have small pieces of paper or white pencil crayons on hand for labelling.

**Alternative:** for a non-food option, program can also be run with toothpicks and small pompoms or you can substitute pipe cleaners for toothpicks and have participants bend/shape constellations.

**Oreo Cookie Moon Phases**

Explore the different phases of the moon with this hands-on and tasty STEM activity! Twist open an oreo to show a full moon, quick then eat the white portion to show new moon. Tie-in non-fiction books from your collection for a strong literacy connection as you discuss moon phases. Pass out cookies to children to children; assign phases to groups or individuals and have them line up to demonstrate these phases.

**Supplies**
- An Oreo cookie for each participant
- A Popsicle stick or other tool for scraping the frosting


**ADDITIONAL ACTIVITIES AND CRAFTS**

**Foil Printed Moon Craft**
This is a fun and simple art activity that is inspired by the appearance of the moon! You can also very easily extend this activity and have kids create pictures of other planets using different paint colours.


**Galaxy Jar Kids Activity**
Explore the exciting and beautiful topic of nebulas with this sensory craft that allows kids to get creative! Incorporate facts about nebulas and share non-fiction books from your collection on the topic.
