



Gold Seal Lesson

Author(s): Marsha Kucker			Lesson Title: Learning About Planets			
Grade Span			ICLE Application Model			
K-4 x	5-8	9-12	A	B	C x	D

Instructional Focus:

Basic Concepts and Knowledge – Students develop an understanding of scientific concepts using facts, theories, principles, and models.
Unifying Concepts and Processes – Students recognize patterns and processes, making connections in terms of systems and subsystems that explain the interrelationships of the natural and designed world.
Science as Inquiry – Students demonstrate knowledge and skills necessary to perform scientific inquiry.
Reading – Students read a variety of grade level materials, applying strategies appropriate to various situations.
Writing – Students write for a variety of purposes and audiences with sophistication and complexity appropriate to the grade level.
Listening – Students listen for a variety of purposes appropriate to the grade level.
Speaking – Students speak for a variety of purposes and audiences with sophistication and complexity appropriate to the grade level.

Performance Task

<ol style="list-style-type: none"> 1. Ask students if they know what the solar system is. Have pictures and resource materials available to illustrate. Ask students to list or describe the planets that make up the solar system. Have them share what they know about them. 2. Tell students that they are going to "investigate" to learn more about each of the planets. Have students select a planet on which they will report. The reports should be written from the view point of a newspaper report. Provide students with the worksheet (see Learning About Planets Chart) to use as a guide. They should also have access to library and classroom resources for use in research. 3. Have students present their news articles to the class. <p>This activity meets specific competencies and indicators as outlined in the National Career Development Guidelines.</p>

ICLE Essential Skills

Identify and comprehend celestial observations (i.e., motions of objects in the sky) such as star paths, planetary motions, satellite motions, and sun motions. (s 50)
Apply the geocentric and heliocentric solar system models to explain celestial and/or terrestrial objects or events. Learn the geometry of the earth's orbit around the sun and the gravitational force and energy effects on the earth relative to its position in the orbit. (s 58)
Know and apply the principles of scientific inquiry. (Implicit in this statement are the processes of prediction, estimation, developing hypotheses, drawing conclusions, evaluation, and following ethical principles and professional procedures. (s 114)
Apply in writing the rules and conventions of grammar, usage, punctuation, paragraphing and spelling. (ela 1)
Gather information from a variety of sources, including electronic sources, and summarize, analyze, and evaluate its use for a report. (ela 3)
Follow oral or written directions. (ela 4)
Identify, collect and/or select pertinent information while reading. (ela 5)
Discriminate important ideas from unimportant ideas while reading. (ela 15)
Participate, sometimes leading, in group meetings by contributing, taking turns speaking, and working toward a common goal. (ela 20)
Understand and produce a variety of informative formats such as business letters, memos, reports, news articles, brochures, proposals and critiques. (ela 22)
Summarize, synthesize and organize information while reading. (ela 24)
Listen for enjoyment to narratives of personal experiences, stories, drama, performances, lectures, and readings. (ela 47)
Gather information such as data, facts, ideas, concepts, and generalizations from oral sources. (ela 51)

Scoring Guide:

- 4** Response shows exceptional understanding of selection.
Retelling includes key points.
Uses important details in sequence to summarize.
Complete statement of main idea.
- 3** Response shows good understanding of selection.
Retelling includes key points.
Uses some details in sequence to summarize.
Simple statement of main idea.
- 2** Response shows partial understanding of selection.
Retelling includes at least one key point.
May focus on one detail or part of selection.
Does not show understanding of sequence.
- 1** Response does not indicate understanding of selection.
Retelling incomplete with no key points.
Details limited in summary and not in sequence.
No statement of main idea or statement makes no sense.
- 0** No answer.

Keywords

English Language Arts	Mathematics	Science
Reading Research Comprehension	Algebra	Earth Science Astronomy Scientific inquiry Universe Sun Stars Space Solar system Planets Moon
Writing Newspapers Mechanics Organization Journalism	Geometry	Life Science
Communications Discussion Listening Retell	Statistics	Chemistry
Literature	Calculus	Physics
Other	Trigonometry	Other
	Other	

