

PROFESSOR AESOP'S "THE
CROW AND THE PITCHER"
by
Stephanie Gwyn Brown

Although he had probably never met Archimedes, the clever crow used his principle and the scientific method to figure out a way to get at the water in the pitcher. This particular crow lived in the desert and was even more in need of water. In this retelling, all sorts of measuring devices are used to illustrate the story line.

To transition to these activities, have your students retell the story. Remind them of the various instruments used to measure the crow's condition; ask if any of them have ever used any of these, or seen them used.

MATERIALS: Activity #1-- beaker, water, graduated cylinders of varying diameters, pebbles (buttons, aquarium rocks, or beads), and paper for estimating/tallying, math journals.
Activity #2 -- measurement instrument worksheet, pencils.
Activity #3 - "What's Your Temperature?" sheet (adapted from Life Skills: Math, by Don Mosenfelder), ice cubes, hot water, cylinders/glasses, pencils

Activity #1: This activity will allow your students to see for themselves that the crow's method worked. Allow them to experiment with a variety of sizes of beakers, graduated cylinders, or any container that can be marked or calibrated to see how many "pebbles" it takes to raise the water level to a desired height. Have them always start with the water at the same level. Does the diameter of the cylinder affect the number of pebbles needed? Why? Encourage your students to

explain their findings in their math journals.

Activity #2: Discuss the different types of measuring devices used in the book. Have your students complete the appropriate worksheet.

Activity #3: Have your students complete the activity as described. Ask them if they think their ability to estimate temperature increased as they went through it.

NOTE: This would provide an excellent opportunity for your students to practice the scientific method as described to find an answer to one of their own questions.

STANDARDS:

BSL: 1.1, 1.2, 1.3, 1.4, 1.7, 1.8, 1.11, 3.1, 3.3, 5.3, 6.3, 9.7, 12.1, 12.2, 12.7, 12

NCTM: 1a, 1.b, 1c, 2a, 2c, 2d, 3b, 3c, 4a, 4c, 4d, 4e, 5a, 5d, 10a, 10b, 10c, 10d, 11b

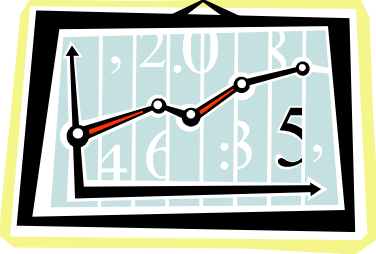



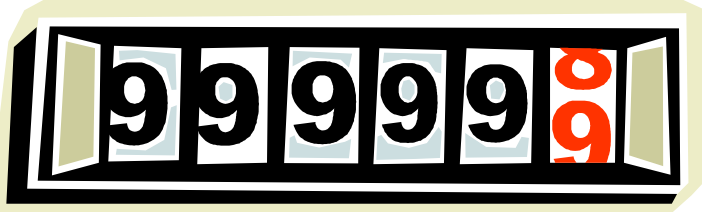
SCS: A1, A2, B1, D1, G1, H2, H3, H4

Brown, Stephanie Gwyn. Professor Aesop's "The Crow and the Pitcher" [398.2 Bro] Berkeley, CA: Tricycle Press, c2003. ISBN#1582460976 A clever crow uses the scientific method to get a drink from a nearby pitcher in this adaptation of this fable from Aesop. Includes an explanation of the scientific method's six steps.

Mosenfelder, Donn. Life Skills: Math. NY: Educational Design, c1997, p96. ISBN#08769411528 Practice sheets for handling everyday situations.

CROW'S INSTRUMENTS

Draw a line from each picture to its matching name and definition.

<p>Gauge n. an instrument for measuring the amount or contents of something</p>	
<p>Graph n. a diagram that shows the relationship between two amounts</p>	
<p>Odometer n. an instrument for measuring the distance traveled by a vehicle or the amount of something that is used</p>	
<p>Meter n. a device that measures the amount, degree, or rate of something</p>	
<p>Thermometer n. an instrument used to measure temperature</p>	

WHAT'S YOUR TEMPERATURE?

With your partner, take turns filling a container with water. Use ice cubes or warm water to make the temperature of your choice. **BEFORE** you measure the temperature of the water, feel the water and estimate the temperature. Write your estimation in the first column. Then, using a Celsius or Fahrenheit thermometer, measure and record the temperature.

Repeat the process. Does your ability to estimate improve as you repeat the activity?

Temperature Estimate °C/°F	Actual Temperature °C/°F
1.	
2.	
3.	
4.	
5.	
6.	