



International Center  
for Leadership  
in Education



Gold Seal Lesson:

Copernicus Education Gateway

<b>Author(s):</b> <i>Ann Cooley</i>			<b>Lesson Title:</b> <i>Best Picker Upper</i>			
<b>Grade Span</b>			<b>ICLE Application Model</b>			
<i>K-4</i>	<i>5-8</i> <i>X</i>	<i>9-12</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i> <i>X</i>

## Instructional Focus:

### Number Operation and Concepts

Students use number, number sense, and number relationships in a problem-solving situation. Students communicate the reasoning used in solving these problems.

### Problem-Solving and Mathematical Reasoning

Students apply a variety of problem-solving strategies to investigate and solve problems from across the curriculum as well as from practical applications.

### Science as Inquiry

Students demonstrate knowledge and skills necessary to perform scientific inquiry.

## Performance Task

This activity introduces processes in math and science to prepare students as consumers. Use four different brands of paper towels to test their absorbency, strength and determine the best value for your money. Label the brands of paper towels, A, B, etc. not revealing the actual name.

Absorbency can be tested by depositing 5 drops of water from an eye dropper on an elevated paper towel. Use a transparency to trace the wet spot. Place the transparency on graph paper to determine the area of wetness. The lower the area the more absorbent the towel. Strength can be tested by adding weights to the wet spot until it rips.

The best buy can be determined by ranking the brands by absorbency, strength and the cost per sheet of towel. Subjective factors can be discussed, such as size of individual towels and texture. A chart would be the best method to collect data.

## ICLE Essential Skills

- 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.*) (Not Ranked)

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

- 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)

- Perform *operations with signed* (positive and negative) *numbers*, including decimals, ratios, percents, and fractions. ( m 1)

- Understand the best procedures for statistical *data collection, organization, and display* including making estimates and predictions and drawing inference ( m 5)

## Scoring Guide:

Score each characteristic from 3 – 0, where:

3 – Excellent quality

2 – Satisfactory quality

1 – Unsatisfactory quality

0 – Does not attempt the task

<u>Characteristic</u>	<u>Score</u>
Experimenting	
Recording and Organization of information	
Math computation	
Task Management	
Developing conclusions	

## Keywords

<b>English Language Arts</b>	<b>Mathematics</b>	<b>Science</b>
<b>Reading</b>	<b>Algebra</b> <b>Computation</b> <b>Cost Analysis</b> <b>Problem Solving</b>	<b>Earth Science</b>
<b>Writing</b>	<b>Geometry</b>	<b>Life Science</b>
<b>Communications</b>	<b>Statistics</b>	<b>Chemistry</b>
<b>Literature</b>	<b>Calculus</b>	<b>Physics</b> <b>Scientific Process</b>
<b>Other</b>	<b>Trigonometry</b>	<b>Other</b>
	<b>Other</b>	