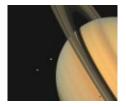
Awesome Saturn

Saturn and some of its icy moons.



LESSON TIME 60 minutes

PREPARATION TIME Approximately 15 minutes

MATERIALS CHECKLIST

For the teacher:

- Chart paper
- Books to read aloud (see Teacher Preparation)
- "Poem Examples" and "Word Banks" (copy or transparency)

For the students:

• Copies of "Saturn Poem" worksheets

STUDENT PREREQUISITES

Students should be familiar with several books about Saturn and completed the Reading, Writing & Rings! activities. Students will need well-developed vocabulary for writing about Saturn; they should be able to write independently or with limited teacher support.

ESSON NO.1

Language Arts Focus — Using Poetry to Describe Saturn Science Focus — Summative Reflections on Saturn

O V E R V I E W

Students complete one or more poems about Saturn using descriptive words. As a pre-writing activity, students generate a word list from books they have heard and read and images they have seen and created. With the support of the word lists, they will create poems.

BACKGROUND

The images sent to Earth from the Cassini–Huygens spacecraft are magnificent. The scientific value of the images is obvious, but their ability to inspire cannot be overlooked. With this in mind, this lesson encourages young students to give voice to the awe that Saturn can inspire. The lesson, which comes at the end of Reading, Writing & Rings!, allows students to integrate all that they have learned about Saturn from previous lessons, discussions, and readings. Students can use a variety of poetic forms in this lesson, among them: acrostic poems, place poems, list poems and "I used to think..." poems. With each form, students express their own understanding of Saturn.

Objectives

Students will:

- 1. Prepare to write by brainstorming words to describe Saturn.
- 2. Write poems using several poetic forms.

Teacher Preparation

Recommended books to read aloud are *Saturn* by Elaine Landau, *Saturn* by Seymour Simon, or *Saturn* by Gregory Vogt. Prepare chart paper for creating word lists or word banks. Make a copy or transparency of "Poem Examples" (two pages, can also be copied for student reference). Make copies for the students of the "Saturn Poem" (Acrostic Poem and Place Poem) worksheets.

Procedure

- 1. Begin this lesson by reading one of the recommended books to your students. You can also focus your reading on specific sections of the text. Be sure to point out the rich language that is used when Saturn is described.
- 2. When you have completed the reading, elicit from students some of the facts they have learned about Saturn.



3. Review Saturn images with your students. The following website contains the most up-to-date images of the Cassini spacecraft:

http://saturn.jpl.nasa.gov/multimedia/images/index.cfm

- 4. After finishing the review of images, brainstorm with your students to come up with nouns and descriptive words for Saturn, its moons, the Cassini space craft, space, and other topics associated with Saturn.
- 5. Try to generate 15 to 20 words for each topic. List your words under each topic heading to help students organize their writing. The lists can be placed on the board or added to your Saturn Word Wall. Use your copies or transparencies of the "Poem Examples" and "Word Banks" to guide the discussion.
- 6. Select the type(s) of poem your students will write from the poem examples. Note: If you choose the acrostic poem, be sure students understand how to pick the descriptive words that should be used. The place poem is the easiest way to teach young students to begin writing poetry.
- 7. Distribute the "Saturn Poem" (acrostic poem) and "Saturn Poem" (place poem) worksheets to students and assist them in writing as needed. Provide extra writing paper if you'd like them to try forms other than acrostic or place poems. Encourage students to use the vocabulary in the word banks or on the Saturn Word Wall.
- 8. Have the students add their finished poems to their portfolios.

Poetry Forms

Here are some poetry forms and the "rule of thumb" for their creation. The "Poem Examples" sheets give samples of these types of poems.

- An *acrostic poem* is a short verse that is constructed so that the first letter of each line forms a specific word. You begin with the word and add the verse.
- A *place poem* describes the essence or feel of a particular place. The first line contains the name of the place, followed by three lines of descriptive words. The second line contains two words, the third three, the fourth two. The last line contains the name of the place again.
- A *chant* is a poem without a fixed form. However, one or more of its lines are repeated over and over. It is fun to recite as a group.
- A *list poem* is the itemization of an event, place, or thing.
- A *thing poem* is created by describing a place or thing in as many ways as you can. This would be a great whole-class poem.
- An *"I used to think. . .but now I know" poem* is created by recalling what you used to think and compare it with what you currently think. This poem form is an effective way to capture changes in student thinking that have taken place over the course of this unit.





Use a transparency of "Poem Examples" to show the class as you describe how to write each type of poem.

Why This Works

Poetry is a wonderful way to give students their own voice. Through poetry, they can express what is meaningful to them about their learning. There are no wrong answers when expressing how one feels about something in a poem. For beginning poets, these very simple, no-fail poetry forms are a way to inspire poetry writing as an ongoing, independent activity.

Conclusion to Reading, Writing & Rings!

Reading, Writing & Rings! contains numerous lessons and covers a variety of topics. You and your students have come a long way. This integrative lesson calls upon students to reflect on all that they have learned. This activity works largely because students can choose to focus on what they find most meaningful about the Cassini–Huygens journey. We hope you have had a great trip! Here is a poem written by one 2nd-grade student:

Saturn

Big, windy Gas, fast, white spot Moons, beautiful *Saturn!*

Assessment

Students' poems will show how students have integrated new information and enriched their understanding of Saturn and the Cassini–Huygens mission.

Standards

NCST Standards for the English Language Arts

- Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.
- Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.
- Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), and genre to create, critique, and discuss print and nonprint texts.
- Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.
- Students use spoken, written, and visual language to accomplish their own purposes (e.g., for learning for enjoyment, persuasion, and the exchange of information).

