



Gold Seal Lesson

Author(s): Marsha Kucker			Lesson Title: Watching the Clouds Roll By			
Grade Span			ICLE Application Model			
K-4 x	5-8	9-12	A	Bx	C	D

Instructional Focus:

Basic Concepts and Knowledge –

Students develop an understanding of scientific concepts using facts, theories, principles, and models.

Science as Inquiry –

Students demonstrate knowledge and skills necessary to perform scientific inquiry.

Habits of Mind –

Students develop habits of mind including curiosity, open-mindedness and persistence.

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

- Review with students the names and the characteristics of the various cloud formations.
 - Cumulus - heaped clouds with bases and castle-like tops.
 - Cumulonimbus - flat-topped cumulus bringing thunder and rain.
 - Cirrus - white feathery lines or bands at great height.
 - Stratus - layer clouds usually smooth and dark.
- Take the class outside to do a cloud observation and drawing daily for one week.
- During this time ask students to draw, color in, and try to identify the cloud formations that they see.
- Ask students to share their guesses and their reasons for them. As a class make a calculated guess at the type of cloud that was seen the most.
- Discuss with students the correlation between cloud formation and the weather.

This activity meets specific competencies and indicators as outlined in the National Career Development Guidelines.

ICLE Essential Skills

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)

Exhibit good data management skills by collecting, organizing, and graphing data. (s 19)

Predict weather as a probability of occurrence by examining the factors that produce change in atmospheric variables. (s 48)

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)

Follow oral or written directions. (ela 4)

Use brainstorming, role playing, and standard problem solving strategies to define a problem and suggest solutions. (ela 19)

Participate, sometimes leading, in group meetings by contributing, taking turns speaking, and working toward a common goal. (ela 20)

Gather information such as data, facts, ideas, concepts, and generalizations from oral sources. (ela 51)

Scoring Guide:

See attachment: Watching the Clouds Roll By Chart

Keywords

English Language Arts	Mathematics	Science
Reading	Algebra	Earth Science Weather Scientific inquiry Clouds
Writing	Geometry	Life Science
Communications Listening Discussion Illustration Visuals	Statistics	Chemistry
Literature	Calculus	Physics
Other	Trigonometry	Other
	Other	

Chart

3	BEYOND	<p>Analyzed and readily understood the task.</p> <p>Developed an efficient and workable strategy.</p> <p>Showed explicit evidence of carrying out the strategy.</p> <p>Synthesized and generalized the conclusion.</p>
2	AT LEVEL	<p>Understood the task.</p> <p>Developed a workable strategy.</p> <p>Inferred (some evidence) but not always clear.</p> <p>Connected and applied the answer.</p>
1	NOT YET AT	<p>Partially understood the task.</p> <p>Appropriate strategy some of the time.</p> <p>Possible evidence of a plan – not clear.</p> <p>Partial connection of answer.</p>
0		<p>Totally misunderstood.</p> <p>Inappropriate, unworkable strategy.</p> <p>No evidence of carrying out a plan.</p> <p>No connections of answer.</p> <p>Blank.</p>