Gold Seal Lesson

Author(s):			*Lesson Title:*			
Sharon Ratner			*Moon Phase Cookies*			
Grade Span			*ICLE Application Model*			
K-4 X	*5-8*	*9-12*	*A*	*B X*	*C*	*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.

Performance Task

As a culminating activity to a class study of the moon and its relationships of the sun and earth, students will model the phases of the moon. The model will consist of a round plate of cookies decorated to show the different phases of the moon. Students will place the decorated cookies in proper sequence and explain orally or in writing why the phases appear and the reasoning for the proper sequence of the phases.

Students will need a 10 or 12" paper plate, vanilla wafer type cookies, yellow and chocolate frosting, and a plastic knife.

Each student will frost each cookie to represent a phase of the moon and place them in the proper order.

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)

Plan and apply real or hypothetical models and constructions to facilitate investigation and learning and the solution to practical problems. (Not Ranked s115)

Make observations using senses and instruments. Inferences and interpretations are arrived at based on observations. Classify observable properties and organize observations in a meaningful and logical way. (s 5)

Present information in well-organized fashion that will be clear to the target audience. (ela 11)

Scoring Guide:

RATE THE CRITERIA: 3=Excellent, 2=satisfactory, 1=unsatisfactory, 0=does not attempt or work is not acceptable

CRITERIA	SCORE
Each Phase of the moon is represented accurately	_____
Each phase of the moon is placed in proper sequence	_____
Proper terminology and scientific understanding is used during presentation	_____

2 errors=3, 5 errors=2, 8 errors=1, >8errors=0

Keywords

English Language Arts	Mathematics	Science
Reading	**Algebra**	**Earth Science** **Solar System** **Moon** **Phases of the Moon** **Sun** **Earth**
Writing **Expository**	**Geometry**	**Life Science**
Communications **Oral Discussion**	**Statistics**	**Chemistry**
Literature	**Calculus**	**Physics**
Other	**Trigonometry**	**Other** **Modeling**
	Other	