Space Colony



Benefits of Play: Creative, Cognitive, Communication, Social

Through inquiry, students will exercise their creativity in the creation of a space colony and play around with space travel ideas.

STEAM Skills: Science, Technology, Engineering, and Arts

Grades: 3+

Materials:

- toilet paper rolls
- scissors
- hot glue guns and glue sticks
- craft/popsicle sticks
- construction paper
- crayons
- colored markers and/or paints

Step 1: Students can read about Space Colonization on these <u>Academic Kids</u> and <u>NASA</u> websites.

Step 2: Divide students into groups and hand out the materials. Initially, have the students use inquiry to think about the necessities for life, i.e. What would human beings need to survive on another planet?

Step 3: Have students design the habitat and think of how Martian colonists will get water, food, and breathable air (i.e. does the outpost need spaces for growing food or technology for extracting water from the soil?). Students can brainstorm ideas first and then list their ideas in a science journal.



Step 4: The students can begin construction on their outpost. Teachers should assist with the hot glue guns as students connect sections of their habitat. Students should create a name for their outpost and design a logo for their colony.

Step 5: Have students share their constructions, pointing out each of the sections and how they will help support human life on another planet.

Step 6: Students can write creative stories about their outpost and how humans will survive. They can use their creation for playing out ideas about space travel.