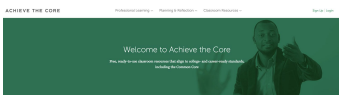
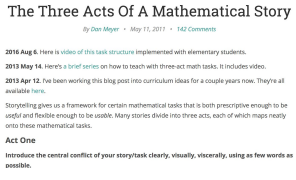
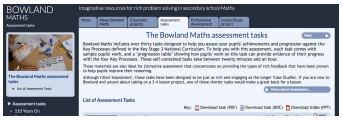
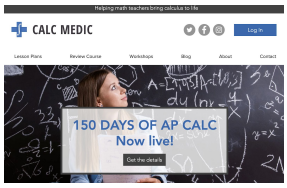
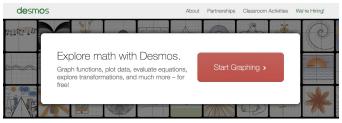
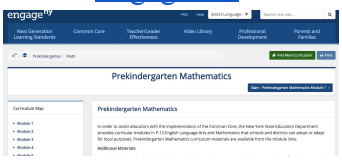
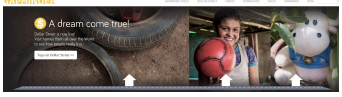
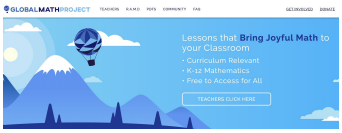
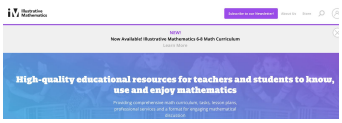
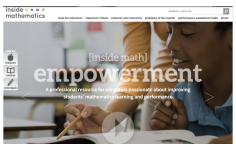
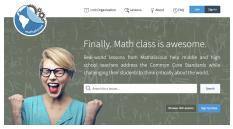
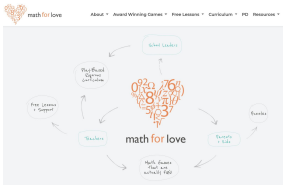
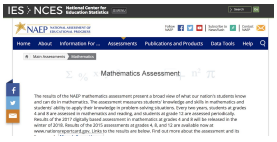
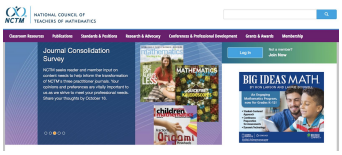
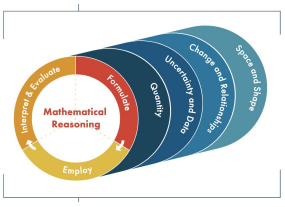
Mathematics Resources Links

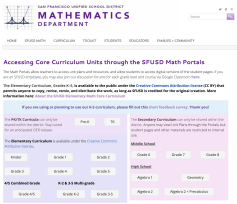
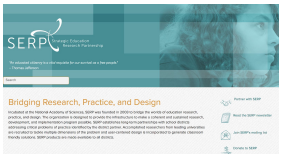
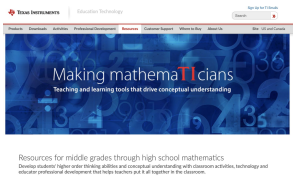
Name	Audience Grade Level, TOSAs, & Administrators	Link
Achieve the Core 	K - 12 TOSA's Admin	Student Achievement Partners (SAP) is a nonprofit organization dedicated to helping teachers and school leaders implement high-quality, college- and career-ready standards. SAP's work is grounded in research and evidence, and they are committed to sharing standards-aligned tools and practices freely with educators across the country. This site offers hundreds of math and literacy instructional resources for teachers and school leaders. https://achievethecore.org/
3 Act Math 	K - 12 TOSA's	A Three-Act Task is a lesson structure designed specifically to engage children in modeling with mathematics. The activity was created by Dan Meyer, http://bit.ly/2ewaxOz
Artful Maths 	PK - 12 Admin Parents	On this site you will find a selection of fully-resourced lessons with a 'mathematical art' theme. The activities in these lessons will help to reinforce many important mathematical skills such as accurate measuring and constructing, visual problem solving and strategic forward planning. https://www.artfulmaths.com/
Bowland Maths 	6 - 10 TOSA's	Bowland Maths aims to make maths engaging and relevant to pupils aged 11-14, with a focus on developing thinking, reasoning and problem-solving skills. In these materials, the maths emerges naturally as pupils tackle problems set in a rich mixture of real-life and fantasy situations. http://www.bowlandmaths.org.uk/index.html
Calc Medic 	HS	Lessons use engaging contexts to build students' intuitive understanding of new calculus concepts. Ideas are introduced through a thoughtful sequence of question prompts in student-friendly language before more formal representations are offered. As a result, students take ownership of their learning and gain mastery of rigorous content. https://www.calc-medic.com/
Desmos	K - 12	Desmos wants to help every student learn math and love learning math. But "every student" is a *lot* of students so we

