

Math Resources by Elementary, Middle, High School & All Levels

Elementary

Core Academy in Mathematics

Wiki in Utah, dedicated to grades K-5 for math CCSS resources - contains teacher created tasks aligned to the CCSS:
<http://ccak52012.wikispaces.com/>

Grade 1 Math Wiki

Amazing math resources from Howard County Public School System-includes pacing guides, resources, enrichment opportunities, task rubrics, formative assessments per standard, and assessment tools...

<https://grade1commoncoremath.wikispaces.hcpss.org/Grade+1+Home>

Grade 2 Math Wiki

Amazing math resources from Howard County Public School System-includes pacing guides, resources, enrichment opportunities, task rubrics, formative assessments per standard, and assessment tools...

<https://grade2commoncoremath.wikispaces.hcpss.org/Grade+2+Home>

Grade 3 Fractions Unit

by *South Carolina Leaders in Mathematics Education*

This unit involves CCSS 3NF.1-.3

 3rd Fraction Unit SCLME.docx, **676.75 KB** (Last Modified on October 7, 2012)

Grade 3 Math Wiki


Amazing math resources from Howard County Public School System-includes pacing guides, resources, enrichment opportunities, task rubrics, formative assessments per standard, and assessment tools...

<https://grade3commoncoremath.wikispaces.hcpss.org/home>

Grade 4 Fractions Unit

by *South Carolina Leaders in Mathematics Education*


This fractions unit involves CCSS 4NF.1-.7

 gr 4 fraction unit SCLME.docx, **355.51 KB** (Last Modified on October 7, 2012)

Grade 5 Fractions Unit

by *South Carolina Leaders in Mathematics Education*

This fractions unit involves CCSS 5NF.1-.7

 5th_gr_ccss_m_fraction_drop_in_unit_2.docx, **4.74 MB** (Last Modified on February 11, 2013)

Kindergarten Math Wiki

Amazing math resources from Howard County Public School System-includes pacing guides, resources, enrichment opportunities, task rubrics, formative assessments per standard, and assessment tools!

<https://gradedcommoncoremath.wikispaces.hcpss.org/Kindergarten+Home>

K-5 Math Resources

This site provides an extensive collection of free resources, math games, and hands-on math activities aligned with the Common Core State Standards for Mathematics. Our math printables are suitable for use in math centers, small group or whole class settings. Instructions for each activity are presented in large print on a task card in child-friendly language to enable students to work on tasks independently after a brief introduction to the task. Also available are Math Journal Tasks (K-5), Math Vocabulary Resources (2-5) and Math Projects (3-5) for teachers looking for ways to support students' math writing skills while developing key concepts and skills.

<http://www.k-5mathteachingresources.com/>

Making learning fun through use of math games- grade 2 (7 min)

<https://www.teachingchannel.org/videos/second-grade-math-lesson>

Math & Science Resources

In today's world, giving students a solid background and understanding in math and science is vital. Compared to past decades, there are now more careers than ever that are rooted in math and science fields. This webpage provides links to practical uses of math and science and lets students know that they have access to extra help outside of class and demonstrates how math and science does apply to very real and practical situations.

<http://www.crucial.com.au/web-support-math-and-science-resources.php>

Mathematical practice 1- Persistence in problem solving- Find three ways- grade 3

<https://www.teachingchannel.org/videos/problem-solving-math>

Mathematical Practice 5- Use appropriate tools strategically grade 4 (4 minutes)

Use Google Chrome to view

http://mhpdonline.com/mhpd/index.php?option=com_videolibrary&ajaxData=player&video_id=526

Multiplication and division reasoning- grade 3 (7 min)- use of interactive charts

<https://www.teachingchannel.org/videos/multiplication-division-in-the-core?fd=1>

Number Talks (or Math Talks) grade K-1- Building number sense:

