

HERSHEY'S KISS

Performance Descriptor (6C/7B).E

Make estimates about the weight, cost, height, circumference, diameter, and length of a Hershey's kiss and the shape, perimeter and area of its wrapper and compare the estimates to actual measurements accordingly:

- *Mathematical knowledge*: make and evaluate estimates of metric measurements; select and apply appropriate operations and tools to perform calculations,
- *Strategic knowledge*: use appropriate estimation, measurement and calculation strategies, and
- *Explanation*: explain completely and clearly what was done and why it was done.

Procedures

1. ***In order to compute and estimate using mental mathematics, pencil-and-paper methods, calculators, and computers (6C), and estimate measurements and determine acceptable levels of accuracy (7B)***, students should experience sufficient learning opportunities to develop the following:
 - Evaluate estimates to judge their reasonableness and degree of accuracy.
 - Select and use appropriate operations and tools to perform calculations on whole numbers, fractions, and decimals according to the context and nature of the computation.
 - Explain that all measurements are approximations.
 - Estimate the perimeter, area, and/or volume of regular and irregular shapes and objects.
2. Make a list of the student-generated responses on the board or overhead. The list should include linear measures-length, width, height perimeter, diameter, circumference-as well as weight, elapsed time, cost, and area. Ask, "What about a Hershey's kiss or a bag of Kisses could be measured?"
3. Provide each student with the "Hershey Kiss" recording sheet and the rubric. Each student will decide what can be measured, write it in the first column, estimate that measure in the second column and actually measure it and record the measure in the third column.
4. At the bottom and on the back of the recording sheet each student will write:
 - About what s/he decided to measure
 - About how s/he came up with each estimate
 - About each procedure used to measure
 - A justification for the decisions s/he made
5. Evaluate each student's work and determine the performance level using the rubric. The student should include measurements of both the wrapper and candy including linear measures and weight as well as determining the area of the wrapper, diameter and circumference of the candy. Correct strategies for measuring and determining area, diameter and circumference are used. The students clearly explain the steps that were followed and why.

Examples of Student Work not available

Time Requirements

- One class period

Resources

- Copies of the "Hershey's Kiss" recording sheet
- Bag or two of Hershey's kisses
- Scale, rulers, tape measures, calculators
- Clock with a second hand or stop watches
- Mathematics Rubric

ASSESSMENT (6C/7B).E