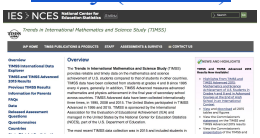
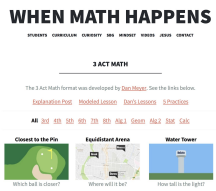
	TOSA's	create *digital* math tools and let the Internet take them to anyone who wants them. https://www.desmos.com/
Elementary Mathematics Specialists (ems&tl) 	K - 8 TOSA's Admin	The Elementary Mathematics Specialists & Teacher Leaders (ems&tl) Project, sponsored by The Brookhill Institute of Mathematics, addresses issues related to and in support of Elementary Mathematics Specialists (EMS). The Project engages mathematics specialists nationally, work with a cadre of specialists and supervisors to provide that up close and personal view of the everyday challenges in the work of elementary mathematics coaches/specialists. https://sites.google.com/site/emstlonline/home
EngageNY 	K - 12 TOSA's	The optional curricular materials on EngageNY are designed to be adopted or adapted. Educators will find both PDF and Word versions available for their use. Some lessons provide detailed instructions or recommendations but it is important to note that *the lessons are not scripts* but rather they should be viewed as guides so that the reader can imagine how classroom instruction could look. https://www.engageny.org/common-core-curriculum
Estimation 180 	K - 12 TOSA's	Each day of the school year, students has an estimation challenge to do . With each activity, students improve both their number sense and problem solving skills. http://www.estimation180.com/
Gapminder 	K - 12 TOSA's	Get a global perspective through Gapminder! Explore the tools that add sparkles to fresh numbers into your eyes and upgrade your worldview. http://www.gapminder.org/
GFletchy 	3 - 10 TOSA's Admin	If you're looking for 3-Act tasks, math progression videos, or innovative ways to engage your students you're in the right place. https://gfletchy.com/
Global Math Project		The Global Math Project is a worldwide movement committed to inspiring educators everywhere to ignite and sustain in their students a love for learning mathematics.

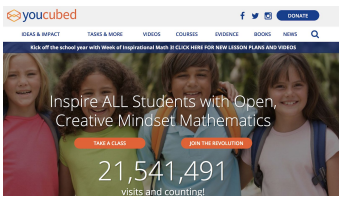
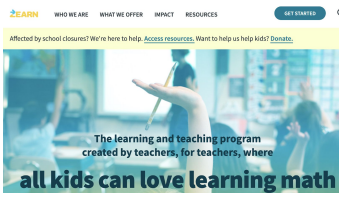
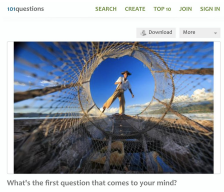
		https://globalmathproject.org/ Exploding Dots
Illustrative Mathematics 	K- 12 TOSA's Admin	High-quality educational resources for teachers and students to know, use and enjoy mathematics. The website offers comprehensive mathematics curriculum, tasks, lessons plans, professional services, and a format for engaging mathematical discussions. https://www.illustrativemathematics.org/
Inside Mathematics 	K - 12 TOSA's Admin	Inside Mathematics provides a resource for educators around the world who struggle to provide the best mathematics instruction they can for their students. http://www.insidemathematics.org/
Julia Robinson Mathematics Festival 	K - 12 Parents	Julia Robinson Mathematics Festivals inspire students to explore the richness and beauty of mathematics through activities that encourage collaborative, creative problem-solving. http://jrmf.org/
Mathalicious 	K - 12	Mathalicious lessons provide teachers with an opportunity to teach standards-based math through real-world topics that students care about. http://www.mathalicious.com/
Mathematics Assessment Project 	6 - 12	Classroom Challenges are lessons that support teachers in formative assessment. There are 100 lessons in total, 20 at each grade from 6 to 8 and 40 for 'Career and College Readiness' at High School Grades 9 and above. Some lessons are focused on developing math concepts, others on solving non-routine problems. http://map.mathshell.org/lessons.php
Mathematics Design Collaborative 	K - 12	An effective teacher is the single most important in-school factor that can help students succeed. The site offers support to define and identify what makes a teacher effective, and can help more teachers improve how they support students. http://k12education.gatesfoundation.org/blog/math-design-collaborative/