Guess My Number (5 min)

http://www.mathsolutions.com/videopage/videos/Final/Guess_My_Number.swf

Number Talks grade 3- Building number sense in computation before use of algorithms

http://www.mathsolutions.com/videopage/videos/Final/Classroom_NumberTalk_Gr3.swf

Number Talks grade 5- geometry sense- How to find volume of rectangular prism without use of algorithms

http://www.mathsolutions.com/MathTalk/videos/CRD_Gr5.swf

Progressions for the CCSS in Math

This draft document explains the progressions in the CCSS for math and provides actual examples re: how to explain math concepts. For example, understand what addition and subtraction mean and apply it to word problems.


http://commoncoretools.files.wordpress.com/2011/05/ccss_progression_cc_0a_k5_2011_05_302.pdf

Read Tennessee -ELA and math common core toolkits for grades preK-3

The home of Read Tennessee, a joint project designed to allow teachers, families and community members to work together for the benefit of young children throughout the state of Tennessee. Explore their Reading and Math toolkits to take advantage of the information provided to help accelerate student learning. Click on either the Reading or Math logo visit the toolkits that include vocabulary, integration ideas, questions to focus instruction, and learning progressions.

<http://www.readtennessee.org/>

Standards for Mathematical Practices Checklist

by Charlene Herlong, Instructional Coach, Saluda Primary & Elementary Schools
use this checklist when observing math teachers and the implementation of the CCSS
 SMP checklist_Herlong.docx, **16.34 KB** (Last Modified on February 24, 2013)

Elementary & Middle


Common Core Standards Math Practice

Free Test Online has developed sets of practice questions for grades K-8 that illustrate the full range of difficulty expected by particular CCSS.

<http://www.free-test-online.com/ccss/ccss.html>


Grade 6 Math CC lesson plan example-equations and inequalities

by Holly Shaw, Saluda Middle School Math Teacher

 Equations and Inequalities Unit 6th math.docx, **139.97 KB** (Last Modified on November 1, 2012)

Grade 6 Math CC summative assessment example-equations and inequalities

by Holly Shaw, Saluda Middle School Math Teacher

 Equations and Inequalities Summative Assessment 6th math.docx, **20.35 KB** (Last Modified on November 1, 2012)

Performance Task Bank grades K-8

Tasks are available in English and Spanish and come with a rubric.

<http://www.rda.aps.edu/mathtaskbank/start.htm>

Problem Solving Decks for Math grades 1-8

Challenge students to become better problem solvers with these decks of cards-all of these problems lend themselves to students telling and writing about their thinking.

<http://mathlearnnc.sharpschool.com/cms/One.aspx?portalId=4507283&pageId=5856325>

South Carolina Dept of Education

[Elementary & Middle Level Common Core Resources List](#)

Superstars Math Problem Solving Program

The basic purpose of **Superstars III** is to provide the extra challenge that self-motivated students in grades K-8 need in mathematics, and to do so in a structured, long-term program that does not impinge on the normal classroom routine or the time of the teacher. The system is not meant to replace any aspect of the school curriculum -- it is offered as a peripheral opportunity for students who identify with challenges and who want to be rewarded for their extra effort.

<http://mathlearnnc.sharpschool.com/cms/One.aspx?portalId=4507283&pageId=5856292>

Thinking Blocks-Models for Math

Thinking Blocks is a suite of learning tools designed to help students solve math word problems accurately and efficiently. Using brightly colored blocks, students model mathematical relationships and identify known and unknown quantities. The model provides students with a powerful image that organizes information and simplifies the problem solving process. By modeling increasingly complex word problems, students develop strong reasoning skills which will facilitate the transition from arithmetic to algebra. Thinking Blocks Supports the Common Core State Standards and is based on Singapore Math.

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


Van deWalle's Blackline Masters

Link to the Van deWalle Professional Mathematics Series: Teaching Student-Centered Mathematics. These blackline masters are used in the Georgia Common Core Units
http://www.ablongman.com/vandewalleseries/volume_1.html

WPEC CCSS Middle School Math Presentation

by *Lea Severin, Brandon Addy of Laurens 55*

July 16-17 presentation for common core math

 WPEC July 16 17 middle school math.pptx, **1.11 MB** (Last Modified on July 28, 2012)

YUureka Mathematics

The documents provided on this page are meant to help educators to gain a better understanding of the Common Core State Standards for Mathematics. Resources include docs such as ****Smarter Balanced** assessment examples by grade level and claim, interpretive guides for the CCSS, and lists of recommended manipulatives pertaining to specific standards... (A MUST SEE!)

