

PA Core Standards for Mathematics
Online Resources *

Source	url	Content
CK-12	http://www.ck12.org/	CK-12 Foundation is a non-profit organization with a mission to reduce the cost of textbook materials for the K-12 market both in the U.S. and worldwide. It offers free digital textbooks .
Developing Effective Fractions Instruction for Kindergarten Through 8th Grade	http://ies.ed.gov/ncee/wwc/PracticeGuide.aspx?id=15	This practice guide presents five recommendations intended to help educators improve students' understanding of fractions. Recommendations include strategies to develop young children's understanding of early fraction concepts and ideas for helping older children understand the meaning of fractions and the computations involved. The guide also highlights ways to build on students' existing strategies to solve problems involving ratios, rates, and proportions .
EDC Think Math Information Exchange	http://thinkmath.edc.org/index.php/CCSS_Mathematical_Practices	This is an open-source, active, growing, free resource, and serving K-8 education communities. This link takes you directly to the discussion of the Standards for Mathematical Practices in elementary school with easy to grasp explanations and examples . The full site also provides useful information and materials for the K-8 math teaching community.
Georgia Department of Education	https://www.georgiastandards.org/Georgia-Standards/Pages/Math.aspx	This site provides mathematical resources from videos, assessment to instructional ideas.
HippoCampus	http://www.hippocampus.org/?user=hippocampus	HippoCampus was designed as part of Open Education Resources (OER), a worldwide effort to improve access to quality education for everyone .
Illustrative Mathematics	https://www.illustrativemathematics.org/	Illustrative Mathematics provides guidance and develops resources to support the implementation of the standards . The Illustrative Mathematics project has developed hundreds of tasks that illustrate the meaning of each standard and provide instructional best practices for teachers.

* These resources have been reviewed for relevance and quality. They reflect some of the many outstanding resources available for use by PA educators.
3/1/2016

PA Core Standards for Mathematics
Online Resources *

Source	url	Content
Inside Mathematics	http://www.insidemathematics.org/	This professional resource for educators features classroom examples of innovative teaching methods, insights into student learning, and tools for mathematics instruction.
K-5 Math Teaching Resources	http://www.k-5mathteachingresources.com/	K-5 Math Teaching Resources provides an extensive collection of free resources, math games, and hands-on math activities.
KHAN Academy Math	https://www.khanacademy.org/math	Khan Academy offers practice exercises, instructional videos, and a personalized learning dashboard that empower learners to study at their own pace in and outside of the classroom.
LearnZillion	http://www.insidemathematics.org/	LearnZillion makes life easier by putting quality instruction and assessment items at your fingertips.
Mathematics Assessment Project (Math Design Collaborative)	http://map.mathshell.org/index.php	The project set out to design and develop well-engineered tools for formative and summative assessment that expose students' mathematical knowledge and reasoning, helping teachers guide them towards improvement and monitor progress. The tools are relevant to any curriculum that seeks to deepen students' understanding of mathematical concepts and develop their ability to apply that knowledge to non-routine problems.
National Council of Mathematics Teachers (NCTM)	http://www.nctm.org/ccssm/	NCTM provides resources that emphasize effective instruction, developing essential understanding of concepts, strategies for formative assessment, and integrating the math practices for teachers and leaders.
NC Common Core Instructional Support Tools – Unpacking the Standards - Math	http://www.ncpublicschools.org/acre/standards/common-core-tools/	For each grade level and CCSS high school area, this document provides explanations and examples for each Standard of Mathematics Practice and what each looks like by grade level.
NY State Education Department	https://www.engageny.org/#	This site includes sample Pre K – High School Math and ELA questions to help students, parents, and educators better understand the instructional shifts and the rigor required to ensure that all students are on track to college and career readiness.

* These resources have been reviewed for relevance and quality. They reflect some of the many outstanding resources available for use by PA educators.
3/1/2016

PA Core Standards for Mathematics
Online Resources *

Source	url	Content
Ohio Department of Education	http://education.ohio.gov/Topics/Ohios-Learning-Standards/Mathematics	Each grade level document unpacks the standards and provides instructional strategies , sample items, common misconceptions, and connection to diverse learners and links to other resources aligning to the standard.
Partnership for Assessment of Readiness for College and Careers (PARCC)	http://www.parcconline.org/	PARCC is a 23-state consortium working together to develop next-generation K-12 assessments in English and Math .
Progressions Documents for the Common Core in Mathematics Standards	http://ime.math.arizona.edu/progressions/#	The authors of the Common Core State Standards in Mathematics are releasing draft papers that provide in-depth discussion of the domain progressions across grades, highlight connections across domains, elaborate on the learning expectations for students, and provide instructional suggestions .
Smarter Balanced Assessment Consortium	http://www.smarterbalanced.org/	Smarter Balanced Assessment Consortium is a state-led consortium developing assessments aligned to the Common Core State Standards in English language Arts/literacy and mathematics that are designed to help prepare all students to graduate high school college- and career-ready.
Student Achievement Partners	http://achievethecore.org/	Student Achievement Partners offer a variety of practical resources and examples for working with the Common Core Standards in both ELA and Mathematics.
Teaching Channel	https://www.teachingchannel.org/	This site includes videos of classroom vignettes with teacher voice overs relating to CCSS. (most about 10 min.)
Tennessee Department of Education	http://www.tncore.org/math.aspx	This site provides instructional and assessment resources to engage students in higher levels of thinking and reasoning .

* These resources have been reviewed for relevance and quality. They reflect some of the many outstanding resources available for use by PA educators.
3/1/2016