

Melon Math

Objective

Students will estimate, measure and collect data using watermelons.

Procedures

1. Show students an assortment of melons in a variety of shapes, colors and sizes to conduct the following activities.
 - Create charts or graphs to organize the melons by color, shape, skin texture, type of seeds, number of seeds, taste, color of edible pulp. etc.
 - Conduct a class or grade level survey to determine favorite melon types.
2. As a class, students will estimate the weight of a watermelon (seeded, oblong) by comparing with the weight of other familiar objects.
 - Students develop strategies for measuring the length, circumference, weight, mass of the watermelon, using standard and non standard units of measure.
3. Divide students into groups of 4-5. Students will wash their hands thoroughly. Provide lab coats or aprons. Cover tables with plastic covering. Students will conduct various age-appropriate math operations using watermelon and seeds, as follows, and record their activities in math journals to share with the class.
4. Cut open a seeded watermelon. Students will use the seeds as manipulatives in the following activities:
 - Cut the watermelon into crosswise slices and provide each group with one or more slices.
 - Students will develop strategies for estimating and then counting the number of seeds within each group.
 - Students will use the seeds to develop addition and subtraction problems or multiplication and division problems within their groups. Student will write the problems and share them with the class.
 - Provide cups. Students will designate cups for ones, tens and hundreds and count seeds into cups to develop the concept of place value.
 - Cut slices into pieces to demonstrate fractions and common percents.
 - Discuss perimeter. Students develop strategies for measuring the perimeters of their melon slices
 - Students design appropriate graphs and graph the number of seeds for each group.

Oklahoma Academic Standards

PRE-KINDERGARTEN

Number & Operations:

1.1; 2.2,3,4. Algebra: 1.1,2.

Geometry and Measurement:

1.1; 2.1,2,3. Data &

Probability: 1.1,2

KINDERGARTEN

Number & Operations:

1.1,2,5,6; 3.1. Algebra: 1.1.

Geometry & Measurement:

1.1,2,3; 2.1,2,3. Data &

Probability: 1.1,2,3

GRADE 1

Number & Operations:

1.2,3,4,8; 2.1,3. Geometry &

Measurement: 2.1. Data &

Probability: 1.1,2,

GRADE 2

Numbers & Operations:

1.1,3; 2.1,2,4,5,6; 3.1,2.

Geometry & Measurement:

2.1,2; Data: 1.1,2,4

GRADE 3

Numbers & Operations:

1.1,4; 2.1,2,3,5,6,7,8; 3.2,3,4.

Geometry & Measurement:

1.1; 2.1,3,5,8. Data: 1

PE—1.5; 5.1,2; 6.2

GRADE 4

Numbers & Operations:

1.1,2,5; 2.1,3,4,5;

Measurement: 2.5

PE—5.1,2; 6.3