Process Standards Rubric

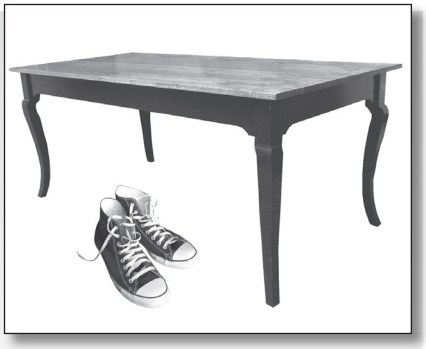
Data Analysis and Probability

Expectations Instructional programs from pre-kindergarten through grade 12 should enable all students to:	Exercise 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Drill Sheet 1	Drill Sheet 2	Review A	Review B	Review C
GOAL 1: Problem Solving • build new mathematical knowledge through problem solving; • solve problems that arise in mathematics and in other contexts; • apply and adapt a variety of appropriate strategies to solve problems; • monitor and reflect on the process of mathematical problem solving.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 2: Reasoning & Proof • recognize reasoning and proof as fundamental aspects of mathematics; • make and investigate mathematical conjectures; • develop and evaluate mathematical arguments and proofs; • select and use various types of reasoning and methods of proof.	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
GOAL 3: Communication • organize and consolidate their mathematical thinking through communication; • communicate their mathematical thinking coherently and clearly to peers, teachers, and others; • analyze and evaluate the mathematical thinking and strategies of others; • use the language of mathematics to express mathematical ideas precisely.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 4: Connections • recognize and use connections among mathematical ideas; • understand how mathematical ideas interconnect and build on one another to produce a coherent whole; • recognize and apply mathematics in contexts outside of mathematics.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 5: Representation • create and use representations to organize, record, and communicate mathematical ideas; • select, apply, and translate among mathematical representations to solve problems; • use representations to model and interpret physical, social, and mathematical phenomena.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

NAME: _____

Task Sheet 8

8a) Count all the tables in the classroom and record the number of tables with a |.



Example: **One table = |,**
three tables = |||

Tables:

My tally is _____ tables in the classroom.

b) Count all the shoes in the coat room and record the number of shoes with a |.

Shoes:

My tally is_____ shoes in the coat room.

c) How did tallying help you with your counting?

_____

_____

_____

_____

NAME: _____

Drill Sheet 2

The chart below shows the number of snowy days in the month of December.

Month	Snowy Days Tally
December	||||| ||||| ||||| |||

Using the information in the chart above, create a graph to show the number of snowy days in December.

Explore With Technology

Visit http://www.theweathernetwork.com/ to find the weather in your area. Tally and graph the information.

Fruit Groups

Open a box of Fruit Loops in your group.

Separate the colors into groups.

Count how many Fruit Loops you have of each color.

Graph your results.