

Get ready to discover mathematics all around you this fall!

Just like reading, regular practice with problem solving, computation, and math facts will maintain and strengthen the mathematic gains you have made over the school year.

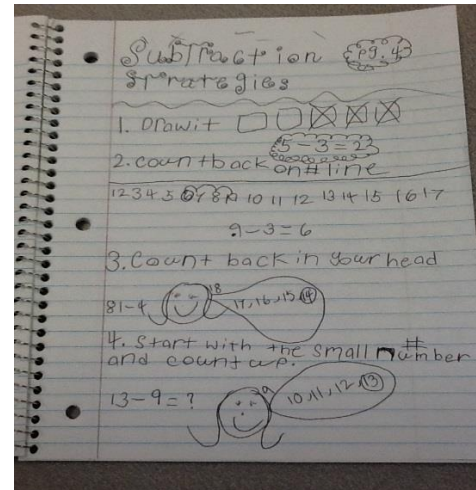
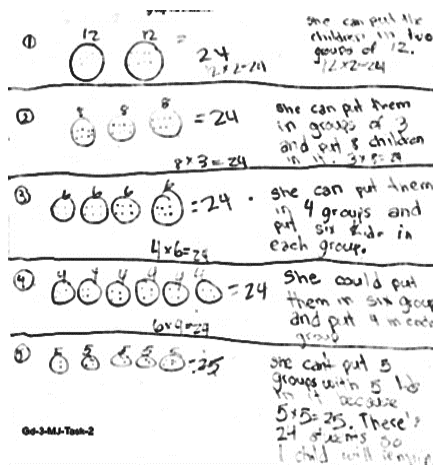
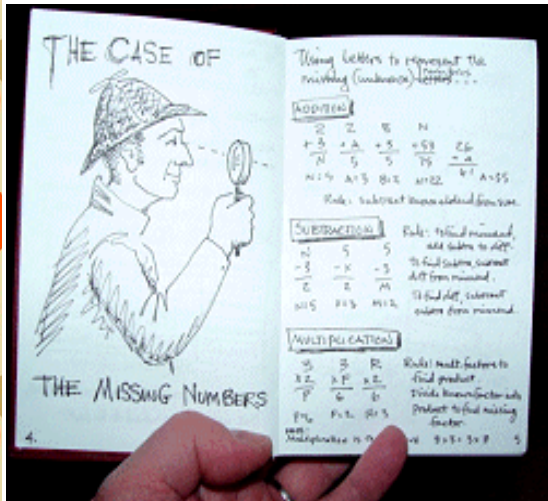
Enjoy these activities to explore problem solving at home. The goal is for you to have fun thinking and working collaboratively to communicate mathematical ideas.

While you are working ask how the solution was found and why a particular strategy helped you solve the problem.

Math Journals are an excellent tool for helping children record their perceptions about math and the strategies they employ to arrive at a solution. A math journal is a book in which children record their math work and thinking. At home a math journal can be used to:

- Record the solutions to math problems or projects, along with the strategy and thought processes used to arrive at the solution
 - For instance a math problem or project may require some time (perhaps days) to arrive at a solution and a math journal helps children to reflect on their thought processes as well as strategies that did and did not work.
- Write about learning: When children students are asked to reflect on their math learning. For example, children may be asked to write about "what you already know about" before beginning an activity or "think about what you did today, what you learned, and any questions you have", or "the three most important things you learned from this activity." These opportunities to journal provide children with metacognitive occasions to think about their thinking or consider points that were not clear. As well as to return at a later time to clarify their thinking.

By dating entries the journal provides a chronological record of the development of a child's mathematical thinking throughout the year.



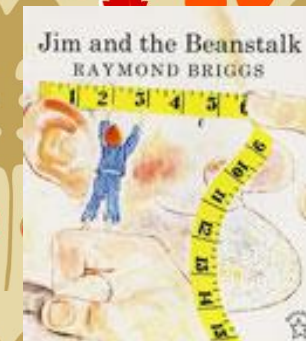
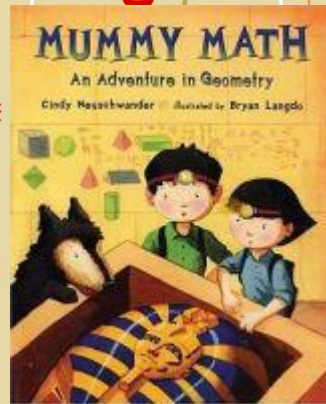
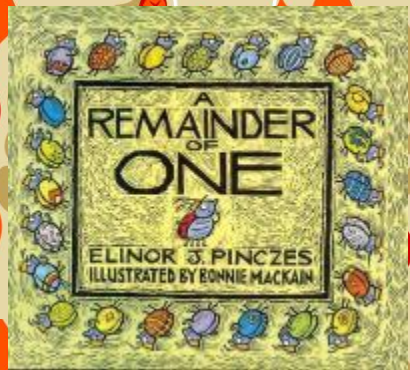
<http://teacherweb.com/MA/LexingtonPublicSchools/EstabrookMath/apt6.aspx>

