



**Middle School**

**Mathematics**  
At-Home **Resources**



Online or screen time resources



Offline/no screen time resources

**MIDDLE SCHOOL MATH RESOURCES (SCREEN TIME OR WITH TECHNOLOGY)**



Name of Site and Link	Description/Directions/Explanation	Course
<p><b>Youcubed</b> <a href="https://www.youcubed.org/online-student-course/">https://www.youcubed.org/online-student-course/</a></p>	<p>How to Learn Math is a free class for learners of all levels of mathematics. There are 6 sessions; the first three are approximately 10 minutes long and the last three approximately 20 minutes long.</p> <p>Main concepts to learn in this course:</p> <ul style="list-style-type: none"> <li>• Knocking Down the Myths About Math</li> <li>• Math and Mindset</li> <li>• Mistakes and Speed</li> <li>• Number Flexibility, Mathematical Reasoning, and Connections</li> <li>• Number Patterns and Representations</li> <li>• Math in Life, Nature and Work</li> </ul>	<p>All MS Math courses</p>
<p><b>NRich Interactive Math Games</b> <a href="https://nrich.maths.org/9465">https://nrich.maths.org/9465</a></p>	<p>This site has interactive math games including topics such as angles, factors, ratios, linear graphs, integers, and vectors. It also includes problems solving, number sense and strategy games.</p>	<p>All MS Math courses</p>
<p><b>KenKen Math Puzzles</b> <a href="http://www.kenkenpuzzle.com/">http://www.kenkenpuzzle.com/</a></p>	<p>This site offers online KenKen Math number puzzles. You can choose the size of the puzzle and the operations used.</p>	<p>All MS Math courses</p>
<p><b>Solve Me Puzzles</b> <a href="https://solveme.edc.org/">https://solveme.edc.org/</a></p>	<p>This site includes equation mobiles, number sense riddles and number puzzles.</p>	<p>All MS Math courses</p>
<p><b>Math Pickle</b> <a href="https://mathpickle.com/organized-by-grade/">https://mathpickle.com/organized-by-grade/</a></p>	<p>MathPickle.com is a free online resource of original mathematical puzzles, games and unsolved problems for K-12.</p>	<p>All MS Math courses</p>

**Teaching and Learning**

<p><b>Math PhET Simulations</b> <a href="https://phet.colorado.edu/en/simulations/category/math">https://phet.colorado.edu/en/simulations/category/math</a></p>	<p>PhET simulations provide fun, interactive research-based simulations for use in K-12 and college STEM education.</p>	<p>All MS Math courses</p>
<p><b>Cool Math</b> <a href="https://www.coolmathgames.com/">https://www.coolmathgames.com/</a></p>	<p>This site has interactive math games. It includes logic, number sense, and strategy games.</p>	<p>All MS Math courses</p>
<p><b>IXL Texas Math</b> <a href="https://www.ixl.com/standards/texas/math">https://www.ixl.com/standards/texas/math</a></p>	<p>In this site math practice feels like play in the form of games and other fun activities.</p>	<p>All MS Math courses</p>
<p><b>Balancing Your Checkbook</b> <a href="http://www.themint.org/teens/balance-your-checking-account.html">http://www.themint.org/teens/balance-your-checking-account.html</a></p>	<p>Practice balancing a checkbook with this fun, informative simulation</p>	<p>Grades 6 - 8</p>
<p><b>Charge!</b> <a href="http://senseanddollars.thinkport.org/games/charge/home.html">http://senseanddollars.thinkport.org/games/charge/home.html</a></p>	<p>So what's the real cost of credit? Let's go shopping and find out.</p>	<p>Grades 6 - 8</p>
<p><b>Determine Your Budget</b> <a href="http://www.themint.org/teens/determine-your-budget.html">http://www.themint.org/teens/determine-your-budget.html</a></p>	<p>Don't plan on taking the entire paycheck home. Learn how budgeting is an art!</p>	<p>Grades 6 - 8</p>
<p><b>Check It Out!</b> <a href="http://senseanddollars.thinkport.org/games/checkitout/home.html">http://senseanddollars.thinkport.org/games/checkitout/home.html</a></p>	<p>Ever wonder what it would be like to be out of school and on your own? Play the Check It Out game and find out!</p>	<p>Grades 6 - 8</p>
<p><b>Integer Conundrum</b> <a href="https://www.mathplayground.com/number_conundrum_integers.html">https://www.mathplayground.com/number_conundrum_integers.html</a></p>	<p>Complete the number puzzle using integers. The number in each block is the sum of the two numbers directly underneath.</p>	<p>Grade 6</p>
<p><b>Fraction Models</b> <a href="https://www.nctm.org/Classroom-Resources/Illuminations/Interactive/Fraction-Models/">https://www.nctm.org/Classroom-Resources/Illuminations/Interactive/Fraction-Models/</a></p>	<p>Explore different representations for fractions including improper fractions, mixed numbers, decimals, and percentages. Additionally, there are length, area, region, and set models.</p>	<p>Grade 6</p>
<p><b>Area of Triangles</b> <a href="https://www.nctm.org/Classroom-Resources/Illuminations/Interactive/WSP-Area-of-Triangles/">https://www.nctm.org/Classroom-Resources/Illuminations/Interactive/WSP-Area-of-Triangles/</a></p>	<p>Explore how the area of a triangle relates to the area of a parallelogram.</p>	<p>Grades 6 - 8</p>
<p><b>Lobster Diver HD (for ipad only)</b> <a href="https://apps.apple.com/us/app/lobster-diver-hd/id416610863">https://apps.apple.com/us/app/lobster-diver-hd/id416610863</a></p>	<p>This app, designed for grades 3-8, is great for reading numbers, understanding fractions, reading a number line, and comparing and ordering fractions</p>	<p>Grade 6</p>
<p><b>Middle School Math 7<sup>th</sup> Grade (for ipad only)</b> <a href="https://apps.apple.com/us/app/middle-school-math-7th-grade/id457613673">https://apps.apple.com/us/app/middle-school-math-7th-grade/id457613673</a></p>	<p>Guide the monkey down the ladders to the end of a level. Math topics included are negative numbers, absolute value, and order of operations. There are three levels of difficulty for each topic.</p>	<p>Grade 7</p>

