

## Math Ed Reference Links

### COMMON CORE STATE STANDARDS FOR MATHEMATICS (CCSSM)

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General Information – Many of these sites cross-link to each other.

1. **Common Core State Standards Initiative**  
<http://www.corestandards.org/>
2. **History of the Common Core**  
<http://educationnorthwest.org/resource/1280>
3. **Tools for the Common Core** (Bill McCallum's Blog) – VERY useful.  
Contains the latest information on elaborating the progressions.  
<http://commoncoretools.me/>
4. **California Department of Education (CDE)**  
Contains the CA Math Framework  
<http://www.cde.ca.gov/ci/cc/>
5. **ACHIEVE**  
This site provides free tools, articles and research to educators now doing the hard work of implementing Common Core Standards in math and ELA  
<http://www.achievethecore.org/>
6. **ASCD**  
Map of Common Core Standards adoption by the states. Shows which states have not or partially adopted the standards.  
<http://www.ascd.org/public-policy/common-core-standards.aspx>
7. **BLAST** – Bringing Learning and Standards Together  
Unpacks K-8 Standards for teachers.  
<http://commoncore.ccsd.net/>

### COMMON CORE ASSESSMENT CONSORTIA

1. **Smarter Balanced Assessment Consortium** – The official site for California, a governing state. Producing the new assessments, to be rolled out in 2014-15. These will replace the CST. In the interim, the CST will be gradually modified. Lots of important information for teachers as well as some sample tasks and pilot tests.  
<http://www.smarterbalanced.org/>
2. **PARCC** – (Partnership for the Assessment of Readiness for College and Careers)  
The other assessment consortium. Many eastern states.  
<http://www.parcconline.org/>

### PERFORMANCE TASKS AND ADDITIONAL RESOURCES

1. **Inside Mathematics – SVMII (Silicon Valley Mathematics Initiative)**  
Includes tasks by standard, classroom videos, lessons, student work, and rubrics for assessing the work. Fabulous site!  
<http://www.insidemathematics.org/>

2. **Noyce Foundation MARS Tasks** (Mathematics Assessment Resource Service) 2003- 2009 for Grades 2-8, Algebra (Course 1) and Geometry (Course 2).  
<http://www.noycedn.org/resources.php>
3. **SVMi Assessment Consortium**  
**MARS Tasks 2003-2012.** Years after 2009, which include grades K and 1, require purchase of a license by your school or district.  
<http://www.svmimac.org/mars/mars.html>
4. **SERP** (Strategic Education Research Partnership)  
<http://www.serp.institute.org/>  
Has link on right side of page to Tools for Sense-Making in Mathematics  
<http://math.serpmedia.org/>
5. **MAP** (Mathematics Assessment Project) from the Shell Centre in Nottingham, England. Novice, Apprentice and Expert Tasks for Middle and High School.  
<http://map.mathshell.org/materials/tasks.php>
6. **Illustrative Mathematics Project (IMP)**  
Tasks keyed to CCSS-M. A work in progress, but has some nice tasks for all grades. Registration is free. You can also submit and review tasks.  
<http://illustrativemathematics.org/>
7. **National Council of Teachers of Mathematics (NCTM)**  
Lessons, Resources, and Software (Core Tools). Good to become a member of this national organization. Annual national conference and regional conferences.
8. **NCSM (Network, Communicate, Support, Motivate): Leadership in Mathematics Education**  
Resources for math coaches, principals and math ed leaders  
<http://www.mathedleadership.org/index.html>
8. **California Mathematics Council (CMC)**  
Good to become a member of the California organization. Three sections: North, Central and South. Each has an annual conference.  
<http://www.cmc-math.org/resources/core.html>
9. **California Mathematics Project Resources**  
Just learned that these resources designed for delivering professional development are public. Here's the link for transformational geometry:  
<http://cacssm.cmpso.org/geometry-task-force>
10. **Math Reasoning Inventory (MRI - Marilyn Burns)**  
Excellent resources for K-8 teachers. Includes video. Free to teachers.  
<https://mathreasoninginventory.com/>
11. **SCOE (Sonoma County Office of Education) Video Archive**  
The most innovative county office of education in California.  
<http://www.scoe.org/pub/htdocs/math-media.html>
12. **Project LEAD (Leading Educators in Academic Discourse)**  
The Resource Tab contains a variety of useful items.  
<http://www.northbaymathproject.com/projectlead/>
13. **Math Solutions Educator Tools** (Marilyn Burns)  
<http://www.mathsolutions.com/index.cfm?page=wp10&crid=3>
14. **CCSS Math** – A variety of nice resources  
<http://ccsmath.org/>