Cool Math Books to Read:

The \$1.00 Word Riddle Book by Marilyn Burns

Fraction Fun by David Adler

The Best of Times by Greg Tang



Math Fall Fun Activities (reading too)

<http://homeschool.rebeccareid.com/2014/09/19/learning-activities-for-school-aged-children/>

Math Literature Connection

Educational research has shown that students taught mathematics via connections to children's literature become better critical thinkers and problem solvers, and become better able to connect mathematical ideas to personal and real-life experiences. Check out these delightful stories that combine entertainment with Math.

Title	Publisher	Author	Content
<i>2 X 2 = BOO</i>	Holiday House	Leedy	Multiplication
<i>8 O'Clock</i>	Scholastic		Time
<i>10 for Dinner</i>	Scholastic	Bogart	Addition, measurement
<i>12 Circus Rings</i>	Vogel/H.B.	Chwast	counting, ordinal
<i>17 Kings & 42 Elephants</i>	Puffin Pied Piper	Margaret Mahv	Counting, multiplying
<i>26 letters and 99 cents</i>	Greenwillow	Hobas	Proportion
<i>100th Day Worries</i>	Simon & Schuster	Cuyler	Counting
<i>The 100th Day of School</i>	Scholastic	Medearis	Counting
<i>Alexander and the Terrible, Horrible, No Good, Very Bad Day</i>	Scholastic	Viorst	probability, measurement
<i>Alexander, Who Used to Be Rich Last Sunday</i>	Aladdin Paperbacks	Viorst	Money
<i>Amanda Bean's Amazing Dream</i>	Scholastic	Neuschwander	multiplication
<i>Among the Odds & Ends</i>	Farrar, Straus Giroux	Turner	patterns, odd & even
<i>A My Name is Alice</i>	Puffin	Bayer	patterns, sequencing

Fall Family Fun

Gloria Cuellar-Kyle

Grade 4

<i>Annie, Bea, and Chi Chi DOLores</i>	Orchard Books	Maurer	Patterns & Graphing
<i>Animalia</i>	Abrahms	Base	prob. solving
<i>Anno's Counting</i>	Harper Collins	Anno	Counting
<i>Anno's Journey</i>	Putnam & Grossett	Anno	
<i>Anno's Magic Seeds</i>	Harper Collins	Anno	Counting, Addition
<i>Anno's Math Games</i>	Harper Collins	Anno	
<i>Anno's Mysterious Multiplying Jar</i>	Philomel	Anno	multiplication, factorials
<i>Actic Fives Arrive</i>	Scholastic	Pinczes	patterns & counting
<i>Arror to the Sun</i>	Viking	McDermott	patterns, geometry
<i>The Baker's Dozen</i>	Ataddin	Shepard	counting
<i>Bat Jamboree</i>	Scholastic	Appelt	Counting
<i>Bella's Mystery Book (Set of Cards)</i>			
<i>Beeny's Pennies</i>	Dell	Brisson	Money
<i>The Best Bug Parade</i>	Harper/Trophy	Stuart Murphy	Measurement, comparison
<i>Betcha!</i>	HarperTrophy	Murphy	Estimating
<i>Big Buck Adventure</i>	Charlesbridge	Gil	money
<i>The Big Green Pocketbook</i>	Harper Trophy	Ransom	Money
<i>Big Numbers</i>	Millbrook	Packard	
<i>The Biggest Nose</i>	Houghton Mifflin	Caple	measurement
<i>Biggest, Strongest, Fastest</i>	Houghton Mifflin	Jenkins	measurement

