

Incoming First Graders

- Count by 1's to 100
- Identify numbers 0-20
- Write numbers 0-20
- Break any number 1-9 and show what is needed to make 10
- Take apart numbers 11-19 and show how many tens and ones are in the numbers
- Use objects and drawings to add and subtract within 10

Incoming Second Graders

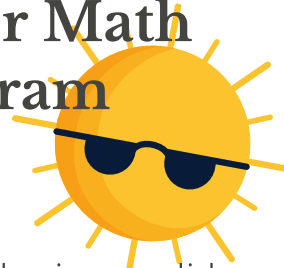
- Count to 120 starting with any number
- Read and write numbers within 120
- Add and subtract within 20, knowing facts within 10 from memory
- Use addition and subtraction within 20 to solve word problems
- Understand that a two-digit number is made up of tens and ones (for example: 42 is the same as four tens and two ones)
- Identify and describe shapes by their attributes

Incoming Third Graders

- Add and subtract within 20 fluently
- Add and subtract within 100 using strategies based on place value
- Solve addition and subtraction word problems with one or two steps
- Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies
- Tell time to the nearest minute
- Estimate and measure lengths of objects using units of inches, feet, centimeters, and meters
- Identify triangles, quadrilaterals, pentagons, hexagons, and cubes

Summer

Superintendent's Summer Math Program



Dear Parents,

Did you know that having a solid math foundation is vital for your child's academic and future success? We live in a mathematical world where the level of mathematical thinking and problem solving needed to succeed is increasing everyday. Students who understand and can do math well will have opportunities that others do not. (NCTM)

In order to maintain the math skills that your child learned this year, it is recommended that you spend time practicing during the summer months.

The most important skills to review are included along with ideas and opportunities to practice these skills.

An electronic copy of this program can be found on the district's website as well as your school's website.

Incoming Fourth Graders

- Add and subtract within 1,000 using strategies and algorithms
- Multiply within 100 (including facts through 10×10)
- Divide within 100 using an understanding of the relationship between multiplication and division
- Solve a one and two-step word problems involving addition, subtraction, multiplication, and division
- Understand fractions to represent numbers equal to, less than, and greater than one
- Recognize and generate simple equivalent fractions (For example: $\frac{1}{2} = \frac{2}{4}$)

Incoming Fifth Graders

- Add and subtract multi-digit numbers using strategies including the U.S. algorithm
- Multiply and divide fluently through the 12's tables
- Solve multi-step word problems involving addition, subtraction, multiplication, and division
- Add and subtract fractions with like denominators (for example: $\frac{1}{6} + \frac{3}{6} = \frac{4}{6}$)
- Understand and show how two different fractions can be equal (For example: $\frac{2}{10} = \frac{1}{5}$)
- Multiply fractions by whole numbers (For example: $3 \times \frac{1}{3} = 1$)

Incoming Sixth Graders

- Read and write decimals to the thousandths
- Compare decimals to the thousandths
- Add and subtract decimals through hundredths
- Multiply multi-digit numbers
- Multiply a decimal number by a decimal number
- Divide whole numbers
- Graph ordered pairs in Quadrant 1
- Add, subtract, and multiply fractions and mixed numbers

WEBSITES

- <http://bedtimemath.org> (grades K-6)
 - This site has quick and engaging daily activities that include a story and math questions focusing on fun, real-world math topics.
- www.uen.org/k-2interactives/math.shtml (grades K-2)
 - This site includes a wide variety of games and activities related to tangram puzzles, patterns, sorting, adding, subtracting, geometry, and place value.
- <https://www.uen.org/3-6interactives/math.shtml> (grades 3-6)
 - This site include a wide variety of games and activities related to arithmetic, expressions, factoring, equations, and graphing.
- <https://www.abcya.com/> (grades K-6)
 - This site has a wide variety of math games for K-6 students.
- <http://teacher.scholastic.com/maven/index.html> (grades 3-6)
 - If you like logic games, this site is for you.
- <http://www.setgame.com/set/puzzle> (grades 3-6)
 - A new game of set each day.
- https://math.imaginelearning.com/users/sign_in (grades K-6)
 - Your child may continue to use their student login throughout the summer.
- <https://www.dreambox.com/> (grades K-6)
 - Your child may continue to use their student login throughout the summer.
- <https://www.prodigygame.com/main-en/> (grades 3-6)
 - Interactive games that help build math skills.
- <https://www.ixl.com/> (grades K-6)
 - A personalized learning platform with a comprehensive curriculum.

