

Exploring the Solar System Through Dance; Grade 4 Science; Ned Warner, Mallory Clasquin, Suzi Wilkins

Written by Ned Warner, Mallory Clasquin, and Suzi Wilkins

Solar System Unit

Aims, Goals, or Objectives: Students will be able to experience the meaning of our solar system through multiple modes of expression and through deep immersion in sensory activities.

Grade Level: 4th

Standards:

EARTH SYSTEMS SCIENCE

1. Earth is part of the solar system, which includes the Sun and Moon and other bodies that orbit the Sun in predictable patterns that lead to observable paths of objects in the sky as seen from Earth.

DRAMA AND THEATER ARTS

1. Create characters from scripts or improvisation using voice, gestures and facial expressions.
2. Participate collaboratively with partners and groups.
3. Demonstrate safe use of voice and body to communicate characters.

READING AND WRITING

1. Correct sentence formation, grammar, punctuation, capitalization and spelling are applied to make the meaning clear to the reader.

Introduction: Students will be introduced to the concept of our solar system through several different, immersive experiences. The unit begins by reading a poem about the sun to students with the lights off and a solar system video projection on. After the poetry reading -- setting the stage -- the students are introduced to the lesson components. Students will choose their own planet to research using the Internet and books to learn about their individual planet properties. Their research, for the most part, will be self-guided inquiry. Students will create a solar system dance rotating around the Sun in which each student "becomes" and dances as the planet they researched. The unit concludes as students write poems with individual lights in the dark with a star projector projecting from the center of the room. Their poems are from the perspective of their planet.

Students will do the solar system dance again, but the teacher will “freeze” movement and call on students/“planets” to recite their poems.

Incorporation of CRISPA Themes: Students engage in **risk-taking** when reading their own poems and when participating in the solar system dance because these activities can be intimidating to students, especially when reading poetry solo in front of their peers. Student **imagination** is engaged when writing planet poetry in the dark with the star projector on, as well as when doing the solar system dance, imagining that they are planets. This unit is filled with **sensory experiences**, such as the calming sound of the teacher reading poetry, the movement of the dancing, the feeling of the solar system costumes, and the use of the star projector to inspire planet poetry. Students are given several settings in which **perceptivity** can occur, such as focused research, dance and poetry-writing. Students are **actively engaged** in any of the following activities: listening to poetry, researching planets, dancing, writing poetry and reciting poetry.

Time Line: Three days

Materials: Paper, pencils, star projector, overhead projector, planet costumes, individual lights

Activities:

1. Listening to poetry read by teacher.
2. Students choose planets and research them.
3. Students “dance” like their planets, dressed as their planets.
4. Students write poetry from the perspective of their chosen planet.
5. Students dance again and read their planet poems to the class.

Adaptations: Depending on how many students are in your class, the solar system dance will look very different and will need to be adapted to include solar system bodies beyond the planets for students to research and “become”.

Evaluation: Participation grade, poetry is graded