Fall Family Fun

Gloria Cuellar-Kyle

Grade 4

<i>The Brand New Kid</i>	Doubleday	Couric	
<i>Bugs on the Go</i>	Little Simon	Carter	Counting
<i>Bunches & Bunches of Bunnies</i>	Scholastic	Louise Mathews	counting
<i>Bugs at Play</i>	Little Simon	Carter	counting
<i>Bunny Money</i>	Puffin Books	Rosemary Wells	money
<i>The Button Box</i>	Puffin	Reid	patterns & sorting
<i>Caps for Sale</i>	Harper Collins	Slobodkina	Counting, combinations, Sorting
<i>Cat Up a Tree</i>	Houghton Mifflin	Hassett	Counting
<i>Cereal Math</i>	Scholastic	Yeatts	
<i>Chicka Chicka Boom Boom</i>	Ataddin	Bill Martin Jr	primary counting
<i>Chrysanthemum</i>	Mulberry	Henkes	Patterns
<i>Circle</i>	Addison Wesley	Ross	Geometry
<i>A Cloak for the Dreamer</i>	Scholastic	Friedman	Geometry, tesslations
<i>The Coin Counting Book</i>	Charlesbridge	R. L. Williams	money
<i>Cookie's Week</i>	Paperstar	Ward	Calendar
<i>Counting On Frank</i>		Clements	estimating, measurement

Games To Play (You will need a deck of cards, with all the face cards removed. Treat the Ace as the number 1.)

1. **Multiplication War** - Deal out all the cards equally between 2 or 3 players. Each player turns over 2 cards and multiplies the numbers together. The person with the higher product wins the pile of cards. If you have the same product repeat the procedure. The winner takes all of the cards.
2. **Multiplication Strikeout** is like hangman, but with numbers! It will have you guessing the digits in a multiplication question. Try to find out what multiplication question it is, with as few strikes as possible! Compare your stats with the rest of the world! Can you beat everybody else? Can you guess the mystery multiplication puzzle with no strikes at all? And..... can you do it *without* a calculator??
3. **Division- Envision** the concept of division. Choose a number and make as many division problems as possible from that number. Use the handy draw tool to make groups from stars. For example, if you were to choose 16, you would see 16 stars on the stage. Simply draw circles around four groups of four stars to make the problem $16 \div 4 = 4$. See how long it takes you to divide 16 by as many numbers as possible that divide evenly. <http://mrnussbaum.com/envision-division-ipad.html>
4. Division - <http://www.sheppardsoftware.com/mathgames/menus/division.htm>
5. **Close to 1000** - Deal 8 cards to each player. Use any 6 of your cards to make two 3-digit numbers. Try to get a sum that is close to or equal to 1000. Write these 2 numbers in your journal. Your score is the difference between your number and 1000.
Example: Your eight cards are 1, 5, 4, 3, 1, 8, 3, 8
You can combine $148 + 853 = 1001$. Your score is 1 since the difference between 1001 and 1000 is 1. Discard the 6 used cards and pick 6 new cards. Whoever has the lowest total score after 5 rounds wins the game.
6. Fractions - <http://www.sheppardsoftware.com/math.htm#fractions>
7. **Fraction Dominoes** - <http://www.dr-mikes-math-games-for-kids.com/fractions-dominoes.html>
8. **At Home Hands-On Fraction Activities** - <http://jimmie.squidoo.com/hands-on-fractions>
9. **Tony's Fraction Pizza Shop**: In Tony Fraction's Pizza Shop, learners play the role of a pizza shop owner who must fulfill as many of his customer orders as possible in five minutes. Tony's customers, however, order their toppings in unusual fractions and learners must apply knowledge of equivalent fractions to be successful. http://mrnussbaum.com/pizza_game/

Other Games to Play:

Monopoly, Othello, Battleship, Connect Four, Mastermind, Mancala, Legos, K'Nex, Simon, Yahtzee, Rummikub, Check out the PDF: [Making Math More Fun Board Games](#) that contains a variety of board games for different grade levels.

Fun Websites to Explore All Year Long:

<http://mathwire.com/problemsolving/probs34.html>

<http://www.mathblaster.com/teachers/math-problems/4th-grade-math-problems>

<http://www.funbrain.com>

<http://www.setgame.com>

<http://www.aplusmath.com>

<http://www.multiplication.com>

<http://www.coolmath4kids.com>

<http://www.mathplayground.com>

<http://www.illustrations.nctm.org>

Click on **ACTIVITIES**.

Click on **3-5** and press **SEARCH**.

Brain Teasers

<http://www.eduplace.com/kids/mhm/brain/gr4/>

<http://www.yummymath.com/>