National Science Education Standards Earth and Space Sciences

• Objects in the sky



Acrostic Poem

S pinning A mazing T itan U nbelievable R otating N arrow rings

Place Poem

Saturn! Ringed, Icy Cold, spinning, orbiting, Tan, dim. Saturn!

Chant Poem

Saturn is cold! Saturn is cold! Far from the Sun, Saturn is cold!

List Poem

When Cassini gets to Saturn it will find rings. When Cassini gets to Saturn it will find moons. When Cassini gets to Saturn it will find ice. When Cassini gets to Saturn it will find helium. When Cassini gets to Saturn it will find hydrogen. When Cassini gets to Saturn we will celebrate!

Thing Poem

It is round. It has rings. It has moons. It is made of gases. It is cold. It is Saturn!

"I used to think" Poem

I used to think Saturn was small but now I know it is huge.

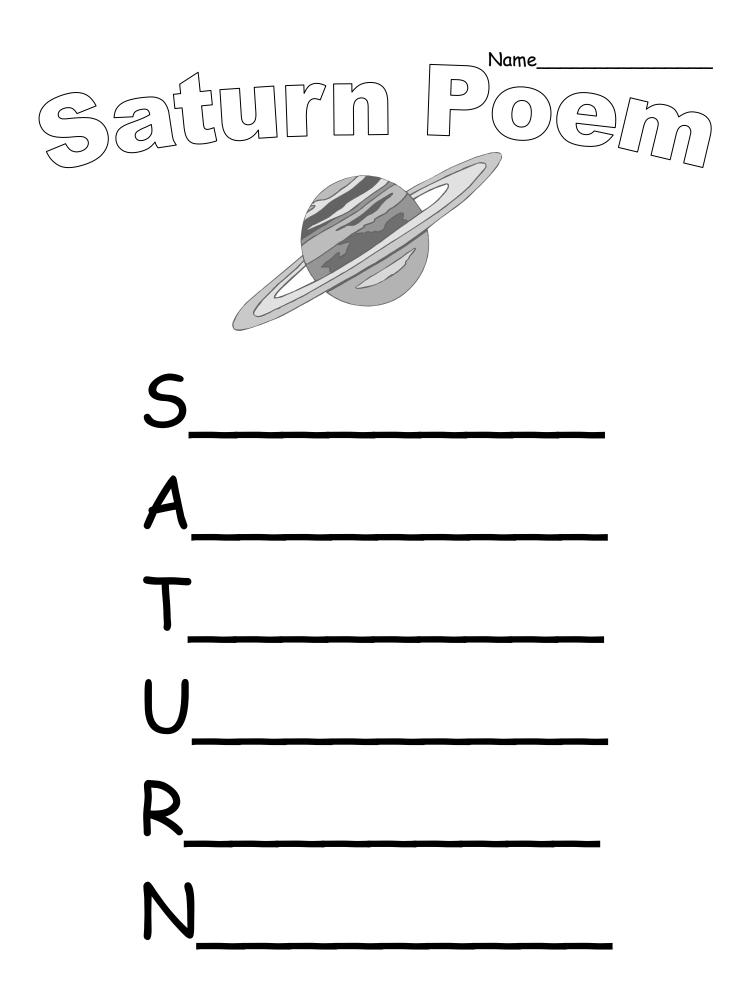
I used to think Saturn was close to Earth but now I know it is very far.

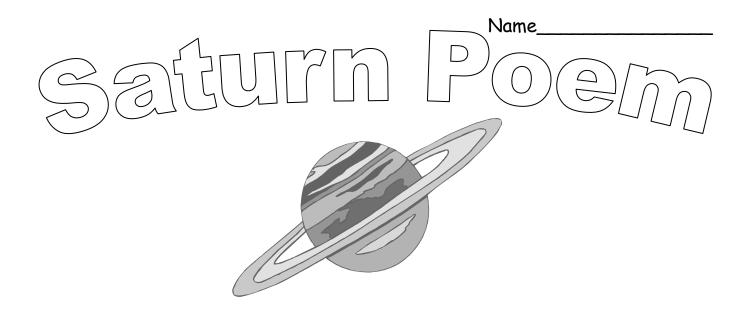
I used to think Saturn was standing still but now I know it is orbiting.

I used to think Saturn was hot but now I know it is cold.

I used to wonder about Saturn but now I know I want to learn even more!

| Solar System | Saturn | Moons | Titan | Rings | Cassini |
|--------------|----------------|-----------------|---------------------|------------------|------------------|
| Sun | rings | craters | thick atmosphere | icy | spacecraft |
| Mercury | ringed | spherical | clouds | Cassini Division | journey |
| Venus | sixth planet | round | orange | A-rings | 7 years |
| Earth | second largest | orbiting | big | B-rings | Cassini Division |
| Mars | icy rings | paths | smog | equator | Huygens |
| Jupiter | gas giant | icy | orbiting | ringlets | antenna |
| Saturn | cold | rock | cold | moons | instruments |
| Uranus | no life | irregular shape | Huygens Probe | shepherding | mission |
| Neptune | rotates | bumpy | parachute | particles | launched |
| Pluto | clouds | diameter | | crashing | space probe |
| Orbit | cold gases | collided | | thin | scientists |
| Planets | wind storms | impact | | huge | astronomers |
| Rotation | core | smooth | | wide | |
| Revolution | inner layer | surface | | gaps | |
| Moons | outer layer | grooves | | orbiting | |
| Asteroids | surface | reflect | | | |
| Comets | orbits | frozen water | | | |
| Milky Way | gravity | canyons | | | |
| | moons | cold | | | |
| | atmosphere | frost | | | |
| | | shepherding | | | |
| | | co-orbital | | | |
| | | terrain | | | |
| | | big | | | |
| | | small | | | |





Saturn

Saturn!