AND SINCE YOU'RE GOING TO READ, HOW ABOUT COMBINING READING WITH MATH!

Number Sense and Operations

- Quack and Count by Keith Baker
- Elevator Magic by Stuart J. Murphy
- One is a Snail, Ten is a Crab by April Pulley Sayre and Jeff Sayre
- Albert Adds Up! by Eleanor May
- Ten Friends by Bruce Goldstone
- Feast for 10 by Cathryn Falwell
- Eric Carle's 123 by Eric Carle
- Zero is the Leaves on the Trees by Betsy Franco
- How Do Dinosaurs Count to Ten by Jane Yolen and Mark Teague
- Hippos Go Berserk by Sandra Boynton

Patterns

- Anno's Magic Seeds by Mitsumasa Anno
- Two of Everything: A Chinese Folktale by Lily Toy Hong
- Over, Under and Through by Tana Hoban
- The Best Bug Parade by Stuart J Murphy
- Ots and Lots of Zebra Stripes by Stephen R Swinburne

Geometry and Measurement

- The Shape of Things by Dayle Ann Dodds
- The Greedy Triangle by Marilyn Burns
- Mouse Shapes by Ellen Stoll Walsh
- Round is a Tortilla by Roseanne Thong
- When a Line Bends, a Shape Begins by Rhonda Growler Greene
- Who Eats First? by Ae-hae Yoon
- Just a Little Bit by Ann Tompert

There are many other ways to use math in real life over the summer. These are just a few suggestions. Feel free to make up your own ideas! Just remember to keep track of what you do, and turn it in to your teacher in the Fall.

BOARD GAMES

Basic Operations:

- Monopoly
- Life
- Payday
- Tripoly
- Krypto

Logical Reasoning

- Clue
- Stratego
- SuDoKU

Coordinate Graphing:

- Battleship

Patterns and Geometry:

- Sequence
- Blokus
- Geoshapes
- Quirkle
- Set

Strategy Games:

- Mancala
- Connect 4
- Chess
- Checkers

Probability:

- Deal or No Deal

Math with Cards and Dice:

War: Use playing cards or dice. Throw down two cards, or dice. The person who finds the sum, product, or difference (depending on which skill you are practicing) of the two cards first, keeps the pair.

Real-Life Math Activities:

Before you take off on that family trip....

Use an atlas to figure out how many miles you will be driving. What's your car's fuel efficiency? How fast did you get there?

Take me out to the ballgame!

Take in a summer baseball game- either at the ballpark or on TV. Baseball's a natural place to see math in action. From a pitcher's ERA to a hitter's on-base percentage.

Take a trip to the grocery store!

Estimate the total bill based on prices of what you are purchasing. How much does that bunch of bananas weigh? How much will it cost? What is the unit price of your favorite box of cereal? What is the unit of measurement, and how much is the total cost of that box?

In the kitchen- cook up some math!

Measure all of the ingredients (especially the liquids in the glass measuring cups).

Challenge yourself to double the recipe or cut the recipe in half- fractions are everywhere!



SUPERINTENDENT'S SUMMER MATH PROGRAM



You ask your child to read over the summer, why not have them practice math skills too! The Superintendent would like to challenge each student to practice math throughout their summer break.

To track your practice, cross off one box for every 10 minutes you spend practicing math. For example, If you spend 30 minutes playing Monopoly, cross off three boxes. Just think, if you cross off every box, you will have spent 7 hours practicing math this summer! Once complete, return this paper to your teacher in August to receive a **Superintendent's Summer Math Award**.

10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes
10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes
10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes
10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes	10 Minutes
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Name _____ Grade _____

Parent/Guardian Signature _____