

Rising Grade 5 Math Enrichment

In addition to *Dreambox Math*, students can use the following resources to enrich their math learning from home.

Math Words and Ideas (MWIs): MWIs are short videos and displays in kid-friendly language that explain math concepts students have been working on. Sometimes there is an orange “Directions” arrow you can click for more information near the top of the page, and/or multiple tabs you can select in the bottom right corner. The last tab is often a “Do It Yourself,” which should provide additional practice.

Math Words and Ideas	
Multiplication/Division Representing Multiplication with Arrays Factors & Multiples Prime and Composite Numbers Factors Multiplicative Comparison Square Numbers Strategies for Solving Multiplication Problems Division Situations Division Strategies Unmarked Arrays Remainders: What to Do With the Extras? Division and Multiplication Multi-step Problems with Larger Numbers Converting Measurement	Addition & Subtraction Addition Strategies U.S. Standard Algorithm for Addition U.S. Standard Algorithm for Subtraction Place Value: Large Numbers Subtraction Problem Types Rounding Large Numbers Comparing Addition Notation Subtraction Strategies
Fractions & Decimals Fractions of an Area What is a fraction? Generating equivalent fractions Fractional parts Halves of different wholes Representing decimals Place value: decimals Tenths and hundredths	Using fractions for quantities greater than 1 Comparing fractions Comparing decimals Adding fractions with like denominators Subtracting fractions with like denominators Adding and subtracting mixed numbers Adding tenths and hundredths Multiplying fractions by whole numbers

Games: These are games played in the classroom, and they have two options for playing, an online version and a paper version. In the online games, there is an orange “Directions” arrow you can click for more information near the top of the page, and sometimes multiple tabs you can select in the bottom right corner. Not all games have a recording sheet. Sometimes the online game works better with a paper recording sheet (or just record on notebook paper).

Games	
Online	Paper version
Factor Pairs <i>Multiplication Fact Review</i>	Factor Pair Directions Array Cards (Students received these in October.)
Multiple Turn Over <i>Division Review</i>	Multiple Turn Over Directions Multiple Cards Recording Sheet
Small Array/Big Array <i>Multiplication</i>	Small Array/Big Array Directions Array Cards (same as above set) Recording Sheet
Missing Factors <i>Division</i>	Missing Factors Directions , Array Cards (same as above set) Recording Sheet
Close to 1,000 <i>Addition</i>	Close to 1000 Directions Digit Cards Recording Sheet
Capture Fractions <i>Fractions</i>	Online only (paper version requires cards that students make in class)
Decimal Compare <i>Decimals</i>	Decimal Compare Directions Decimal Cards 10 x 10 Squares
Fill Two <i>Decimals</i>	Fill Two Directions Decimal Cards 10 x 10 Squares
Factor Bingo <i>Division</i>	Factor Bingo Directions and Boards Factor Bingo Cards

Other Resources

Websites:

- <https://investigations.terc.edu/at-home-resources/> from our math curriculum authors
- [YouCubed.org](https://www.youcubed.org) (a fantastic website, based at Stanford University and FILLED with resources for parents/families, teachers, and students)
- [National Council of Teachers of Mathematics Figure This!](https://www.nctm.org/figure-this/) (a website for parents/families)
- [NRICH Maths](https://nrich.maths.org) (nrich.maths.org; Mathematics resources for children, parents and teachers to enrich learning. K-12)
- [Greg Tang Math](https://www.gregtangmath.com)
- [Which One Doesn't Belong?](https://www.woddb.ca) (woddb.ca; a collection of puzzles to support the development of productive mathematical conversation)
- [Bedtime Math](https://www.bedtimemath.org) (bedtimemath.org; a free online app that provides free, 5-minute math tasks for kids and families to work on each day)

Literature for children (many of these are available as video read alouds online):

- *The Grapes of Math* by Greg Tang
- *Place Value* by David Adler
- *Sir Cumference and the First Round Table* by Cindy Neuschwander and Wayne Geehan
- *Triangle* by Mack Barnett and John Klassen
- *Infinity and Me* by Kate Hosford and Gabi Swiatkowska
- *Billions of Bricks* by Kurt Cyrus
- *Each Orange Had 8 Slices* by Paul Giganti
- *How Big is a Foot?* By Rolf Myller

This is just a very small sample. See more at the websites

<https://www.weareteachers.com/picture-books-about-math/>

and

<https://www.kidsmathtalk.com/post/15-picture-books-that-help-build-a-positive-mathematical-identity>.

Games available for purchase (grade level/s):

- Rush Hour (K-5)
- Chocolate Fix (K-5)
- Blokus (2-5)
- Sequence(3-5)
- Prime Climb (4-5)
- Set (3-5)
- 24 Game (many variations on this game, grades 3-12)
- Metaforms (K-5)
- Uno (2 and up)
- Qwirkle (1 and up)
- Yahtzee (2 and up)
- Connect 4 (K and up)

- Kanoodle

Articles:

- [The Three Best Math Questions to Ask Your Kids](#)
- [Math Conversations at Home](#)
- [Helping With Math Homework](#)
- [Parents and Teachers Pass on Math Anxiety to Kids Like a Virus. Especially to Girls](#) blogpost on the A Mighty Girl website (amightygirl.com)
- [6 Ways to Support Your Child's Math Learning](#) by Jo Boaler (Stanford University)
- [Fluency Without Fear](#) by Jo Boaler
- [Memorizers are the Lowest Achievers](#), Hechinger Report
- [Twelve Steps to Increase Your Child's Math Achievement and Make Math Fun](#) by Jo Boaler

Podcast:

- <https://www.kidsmathtalk.com/podcast>

Books:

- *A Parent's Guide to Understanding Math Education in Today's Schools* by Catherine Fosnot
- *Mathematical Mindsets* by Jo Boaler
- *What's Math Got to Do With It?* by Jo Boaler
- *The Mathematician's Lament* by Paul Lockhart