

Solar System Tic-Tac-Toe

Postvisit Activity for Solar System



Courtesy NASA/JPL

Grades K-3

CDE Standards

Science: 1,4,4,5,6

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

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, markers

Miscellaneous art supplies

Construction paper or card stock

Poster board

Puppets or materials to make puppets

Puppet stage (optional)

Learning Goals/Objectives

Students will analyze and synthesize information learned in a unit on the solar system to complete three activities on the game board.

Connection to *Space Odyssey*

Space Odyssey was designed with the solar system at its heart. Students completing this activity can use aspects of literally every experience within *Space Odyssey* to further develop their understanding of the solar system and its formation.

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 the solar system, 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 "Solar System Party" to allow students to share their projects with classmates.
2. Host a "Space Night" open house so parents and families can come see student projects. You may choose to host this night in conjunction with a Museum Star Party for extra space-exploration opportunities.

Resources

<http://skyandtelescope.com/observing/almanac/>

<http://skyandtelescope.com/observing/ataglance/>

Name: _____

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

<p>1. Conduct a survey about the solar system in your class or grade level. Ask a question and then present your research in graphic form on a poster. Include a line, bar, and pie graph to show your results.</p>	<p>2. Work with a partner to write a play about the planets in the solar system. Act out the play using puppets and props.</p>	<p>3. Pretend you are an astronomer researching the solar system. Write a journal describing your experiences studying the solar system.</p>
<p>4. Research the night sky. Locate at least one planet in the night sky. Keep a planet journal for at least one week to show how the planet moves in the sky. Mars and Venus will show the best movement.</p>	<p>5. Write a song or rap about the solar system. Teach it to a group of students in your class.</p>	<p>6. Create a poster to advertise a planet of your choice. Your poster should display important facts about that planet. Share the poster with your class.</p>
<p>7. Research a planet of your choice. Then find a partner to interview you as you pretend to be that planet.</p>	<p>8. Create a diorama of a planet in our solar system, similar to the Mars diorama in <i>Space Odyssey</i>. Use research to ensure that your diorama is scientifically accurate.</p>	<p>9. Create a solar system trivia game with questions about the solar system. Write at least 20 questions and create a game board for your game.</p>

Activities chosen: _____