<http://www.yuureka.com/resources-1/common-core>

Middle & High School

Algebra 1 Correlation to Common Core:Transition Document by *SCLME*

 Alg I Corr to CC Transition.docx, **69.57 KB** (Last Modified on March 25, 2013)

Algebra II Placemat Format

 Placemat Format - Algebra2.docx, **28.00 KB** (Last Modified on August 14, 2012)

Draft progressions on High School Algebra and Functions


These progressions are somewhat different from the K–8 progressions. Since the high school standards are not arranged into courses, the progressions are really more like descriptions than progressions; they are not in any particular curricular order. Furthermore, because each one covers a topic that occupies a large part of the high school curriculum, it gives less detail about how each standard might be addressed or how different standards might be arranged into various different curricular implementations. Find more information here:

<http://commoncoretools.me/2012/12/04/draft-progressions-on-high-school-algebra-and-functions/>

[Algebra CCSS Progressions](#)

[Functions CCSS Progressions](#)

PreCalculus Placemat Format

 Placemat Format - PreCalculus.docx, **22.96 KB** (Last Modified on August 14, 2012)

South Carolina Dept of Education

[Secondary Level Common Core Resources List](#)

Writing in the Math Classroom - Analytic Rubric

by *Center for Performance Assessment, found in the Write to Know Series*


analytic scoring guide to use with writing prompts in the math classroom for grades 6-12 - analytic rubrics allow you to assess a student's writing proficiency trait by trait

 Middle_and_Secondary_Analytic_Scoring_Guide.docx, **13.21 KB** (Last Modified on March 7, 2013)

Writing in the Math Classroom - Holistic Rubric

by *Center for Performance Assessment, found in the Write to Know Series*

holistic scoring guide to use with writing prompts in the math classroom for grades 6-12 - holistic rubrics are less specific and give the students a score based on the teacher's overall impression of the piece

 Write_to_Know_Middle_and_Secondary_Holistic_Scoring_Guide.docx, **13.72 KB** (Last Modified on March 7, 2013)

All Levels

Arizona Dept of Educ Common Core Mathematics Standards

This site includes charts and information for the CCSS in math.

<http://www.azed.gov/standards-practices/mathematics-standards/>

Calculators for Math

Did you know that there are **dozens** of types of calculators? If you think about it, we use math to measure and calculate all sorts of things, from climate, to shopping, cooking, saving money, converting measurements, and lots more. Visit this web site to check out a multitude of calculators.

<http://www.mortgagecalculator.net/math-calculators/>

California Mathematics Project

This project created Task Forces to collect, design, and organize resources that could be used in professional development (PD) to strengthen teachers' content knowledge to teach these standards: K-2 Number Sense and Place Value, Fractions from a Number Line Approach, Model with Mathematics, Transformational Geometry, and High School Mathematical Modeling. These Task Forces have established a high quality list of resources that PD providers can use (e.g., articles, books, videos, technology, problems, existing curriculum, and outlines of presentations).

<http://cacssm.cmpso.org/>

CCSS Math Resources

Great website that has activities/lessons/resources aligned to each standard by grade level.

Once at the site click on "Resources" at the top of the page - it is a way to get information related to each specific grade and standard in math for the CCSS.

<http://ccssmath.org/>

Common Core Math Resources

Cleveland County Schools resources:

<http://mail.clevelandcountyschools.org/~ccselem/07BB59E1-00870B98?Plugin=Loft>

Common Core Math Vocabulary Terms for K-12

Chart listing math terms needed at each grade level:

<http://www.emsd37.org/files/Common%20Core%20Vocab%20Math.pdf>

Common Core State Standards: Connecticut's Vision

This link contains pacing guides for both math and ELA common core and the math units include assessment examples.