15. **Lesson Sketch (High School only)** – Thought Experiments in Math Teaching  
Contains animations of classroom dialog for high school teachers.  
You need to create an account, but it's free.  
<https://www.lessonsketch.org/login.php>
16. **Understanding Language**  
A collection of papers on teaching ELLs in math and other subjects  
<http://ell.stanford.edu/papers>
17. **NRICH – Enriching Mathematics**  
Mathematics resources for children, parents and teachers to enrich learning. A British site with lots of high-quality resources.  
<http://rich.maths.org/frontpage>
18. **Emergent Math, by Geoff Krall**  
Curriculum maps and activities for Problem Based Learning for grades 6-11. Lots of activities from teacher-blogs.  
<http://emergentmath.com/my-problem-based-curriculum-maps/>
19. **LearnZillion**  
A commercial professional development provider. A judges' favorite at the 2013 ISTE (International Society for Technology in Education) conference.  
Caveat: I haven't looked at it yet, so can't comment on its quality.  
<http://learnzillion.com/>
20. **"Mathlets" for Teaching Elementary Mathematics**  
The purpose of this website is to present animated visual models which (we hope!) help explain concepts and methods from the elementary math curriculum. (Such models are sometimes called "mathlets".)  
<http://www.commoncoremathlets.com/>
21. **The Math Forum @ Drexel**  
An older site with many resources. Geometer's Sketchpad was born here.  
<http://mathforum.org/> They have an **Internet Math Library**  
<http://mathforum.org/library/>

#### DIGITAL TEXTBOOK RESOURCES

1. 6 Excellent Sites for Free Digital Textbooks (article with links)  
<http://thejournal.com/articles/2013/08/01/hunting-the-whole-enchilada-6-excellent-sites-for-free-digital-textbooks.aspx>

## REGIONAL, STATE AND CITY DEPARTMENTS OF EDUCATION WITH CCSS-M RESOURCES

1. Georgia  
<https://www.georgiastandards.org/Common-Core/Pages/Math.aspx>
2. New York City  
<http://schools.nyc.gov/Teachers/Resources/Classroom/Mathematics/default.htm>
3. New York State  
<http://engageny.org/common-core/>
4. Utah: Mathematics Vision Project (High School only)  
<http://www.mathematicsvisionproject.org/>
5. Massachusetts  
<http://www.doe.mass.edu/omste/>
6. Education Northwest  
<http://educationnorthwest.org/resource/1334>
7. Washington State  
<http://www.k12.wa.us/CoreStandards/Mathematics/default.aspx>
8. North Carolina  
<http://www.ncpublicschools.org/acre/standards/common-core-tools/>
9. Alberta, Canada  
<http://www.learnalberta.ca/Home.aspx>

## VIDEOS ABOUT THE COMMON CORE AND IMPLICATIONS FOR PEDAGOGY

1. YouTube  
<http://www.youtube.com/watch?v=m1rxkW8ucAI&feature=relmfu>  
This link goes to one video (The Importance of Mathematical Practices), with similar suggestions down the right side of the page
2. The Hunt Institute  
<http://www.youtube.com/user/TheHuntInstitute>  
Math Standards is the 3<sup>rd</sup> playlist on the right side of the page. When you click on one of the videos, the others appear on the bottom of the page. You can peruse them by using the right and left arrows on the ends of the video strip.  
[http://www.youtube.com/watch?v=BNP5MddDFPY&list=PLD7F4C7DE7CB3D2E6&index=2&feature=plpp\\_video](http://www.youtube.com/watch?v=BNP5MddDFPY&list=PLD7F4C7DE7CB3D2E6&index=2&feature=plpp_video)  
Newest video by Bill McCallum: The Mathematics Standards: Key Changes and Their Evidence
3. SERP (Strategic Educational Research Partnership)  
<http://www.serpmedia.org/daro-talks/index.html>  
Three videos by Phil Daro:  
Formative Principles of the Common Core Standards  
Against “Answer-getting”  
Planning Chapters, not Lessons
4. Vimeo –Videos from Phil Daro’s conference presentations  
<http://vimeo.com/search?q=Phil+Daro>
5. NCSM Ignite Presentations – 5 minutes, 20 slides  
[http://www.youtube.com/results?search\\_query=NCSM+Ignite&oq=NCSM+I](http://www.youtube.com/results?search_query=NCSM+Ignite&oq=NCSM+I)

