

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.

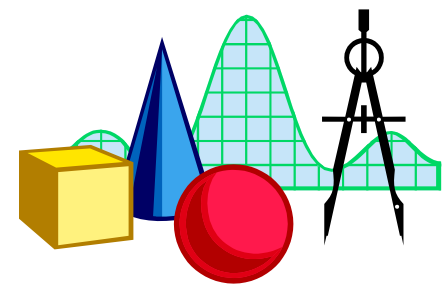
As a result of curriculum, environment and instruction, District 203 students will experience the utility, power and beauty of mathematics as they become proficient in using and applying fundamental mathematical concepts and skills including: computation, critical thinking, reasoning, and resourceful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

Property of Naperville Community
Unit School District 203
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NAPERVILLE COMMUNITY UNIT SCHOOL DISTRICT 203



FIFTH GRADE TRIMESTER ONE MATHEMATICS CURRICULUM



Web Site: www.naperville203.org

AREAS OF FOCUS

Number and Operation

- Demonstrate an understanding of the pattern of the base ten number system.
- Demonstrate an understanding of fraction and how they relate to each other and whole numbers using concrete models, drawings, and mathematical symbols.
- Perform addition and subtractions with fractions.
- Apply appropriate computational strategies and resources to problem solving and life situations.
- Understand the relationship between decimals, percents, and fractions.

RESOURCES

Bits and Pieces I

Understanding Rational Numbers

Constructing Ideas about Fractions,

Decimals, and Percents

Fractions and Decimals

MATERIALS

- Fraction Stax
- Fraction Circles
- Fraction Strips
- Addison Wesley Practice Masters

CONCEPTS AND CONTENT IN THE FIFTH GRADE CLASSROOM

Trimester One

Students will read and write decimals to the thousandth place.

Students will identify digits in the tenths, hundredths, and thousandths places.

Students will write and name common fractions as a part of a whole or as part of a collection.

Students will convert between mixed numbers and improper fractions.

Students will compare and order fractions, whole numbers and mixed numbers including fractions with unlike denominators.

Students will express fractions in lowest terms.

Students will recognize and use common fraction, decimal, and percent equivalence.

HELP AT HOME

Parents can help their children.

Number and Operation:

- Let your child help making a batch of cookies in which the recipe will need to be doubled or decreased.
- After baking the cookies divide the cookies according to a similar plan listed below:
1/8 to Grandma
1/4 to your neighbor
1/2 to the teacher
1/16 to your best friend
1/16 to snack on a home
- In the Sports section of the newspaper locate baseball batting averages or football average yards gained per down and arrange them in ascending or descending order.
- Pick a card from a deck. Record if it is black or red and record the suit. Do this 10 times. Replace the card each time. Then write what fraction of the cards drawn was red? What fraction was black? Hearts? Spades?
- Lay down two cards from the deck side by side. Determine what fraction can be made using these two numbers. If an improper fraction can be made write it as a mixed number. If the fraction can be written in lowest terms be sure to do so.