<http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=322592>

Connecticut State Dept of Education

K-12 units of study include pacing guides, explanations, and examples-- plus links to math resources!

<http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=322592>

Create a Graph

Teachers and students can create 5 different kinds of graphs (bar, line, pie, area, and X-Y) that can be printed or saved as a file to be inserted into homemade assessments.

<http://nces.ed.gov/nceskids/createagraph/default.aspx>

Dynamic Paper

Need a pentagonal pyramid that's six inches tall? Or a number line that goes from 18 to 32 by 5's? Or a set of pattern blocks where all shapes have one-inch sides? You can create all those things and more with the Dynamic Paper tool. Place the images you want, then export it as a PDF activity sheet for your students or as a JPEG image for use in other applications or on the web.

<http://illuminations.nctm.org/ActivityDetail.aspx?ID=205>

EduCore: Tools for Teaching the Common Core

ASCD's newest resource for implementing the CCSS - Access lessons, sample units and related resources for math and literacy. Register to create a free account - this site is a MUST SEE!

<http://educore.ascd.org/>

89 Lesson Plans and Ideas for Teaching Math

From Cool Cat Teacher Blog - tons of resources for **all grades** and resources aligned to CCSS!

<http://coolcatteacher.blogspot.com/2012/08/89-lesson-plans-and-ideas-for-teaching.html>

Georgia Common Core Resources


Contains unit plans, curriculum maps, lesson plans for math and ELA aligned to common core state standards, and much more...

<https://www.georgiastandards.org/Common-Core/Pages/default.aspx>

Grade Level Placemats: Grades K-High School

by Hopkins County School District

NOTE: you will need to print on 11 x 17 sized paper.

 grade level math placemats k to 12.docx, **157.91 KB** (Last Modified on December 17, 2012)

Hawaii Standards Database for Common Core

Professional development resources, K-2 curriculum frameworks, video links, and math resources--

http://wetserver.net/hcpsv3_staging/cc/common-core.jsp

Illustrative Mathematics

Illustrative Mathematics provides guidance to states, assessment consortia, testing companies, and curriculum developers by illustrating the range and types of mathematical work that students experience in a faithful implementation of the Common Core State Standards, and by publishing other tools that support implementation of the standards.

<http://illustrativemathematics.org/>

Inside Mathematics

A professional resource for educators passionate about improving students' mathematics learning and performance!

This site features [classroom examples](#) of innovative teaching methods and insights into student learning, [tools for mathematics instruction](#) that teachers can use immediately, and [video tours](#) of the ideas and materials on the site.

<http://insidemathematics.org/>

Interactive Mathematics Dictionary

The Interactive Mathematics Dictionary is geared towards middle school but has multiple resources for elementary through high school students. In addition to providing a definition/description of math terms it has interactive tabs on the left for the following: related terms, everyday examples, interactive checkpoints (for formative assessment), extra information, and challenge problems. Amazing resource!

<http://intermath.coe.uga.edu/dictionary/homepg.asp>

IXL alignment to Common Core math standards

IXL's math skills are aligned to the Common Core State Standards, providing comprehensive coverage of math concepts and applications. With IXL's state standards alignments, you can easily find unlimited practice problems specifically tailored to each required standard.

<http://www.ixl.com/math/standards/common-core>

Kansas Assoc of Teachers of Mathematics with Common Core Resources

The site has several resources including the Common Core "FlipBooks" - a compilation of research, "unpacked" standards from many states, instructional strategies and examples for each standard at each grade level. The intent is to show the connections to the Standards of Mathematical Practices for the content standards and to get detailed information at each level.

http://katm.org/wp/?page_id=91

Kentucky Department of Education

Resources by grade band, deconstructed standards, links, and professional development (on left side of page):

<http://education.ky.gov/curriculum/math/Pages/default.aspx>

Learn Zillion Common Core Lessons for math & ELA Gr.3-12

Learn Zillion's New Common Core Navigator will take you to lessons for grades 3 and up in math and ELA. It is a very user friendly site and will have grades 5k-2nd soon. Learn Zillion has also launched new lesson pages that contain the following:

Lesson Set View—See how each individual lesson fits within a set of lessons that collectively cover a standard. Larger video player—Teachers and parents can now watch the Core Lesson video in a larger player. Additional resources—Watch a coach's commentary video to help with teacher development, assign a Guided Practice video to students, download texts for read-alouds and more!