[Math for Love](https://mathforlove.com/) 	PK - 10	The site provides math games and curriculum, including tons of free lesson plans and professional learning materials for teachers. Materials such as, puzzles,and math-art shows are shard to show people how playful, beautiful, and life-changing mathematics can be .\https://mathforlove.com/
[Math Playground](http://www.mathplayground.com/) 	K - 8 Parents	Math Playground has many free resources for First to Eight graders that includes puzzles, logic games, math games, math videos, lessons, and more. http://www.mathplayground.com/
[Math Visuals](https://mathvisuals.wordpress.com/) 	PK - 5 TOSA's	**Math Visuals** was created as a resource for fellow math educators, and seeks to uncover patterns that are foundational to Elementary Math, give multiple access points to engage everyone in discussion, and inspire educators and students to invent their own visualizations of math concepts. https://mathvisuals.wordpress.com/
[My Math Forum](http://mymathforum.com/) 	K - 12	Look through over 15, 000 questions and answers to find the information you want. There is an endless number of topics for you to go through. http://mymathforum.com/
[National Assessment of Educational Progress](https://nces.ed.gov/nationsreportcard/mathematics/) 	4 - 12	The results of the NAEP mathematics assessment present a broad view of what our nation's students know and can do in mathematics. The assessment measures students' knowledge and skills in mathematics and students' ability to apply their knowledge in problem-solving situations. Every two years, students at grades 4 and 8 are assessed in mathematics and reading, and students at grade 12 are assessed periodically. https://nces.ed.gov/nationsreportcard/mathematics/
[National Council of Teachers of Mathematics](http://www.nctm.org/) 	K - 12	The National Council of Teachers of Mathematics supports and advocates for the highest-quality mathematics teaching and learning for each and every student. http://www.nctm.org/
[National Library of Virtual Manipulatives](#)	K-12	The National Library of Virtual Manipulatives (NLVM) is an NSF supported project that began in 1999 to develop a library of uniquely interactive, web-based virtual manipulatives or concept tutorials, mostly in the form of Java applets, for

		mathematics instruction (K-12 emphasis). The project includes dissemination and extensive internal and external evaluation. http://nlvm.usu.edu/en/nav/vlibrary.html
NRICH Project 		The NRICH Project aims to enrich the mathematical experiences of all learners. To support this aim, members of the NRICH team work in a wide range of capacities, including providing professional development for teachers wishing to embed rich mathematical tasks into everyday classroom practice. https://nrich.maths.org/
Open Middle 	K - 12	This website offers challenging math problems worth solving. http://www.openmiddle.com/
PBS Learning Media 	K - 12 Parents	Bring math concepts to life through interactive games, animations and engaging media resources. https://www.pbslearningmedia.org/subjects/mathematics/?
Performance Assessment Resource Bank 	K - 12	The Performance Assessment Resource Bank is an online collection of high-quality performance tasks and resources that support the use of performance assessment for meaningful learning. Resources include performance tasks, professional development tools, and examples of how schools, districts, and states have integrated performance assessment into their systems of assessment. These resources have been collected from educators and organizations across the United States and reviewed by experts in the field. https://www.performanceassessmentresourcebank.org/
PISA 	K - 12 Admin	The PISA 2021 mathematics framework defines the theoretical underpinnings of the PISA mathematics assessment based on the fundamental concept of mathematical literacy, relating mathematical reasoning and three processes of the problem-solving (mathematical modelling) cycle. https://pisa2021-maths.oecd.org/#Home
Problems of the Month	K-12	The Problems of the Month are nonroutine math problems designed to be used schoolwide to promote a problem-solving theme at your school. Each problem is divided into five levels