**Teaching and Learning**

<p><b>Middle School Math 8th Grade</b> (for ipad only) <a href="https://apps.apple.com/us/app/middle-school-math-8th-grade/id669529866">https://apps.apple.com/us/app/middle-school-math-8th-grade/id669529866</a></p>	<p>Help the monkey jump across the logs to the end of the level. Math topics included: rational and irrational numbers, radicals and exponents, scientific notation, and graphs.</p>	<p>Grade 8</p>
<p><b>Middle School Algebra</b> <a href="https://apps.apple.com/us/app/middle-school-algebra/id58244654">https://apps.apple.com/us/app/middle-school-algebra/id58244654</a></p>	<p>Bounce the monkey up the steps as high as you can. Answer questions correctly to keep going.</p>	<p>Grade 8 and Algebra 1</p>
<p><b>Algebra Pro - Complete Workbook with ShowMe Lessons (for ipad only)</b> <a href="https://tinyurl.com/qvg6ds6">https://tinyurl.com/qvg6ds6</a></p>	<p>This app includes over 100 practice questions with instant "ShowMe" lessons: if you get stuck on a problem, just tap "ShowMe" and see a step-by-step animation of how to solve the problem, instantly.</p>	<p>Algebra 1</p>
	<p><b>Watch a movie</b> – These movies are about math, mathematicians or include how math is used in our everyday lives. Many are based on true stories. As you watch the movie think about where you see math applied in the context of the movie and/or what impact does mathematical understanding have on the characters in the movie.</p> <ul style="list-style-type: none"> <li>• October Sky (PG)</li> <li>• Back to the Future (PG)</li> <li>• Hidden Figures (PG)</li> <li>• Queen of Katwe (PG)</li> <li>• Stand and Deliver (PG)</li> <li>• Apollo 13 (PG)</li> <li>• Moneyball (PG-13)</li> <li>• A Beautiful Mind (PG-13)</li> <li>• The Man Who Knew Infinity (PG-13)</li> <li>• The Martian (PG-13)</li> <li>• Proof (PG-13)</li> <li>• The Imitation Game (PG-13)</li> <li>• Donald in Mathmagic Land (free on youtube)</li> </ul>	<p>All MS Math courses</p>

**MATH RESOURCES (NO SCREEN TIME OR NO TECHNOLOGY)**



<p><b>Plan a home improvement project</b> - determine what materials, the amount of materials you would need, and how much the project would cost. For example:</p> <ul style="list-style-type: none"> <li>• Painting a room</li> <li>• Building a desk, bookcase, etc.</li> <li>• Putting in new flooring</li> <li>• Building a garden</li> </ul>	<p>All MS Math Courses</p>
<p><b>Play a card game</b> – Solitaire, Rummy, Hearts, Speed, etc. Directions for over 40 games can be found on the following link: <a href="https://playingcarddecks.com/blogs/all-in/40-great-card-games-for-all-occasions">https://playingcarddecks.com/blogs/all-in/40-great-card-games-for-all-occasions</a></p>	<p>All MS Math Courses</p>
<p><b>Play a number puzzle</b> – KenKen, Soduko, Kakuro, Numbrix</p> <ul style="list-style-type: none"> <li>• Printable puzzles can be found on the following sites: <ul style="list-style-type: none"> <li>• <a href="https://www.puzzlesandbrains.com/index.php">https://www.puzzlesandbrains.com/index.php</a></li> <li>• <a href="https://parade.com/numbrix/">https://parade.com/numbrix/</a></li> </ul> </li> </ul>	<p>All MS Math Courses</p>
<p><b>Plan a business</b></p> <ul style="list-style-type: none"> <li>• For example: A grass mowing business where you are going to mow the neighbors’ yards. How much will you charge? Will your cost be based on the size of the yard? Create a plan.</li> </ul>	<p>All MS Math Courses</p>
<p><b>Play a board game</b> – Chess, Checkers, Blockus, Set, Yahtzee, Othello, Mastermind, Racko, etc.</p>	<p>All MS Math Courses</p>
<p><b>Plan a meal</b> – you could just plan the meal or plan and cook the meal</p> <ul style="list-style-type: none"> <li>• Find a recipe, and double or half the recipe</li> </ul>	<p>All MS Math Courses</p>