Usage ideas—Get ideas for ways you can use LearnZillion to support your students and save you time.

http://learnzillion.com/common_core/math/k-8

Math Charts by Jenny Eather

Teachers can reproduce these charts for classroom displays - mathematical areas covered include: Numbers, Operations on Numbers, Fractions, Decimals, Percent and Percentages, Ratios and Rates, Beginning Algebra, Data and Statistics, Probability, Geometry, Measurement, Time and Money.

<http://www.amathsdictionaryforkids.com/mathchartsIntro.html>

Math Dictionary for Students by Jenny Eather

This site is animated and interactive and includes definitions with examples and practice!

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

Math Worksheets Land

They now have over 4,000 PDF files that total over **12,000 printable pages**. 100% free as always! When you open a skill, it will state which common core state standard in which it aligns.

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

Mathematician Dan Meyer's Blog

Check out this math blogger and all of his resources-provides great topics for PLCs.

<http://blog.mrmeyer.com/>


Mathwire-Standards Based Math Activities

Mathwire.com is designed to provide activities and appropriate worksheets for teachers to use in their classrooms. All activities and worksheets support the constructivist approach to learning mathematics and the NCTM Standards. Check out the A-Z list of topics, template library, writing in math resources, etc...

<http://mathwire.com/index.html>

Montana Common Core Standards Mathematical Practice and Content Grade-Band K-12

provides the CCSS in grade bands for vertical planning

 grade_bands_math Montana.pdf, **1,004.28 KB** (Last Modified on March 20, 2013)

NSDL: The National Science Digital Library

The NSDL Math Common Core collection features digital learning resources that address concept and skills components of the Math CCSS. The collection is organized by grade level and domain, as defined within the Common Core documents. Resources include lesson plans, simulations, problem sets with explanations, student activities that provide feedback, and other interactives. The collection will continue to grow as new resources are added regularly. NSDL is also developing a collection of resources associated with the Common Core Standards for English Language Arts (ELA) in Science and Technical Subjects.

<http://nsdl.org/commcore/math/>

NC Public Schools Wiki for Math Resources

Multiple resources and sample units re: CCSS for elementary, middle, and high school levels.

<http://maccss.ncdpi.wikispaces.net/Standard+Course+of+Study>

NCTM Core Math Tools for High School

Core Math Tools is a [downloadable suite](#) of interactive software tools for algebra and functions, geometry and trigonometry, and statistics and probability. The tools are appropriate for use with any **high school** mathematics curriculum and compatible with the Common Core State Standards for Mathematics in terms of content and mathematical practices. Java required.

<http://www.nctm.org/resources/content.aspx?id=32702>

NCTM Illuminations

Includes activities, lessons, standards, web links:

<http://illuminations.nctm.org/>

NYC Dept of Education: Tasks, Units & Student Work aligned to CCSS

Search a growing assortment of Common Core-aligned tasks, units and student work by keyword, grade level, subject area and Common Core Learning Standard.

<http://schools.nyc.gov/Academics/CommonCoreLibrary/TasksUnitsStudentWork/default.htm>

North Carolina Common Core Instructional Support Tools

Public Schools of North Carolina features the following: unpacking the standards for common core math and ELA, ELA text exemplars, graphic organizers, instructional support tools, math & ELA glossary of terms, etc.

<http://www.dpi.state.nc.us/acre/standards/common-core-tools/>

North Carolina Common Core Mathematics Wiki

Various mathematics resources - includes lesson plans for grades K-12.