		of difficulty, Level A (primary) through Level E (high school), to allow access and scaffolding for students into different aspects of the problem and to stretch students to go deeper into mathematical complexity. http://www.insidemathematics.org/problems-of-the-month
Project Zero 		The mission of Project Zero is to understand and enhance learning, thinking and creativity for individuals and groups in the arts and other disciplines. https://pz.harvard.edu/ **Project Zero Ideas and Distance Learning: Visible Thinking and Teaching for Understanding**
Radical Math 	K - 12	Radical Math is resource for educators who are interested in integrating issues of social and economic justice into their math classes and curriculum. http://radicalmath.org/
San Francisco Unified School District Mathematics Department 	PK - 12 Admin Parents	Accessing Core Curriculum Units through the SFUSD Math Portals Signature Strategies Professional Learning Resources for Families and Community
Strategic Education Research Partnership (SERP) 	K - 12	Algebra by Example http://math.serpmedia.org/algebra_by_example/ Poster Problems http://math.serpmedia.org/poster_problems/ The 5x8 Card http://math.serpmedia.org/5x8card/
Texas Instruments 	6 - 12	**Resources for middle grades through high school mathematics** Develop students' higher order thinking abilities and conceptual understanding with classroom activities, technology and educator professional development that helps teachers put it all together in the classroom. https://education.ti.com/en/resources/math
Thinking Collaborative	K - 12	The mission of Thinking Collaborative is to provide individuals and organizations with the strategies, skills and

		concepts to establish and sustain structures for thinking and collaborating that result in increased performance and resourcefulness. http://www.thinkingcollaborative.com/strategies/
Trends in International Mathematics and Science Study (TIMSS) 	4 - 12	The **Trends in International Mathematics and Science Study** (TIMSS) provides reliable and timely data on the mathematics and science achievement of U.S. students compared to that of students in other countries. TIMSS data have been collected from students at grades 4 and 8 since 1995 every 4 years, generally. https://nces.ed.gov/timss/
Tuvalabs 	K - 12	Access Tuvalabs to support data and statistical literacy for teachers and students . Tuva promotes three dimensional science learning, and builds conceptual understanding of essential mathematics and statistics concepts. https://tuvalabs.com/k12/
Understanding Proficiency 	3 - 12	Understanding Proficiency provides resources that guide educators in analyzing student work on performance tasks in order to develop a deeper understanding of the Common Core State Standards in mathematics. https://understandingproficiency.wested.org/
When Math Happens 	K - 12	The site contains numerous resources on growth mindset, 3-Act Math, sample curricula for Algebra and Geometry, blogs and articles on mathematics, and others. https://whenmathhappens.com/3-act-math/
Which One Doesn't Belong? 	K - 12	This is **Which One Doesn't Belong?**, a website dedicated to providing thought-provoking puzzles for math teachers and students alike. There are no answers provided as there are many different, correct ways of choosing which one doesn't belong. Enjoy! http://wodb.ca/
Wolfram Alpha 	K - 12	Using this computational knowledge engine, you will be able to solve a lot of math problems in just a few seconds. Mainly, it is a smart calculator that will solve the problem but won't give you any broad explanations for free. http://www.wolframalpha.com/
YouCubed	K-12	Our main goal is to inspire, educate and empower teachers of

	Admin Parents	mathematics, transforming the latest research on math into accessible and practical forms. We know from research how to teach math well and how to bring about high levels of student engagement and achievement but research has not previously been made accessible to teachers. www.YouCubed.org
Yummy Math 	K - 12	Yummy math provides students, teachers and administrators with engaging, real-world mathematics activities. There's a fee to access all materials. https://www.yummymath.com/
Zearn 	K - 5 Admin Parents	At the core of our mission is a belief that an understanding and love of math is critical to creating a generation of engaged learners who can change the world. It is that simple. And that lofty. And it fuels our work to support teachers in making this happen. https://about.zearn.org/
60+ Awesome Websites for Teaching and Learning Math 	PK - 12 Admin Parents	This is where the teaching magic happens. These classroom ideas, teaching strategies, and actionable tips from brilliant teachers (like you) will inspire you, answer your burning questions, and help you be the best teacher you can be! https://www.weareteachers.com/category/teaching-strategies/
101 Questions 	K - 12	Can you perplex us? Can you show us something that'll make us wonder a question so intensely we'll do anything to figure out the answer, including listen to your lecture or watch your slides? Here's one way to find out. Upload a photo or a video. Find out how many of us get bored and skip it. Find out how many of us get perplexed and ask a question. http://www.101qs.com/