



Assessment Rubric



The Solar System

Student's Name: _____ Assignment: _____ Level: _____

	Level 1	Level 2	Level 3	Level 4
Understanding Concepts	Demonstrates a limited understanding of concepts. Requires teacher intervention.	Demonstrates a basic understanding of the concepts.	Demonstrates a good understanding of the concepts.	Demonstrates a thorough understanding of the concepts.
Response to the Text	Expresses responses to the text with limited effectiveness, inconsistently supported with proof from the text.	Expresses responses to the text with some effectiveness, supported with some proof from the text.	Expresses responses to the text with appropriate skills supported with appropriate proof.	Expresses thorough and complete responses to the text, supported by concise and effective proof from the text.
Analysis & Application of Concepts	Interprets and applies various concepts in the text with few integrated details and inconsistent analysis.	Interprets and applies various concepts in the text with some detail, but with some inconsistent analysis.	Interprets and applies various concepts in the text with appropriate detail and analysis.	Effectively interprets and applies various concepts in the text with consistent, clear, and effective detail and analysis.

SAMPLE

STRENGTHS:

WEAKNESSES:

NEXT STEPS:



Constellations



Answer each question with a complete sentence.

2. How can someone find the North Star?

3. Why would sailors need to use the stars for navigation?

4. Whose story about Ursa Major is correct: the Greeks or the Native Americans'?

SAMPLE

Research & Extension

For centuries, people have gazed up at the stars and used their imagination to see pictures and tell stories.

5. Research the story of the constellation called **Orion**. Draw a diagram of it, and recount the story as either a comic strip or a poem.
6. Create a **Constellation Slideshow Viewer** using a shoebox, black construction paper for constellation slides and a pin to make the holes. Prepare a description for each of your slides.
7. Use a slideshow-making computer program to create a slideshow of your **five** favorite constellations. For each one, have a slide to show the constellation and one to tell its story.
8. **Create your own constellation** from existing stars and write a legend to go with it.



Try It!

SIZE AND DISTANCE OF THE PLANETS

You will use the attached templates to create a scale model of a solar system.

Steps

STEP ONE: Color and cut out the planets on the sheet provided.

STEP TWO: Stand at one end of a hallway, or large space or outdoors. Mark this point as the Sun.

STEP THREE: Place the Earth 22.4 inches from the Sun.

STEP FOUR: Without looking at the table below, place the rest of the planets at the distance you think they are from the Sun.

STEP FIVE: Check the table to measure the actual distances between the Sun and each of the planets. Place your planets at the correct distances.

SAMPLE

PLANET	Distance to the Sun (mi.)	Distance to the Sun (in)	Distance to the Sun (ft)
Mercury	35 983 610	8.7	0.7
Venus	67 232 360	16.2	1.3
Earth	92 957 100	22.4	1.9
Mars	141 635 300	34.0	2.8
Jupiter	483 632 000	116.3	9.7
Saturn	888 188 000	213.6	17.8
Uranus	1 783 950 000	429.1	35.8
Neptune	2 798 842 000	673.2	56.1

Note: If you wanted to include a model of the Sun using this scale, it would have to have a diameter of 0.208 inches.



Our Planets

