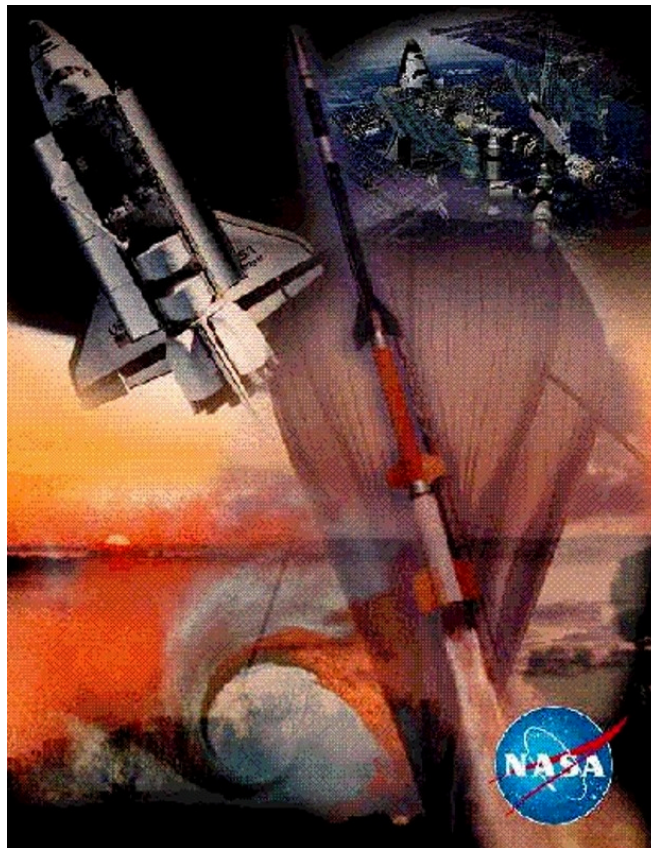


Space Odyssey Online Teacher's Guide

Space Exploration Tic-Tac-Toe

Postvisit Activity for Space Exploration



Courtesy NASA/WFF

Grades 9-12

CDE Standards

Science: 1,4,4,5,6

Language Arts: 1,2,4,5,6

Math: 5

Preparation and Materials

Estimated Preparation Time: 30 minutes

Estimated Activity Time: Three or more time periods of 30 minutes each

Materials

Paper

Pencils

Colored pencils, crayons, or markers

Miscellaneous art supplies (for building space station models)

Poster board (for game boards)

Miscellaneous materials for play props

Computer with Internet access

Learning Goals/Objectives

Students will analyze and synthesize information learned in a unit on space exploration to complete three activities about the exploration of space

Connection to *Space Odyssey*

Space Odyssey was designed with space exploration at its heart. Students completing this activity can use aspects of literally every experience within *Space Odyssey* to further develop their understanding of the past, present, and future of space exploration.

Advanced Preparation

Make a copy of the tic-tac-toe activity sheet for each student in your class.

Classroom Activity

1. This activity is designed to differentiate for the needs and learning styles of the students in your classroom.
2. After completing a unit on space exploration, hand out a copy of the tic-tac-toe sheet to each of your students.
3. Briefly discuss each activity on the tic-tac-toe grid to give students any information they might need to complete their three activities.
4. Tell students they will choose three activities from the grid to complete a row. Students are allowed to choose any of the activities from the grid, as long as they lie in a straight line. (This is a preference only. You may opt to have students choose any of the activities from the playing board.)

5. Give the students the time they'll need to complete the three activities.

Variations/Extensions

1. Have a "Space Exploration Day" to allow student to share their projects with classmates.
2. Host a "Space Night" open house for parents and families to come see student projects. You may choose to host this night in conjunction with a Museum Star Party for extra space exploration opportunities.

Resources

Logic Puzzles

Listed below are a few sites for examples of logic problems for your students to view before writing their own.

<http://www.squiglyplayhouse.com/PencilPuzzles/>

<http://www.brainbashers.com/>

http://www.lennalf.com/puzzle/logic_index.shtml

Name: _____

Instructions: Choose a path on the tic-tac-toe board and complete three activities to make a tic-tac-toe. Your activities must lie in a straight line on the board.

<p>1. Write a children's picture book about a space exploration event. Include illustrations and a resource list.</p>	<p>2. Build a model of a space station or space colony. Include and label all necessary components to sustain life in space.</p>	<p>3. Write a song, poem, or rap to teach a younger student an important space exploration event. Once composed, teach the song to a group of students.</p>
<p>4. Create a logic puzzle with a space exploration theme. See your teacher for examples of logic problems. Give your logic puzzle to a friend to see if they can solve it.</p>	<p>5. Write a journal as if you were living in space. Include not only what you see and do, but also how it feels to live in space.</p>	<p>6. Design a greenhouse to house the plants necessary to sustain life in space. Make a list or diagram of your greenhouse to show which plants you would take to space.</p>
<p>7. Design a board game or game show to teach important concepts of space exploration. Play the game with an appropriate group of students.</p>	<p>8. Write a script for a skit, talk show, reality-based TV show, or short play about living in space. Gather a team of actors, design props, and perform the play in front of an appropriate audience.</p>	<p>9. Develop a floor plan (to scale) of a space station or space colony. For each labeled component of your floor plan include a detailed description of its purpose in your space habitat.</p>

Activities chosen: _____