

In an Elementary Mathematics Classroom:

- Students explore problems in depth.
- Students solve problems using multiple strategies.
- Students choose from a variety of concrete materials and appropriate technology, including calculators, as a natural part of their everyday mathematical work.
- Students express their mathematical thinking through drawing, writing, and talking.
- Students work in a variety of groupings - - individually, in pairs, in small groups, and as a whole class.

Mathematics Philosophy

Mathematics is a universal language that allows us to make sense of fundamental principles, thoughts, ideas, patterns, problems, and phenomena surrounding us and to communicate our understanding and resolutions of these concepts to others. In order to develop and enrich student understanding of mathematics, District 203 will provide a comprehensive and cohesive mathematics curriculum in which mathematical topics are explored and analyzed with significant depth.

The environment in every mathematics classroom will provide the following: active and responsible engagement in the learning of mathematics. An atmosphere of risk taking, in-depth investigation and analysis of intriguing situations and problems, ample opportunities for reflections and interaction, and connections to everyday life.

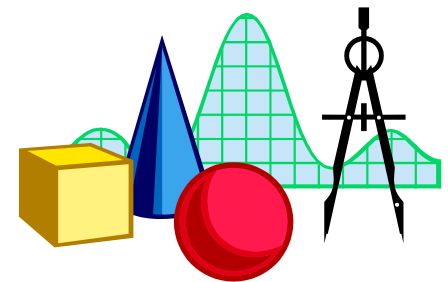
Instruction in every mathematics classroom will provide a rich variety of cognitively appropriate strategies and resources so that all students have opportunities to experience both success and challenge.

As a result of curriculum, environment and instruction, District 203 students will experience the utility, power and beauty of mathematics as they become proficient in using and applying fundamental mathematical concepts and skills including: computation, critical thinking, reasoning, and resourceful problem solving.

NAPERVILLE COMMUNITY UNIT SCHOOL DISTRICT 203



FIFTH GRADE TRIMESTER THREE MATHEMATICS CURRICULUM



Web Site: www.naperville203.org

Property of Naperville Community
Unit School District 203
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AREAS OF FOCUS

Number and Operation

- Collect, organize, and analyze data
- Interpret and communicate results of data analysis
- Organize and analyze data using tables and graphs
- Use graphs and tables to present information

Probability

- Determine, interpret, and apply probabilities of an event
- Demonstrate the ability to connect statistics and probability to other mathematical areas, disciplines, and life situations

RESOURCES

Data About Us
Statistics

Between Never and Always
Probability

MATERIALS

- Cubes
- Calculators
- Grid Paper
- Chart Paper
- Spinners
- Coins

CONCEPTS AND CONTENT IN THE FIFTH GRADE CLASSROOM Trimester Three

Students will use a variety of data collection sources to demonstrate an understanding of organizing and analyzing data.

Students will calculate mean, median, mode, and range with and without the use of calculators. With this knowledge students will determine why data may vary from one sample to the next.

Students will communicate information to an audience using a variety of methods such as explaining data in tables and graphs.

Students will study probability by exploring all possible outcomes of a simple event.

Students will determine whether an outcome is likely, unlikely, certain or impossible to occur.

HELP AT HOME

Parents can help their children.

Data:

- Find the average height of the people in your family.
- Count all the socks in the house. Divide the number by the number in your family. How many socks is the average? Who is closest to the average?
- Do a survey in your neighborhood. How many televisions do the average family have?
- Keep a chart of the temperature at 10 different times today. Make a graph.
- Point out examples of graphical displays in newspapers, magazines, and on TV, and ask your child how to interpret the information shown.

Probability:

- Roll two dice and subtract the numbers shown. Do this 30 times. What answer comes up the most?
- Roll 3 dice and multiply the numbers shown. Do this 20 times. What product comes up most often?
- Go to lunch at a fast food restaurant. Tally the number of people sitting in each booth. What is the probability that two people will be sitting in a booth?