<http://maccss.ncdpi.wikispaces.net/home>

North Dakota Curriculum Initiative for Common Core

This site contains dozens of resources and documents for both ELA and math CCSS including sample unit plans.

http://ndcurriculuminitiative.org/common_core/

Number Talks Rationale for building "Number Talks" into the curriculum by Sherry Parrish - *good to watch all grades to see progression*

http://www.mathsolutions.com/videos/Intro_Clip.swf

Ohio Dept of Educ Common Core Math Model Curriculum

The Model Curriculum was written by Ohio educators to support the implementation of the Common Core State Standards for Mathematics. The State Board of Education adopted the Model Curriculum on March

15, 2011. This document is fluid; it will grow and change over time. Watch for opportunities to contribute. Changes will be noted by revision dates.

<http://education.ohio.gov/GD/Templates/Pages/ODE/ODEDetail.aspx?page=3&TopicRelationID=1704&ContentID=83475&Content=125706>

Oregon City School District Math Resources

Use the links on the left of this web page to access on-line resources such as curriculum maps, common vocabulary, instructional activities, student games, and more. Check back frequently for new information and resources to support mathematics instruction.

http://www.orecity.k12.or.us/staff/curriculum_resources/mathematics

Pacing Guide Templates for Common Core Math and ELA (\$ Fee)

The Allen County Educational Service Center has devised templates for educators to use to map out the English Language Arts and Mathematics Common Core State Standards (CCSS). These templates list all of the strands, standard/content statements, topics, themes, domains, and clusters based on the 2010 CCSS. Teachers have found these templates to be useful for creating pacing guides and/or curriculum maps.

<http://www.allencountyesc.org/DepartmentsPrograms/Curriculum/CommonCoreOhioRevisedStandardsTemplates>

Performance Tasks for Math

This site provides several links for finding performance task examples, sample assessment items, and project-based learning.

<http://hardingmathspecialist.pbworks.com/w/page/48121495/Performance%20Tasks>

Resources for Leaders in Mathematics

This Toolkit for Change contains resources for math teachers such as strategies, tools, challenges, and barriers for math instruction.

<http://toolkitforchange.org/index.php>

Sonoma County Office of Education CCSS Resources

In addition to lists of resources for math CCSS, this site includes links to MARS. These formative performance assessment tasks are from the Mathematics Assessment Resource Service (MARS), a project of UC Berkeley, Michigan State, and the Shell Centre in Nottingham England. The MARS assessment tasks target grades 2-8 and each task comes with a rubric. High school courses have also been added.

The tasks provide a platform for professional development in schools and districts as they transition to the Common Core State Standards. The tasks can be used to promote discussion about student work and real performance data.

<http://www.scoe.org/pub/htdocs/ccss-mathematics.html>

Standards for Mathematical Practice

Standards for Mathematical Practice - individual standards are featured with examples of the practice standards in classroom lessons. Although the practices are presented here individually, it's important to keep in mind that the practices can, and should, be evident together in a lesson. Future developments to this site will show a holistic view of the practices together. You may also view two exemplary lessons where many of the practice standards are integrated by visiting the page [Bringing the Mathematical Practice Standards Together: Establishing a Conversational Context for Mathematical Thinking.](#)

<http://insidemathematics.org/index.php/commmon-core-math-intro>

Standards for Mathematical Practice Posters

<http://departments.jordandistrict.org/curriculum/mathematics/elementary/CCSSM6/SMPposters.pdf>

S²TEM Centers SC Support Page for Common Core State Standards Implementation

The S²TEM Centers SC CCSSM Implementation Team provides quality professional learning experiences and support resources for educators preparing for implementation of the Common Core State Standards in Mathematics.

<http://www.s2temsc.org/ccss>

Utah Core Standards for Math & ELA

A wealth of information compiled here...scroll down and check out all of the tabs!

<http://www.uen.org/commoncore/>

Virtual Manipulatives

National Library of Virtual Manipulatives-chances are, any manipulative that you can find in the classroom can be found in an electronic virtual tool on this website that categorizes its virtual manipulatives by grade level and by mathematics strand.

<http://nlvm.usu.edu/en/nav/vlibrary.html>