- [gnite&gs\\_l=youtube-reduced.3...65867.69178.0.69335.11.11.0.0.0.151.950.10j1.11.0...0.0.Fd044qCHatI](#)
6. NCTM Ignite Presentations – 5 minutes, 20 slides  
[http://www.youtube.com/results?search\\_query=NCTM+Ignite&oq=NCTM+Ignite&gs\\_l=youtube.3...63306.70401.0.71406.6.5.1.0.0.0.118.421.4j1.5.0...0.0.U5Jyr-dHSZI](http://www.youtube.com/results?search_query=NCTM+Ignite&oq=NCTM+Ignite&gs_l=youtube.3...63306.70401.0.71406.6.5.1.0.0.0.118.421.4j1.5.0...0.0.U5Jyr-dHSZI)
  7. CMC-North Ignite Presentations – 5 minutes, 20 slides  
[http://www.youtube.com/results?search\\_query=CMC-North+Ignite&oq=CMC-North+Ignite&gs\\_l=youtube.3...27977.30415.0.30910.10.10.0.0.0.0.119.781.9j1.10.0...0.0.QpVA7I2S1Js](http://www.youtube.com/results?search_query=CMC-North+Ignite&oq=CMC-North+Ignite&gs_l=youtube.3...27977.30415.0.30910.10.10.0.0.0.0.119.781.9j1.10.0...0.0.QpVA7I2S1Js)
  8. CMC-South Ignite Presentations – 5 minutes, 20 slides  
[http://www.youtube.com/results?search\\_query=CMC-South+Ignite&oq=CMC-South+Ignite&gs\\_l=youtube.3...15197.15741.0.16483.4.4.0.0.0.0.118.324.3j1.4.0...0.0.5i6rOJy2WUM](http://www.youtube.com/results?search_query=CMC-South+Ignite&oq=CMC-South+Ignite&gs_l=youtube.3...15197.15741.0.16483.4.4.0.0.0.0.118.324.3j1.4.0...0.0.5i6rOJy2WUM)

#### ONLINE INTERACTIVE APPLETS AND SOFTWARE

1. GeoGebra – Open source software for Algebra, Geometry and above. Very powerful. Available for tablets also and many instructional videos available.  
<http://www.geogebra.org/cms/en/>
2. National Library of Virtual Manipulatives  
<http://nlvm.usu.edu/en/nav/vlibrary.html>
3. NCTM Illuminations (Online activities and lessons)  
<http://illuminations.nctm.org/>
4. Conceptua Math (Some free fraction tools)  
<http://www.conceptuamath.com/>
5. Cut the Knot Math Games for Kids  
<http://www.ctkmathgamesforkids.com/>
6. Wolfram Alpha Computational Knowledge Engine  
See how powerfully your computer can calculate and answer questions.  
<http://www.wolframalpha.com/>

#### E-BOOKS

1. Words of Mathematics, by Steven Schwartzman, published by MAA  
<http://www.maa.org/publications/ebooks/words-of-mathematics>
2. Principles to Actions, NCTM  
<http://www.nctm.org/PrinciplestoActions/>

## BOOKS

1. NCSM Publications for Math Ed Leaders – Must download the form to order (low tech). *It's About Time* is the leadership analog to *Principles to Actions*  
<http://www.mathedleadership.org/resources/shop.html>
2. *The Mathematical Modeling Handbook*  
*The Mathematical Modeling Handbook II: The Assessments*  
COMAP, The Consortium for Mathematics and Its Applications  
<http://www.comap.com/index.html>
3. *Fostering Algebraic Thinking* and *Fostering Geometric Thinking*  
The Educational Development Center (EDC)  
<https://secure.edc.org/publications/list.asp?2>
4. *Young Mathematicians at Work* series and other books by Catherine Twomey Fosnot  
Primarily for elementary, but eye-opening examples of productive math discourse and questioning  
Published by Heinemann  
<http://www.heinemann.com/search/searchResults.aspx?s=all&q=fosnot>

## TED TALKS

1. Conrad Wolfram: Teaching Kids Real Math with Computers  
[http://www.ted.com/talks/conrad\\_wolfram\\_teaching\\_kids\\_real\\_math\\_with\\_computers?language=en](http://www.ted.com/talks/conrad_wolfram_teaching_kids_real_math_with_computers?language=en)
2. Ken Robinson: How Schools Kill Creativity  
[http://www.ted.com/talks/ken\\_robinson\\_says\\_schools\\_kill\\_creativity?language=en](http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity?language=en)
3. Sugata Mitra: Build a School in the Cloud  
[http://www.ted.com/talks/sugata\\_mitra\\_build\\_a\\_school\\_in\\_the\\_cloud](http://www.ted.com/talks/sugata_mitra_build_a_school_in_the_cloud)
4. Emily Pilloton: Teaching Design for Change  
[http://www.ted.com/talks/emily\\_pilloton\\_teaching\\_design\\_for\\_change](http://www.ted.com/talks/emily_pilloton_teaching_design_for_change)

## BLOGS

1. Whole Class Mathematics Discussions  
<http://mathdiscussions.wordpress.com/>
2. Dan Meyer  
<http://blog.mrmeyer.com/>
3. Annie Fetter at the Math Forum  
<http://mathforum.org/blogs/annie/>
4. The Max Ray Blog (Math Forum)  
<http://mathforum.org/blogs/max/>
5. Henri Picciotto: My Math Education Blog  
<http://blog.mathedpage.org/>

Lew Douglas, Co-Director, Bay Area Mathematics Project  
[lewdouglas@berkeley.edu](mailto:lewdouglas@berkeley.edu) 510-642-6280 (office) June 25, 2014

6. Keith Devlin: Mathematics and Other Stuff  
<http://profkeithdevlin.org/>