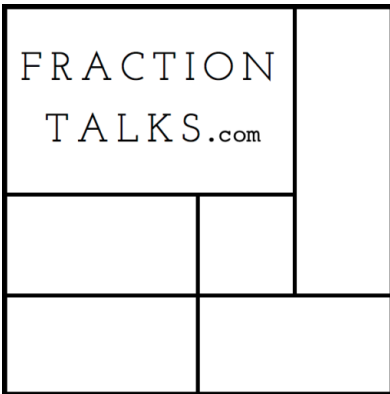


Pinal County Education Service Agency Suggested Math Resources



<https://www.desmos.com>



<http://fractiontalks.com/how-to/>



<https://www.openmiddle.com/whats-open-middle/>



<https://crr.math.arizona.edu/remote-learning-resources>

Desmos is FREE!

Desmos offers free online graphing calculators plus activities that aim at building conceptual understanding. Explore ready-made activities or you can build your own.

Also includes a geometry tool.

Looking for Ways to Strengthen Students Fraction Sense? Turn to FRACTION TALKS! Its Free!

If you teach grade 3 or above, you might wish to check out this great source for fractions. The creator says "I began playing with Fraction Talks in May 2015 after listening to a keynote from Ilana Horn (@ilana_horn). The goal was to develop a simple visual that could foster creative thinking around fractions. An unassuming idea and open disposition began to open up huge spaces for mathematical action for my students.

The idea is simple, the medium is practical, and the thinking is rich. This site is a growing cache of materials designed for classroom teachers and by classroom teachers. Enjoy, invent, contribute."

-Nat Banting (@NatBanting)

Need Activities That Engage Students in Classroom Discussions?

Open Middle problems are engaging and generally require a higher depth of knowledge compared to traditional problems. These problems lead to great discussions about important math ideas that help build students mathematical stamina.

Visit This Site and Find Interactive Simulations for Both Science and Math.

Founded in 2002 by Nobel Laureate Carl Wieman, the PhET Interactive Simulations project at the University of Colorado Boulder creates free interactive math and science simulations. PhET sims are based on extensive education [research](#) and engage students through an intuitive, game-like environment where students learn through exploration and discovery.

Tired of Browsing Through Websites That Have NOT Been Worth Your Time?

The U of A Center for Recruitment & Retention Offers Resources and Training that are all free to Arizona educators. A great collection that is updated often. This should be your "go to" for finding what you need to be a great math teacher.

Pinal County Education Service Agency Suggested Math Resources



<https://www.geogebra.org/?lang=en>

Virtual Interactive Geometry

GeoGebra is an interactive geometry, algebra, statistics and calculus application, intended for learning and teaching mathematics and science from primary school to university level. GeoGebra is available on multiple platforms, with apps for desktops, tablets and web.



Looking for Virtual Number lines? Look No Further!

Virtual Number Lines - Ready to use number lines for integers 0-20, decimals and fractions that could easily be adapted. Made in Google Slides.

<https://drive.google.com/drive/folders/1xOpNygAZKvI-6T-TXtP1MdFvIRNWZ7eh>



Want to Inspire Math Success for ALL Students Through Growth Mindsets and Innovative Teaching? Look No Further!

<https://www.youcubed.org/resource/mathematical-freedom/>

In these times of uncertainty, youcubed is here to help students at home continue to explore and learn maths in rich and creative ways. We are collecting here modified versions of our tasks to be more home-friendly, as well as some new explorations designed for learners at home.



Bring the World to Your Classroom

ArizonaPBS and PBS have curated FREE, standards-aligned videos, interactives, lesson plans, and more just for Arizona teachers like you.



https://docs.google.com/presentation/d/1jadlg9nk64U9gWtj4QEbd-AEzVtCXQeH-y44LPXIF3M/present?slide=id.g27b693dca5_0_261

Looking for Math Manipulatives at Your Fingertips? Visit AZ Virtual Teacher Institute!

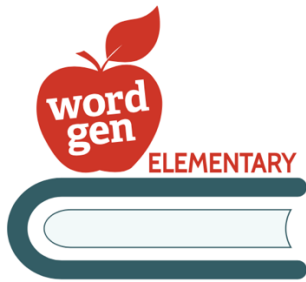
This link will take you to curated Virtual Math Manipulatives Created by Julie Smith. These include Toy Theater, Math Learning Center, Mathigon's Polypad, Math Playground, and Didax manipulatives all in one place. Visit this site once and make a copy for yourself!



Looking for Tools and Resources for Teachers, Parents, and Students?

Visit the National Council of Teachers of Mathematics, this site is jammed packed with resources!

Pinal County Education Service Agency Suggested ELA Resources



<https://www.serpininstitute.org/word-gen-elementary>



<https://www.quill.org>



<https://phet.colorado.edu>



<https://az.pbslearningmedia.org>



<http://mseffie.com>

Looking for Elementary Content-area Literacy Development? Look No Further!

WordGen for grades 4 and 5 is comprised of twelve-two week units with lessons for each day. It is created to expand students background knowledge and academic vocabulary, while emphasizing 21st century learning practices such as argumentation, analytic reasoning, perspective taking, reading to find evidence, oral discussion and writing.

The Content-area Literacy Activities Include: Video Newscasts, Reader's Theater, Word Study, Ask the Expert, Journals and journeys, Informational Text, Situational Math, and a plethora of Discussion, Debate, and Writing opportunities!

Looking for Ways to Strengthen Students Writing?

Quill provides free writing and grammar activities for elementary, middle, and high school students.

Visit This Site and Find Interactive Simulations for Both Science and Math Which Can be Accompanied by Socratic Seminars/Debates.

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Bring the World to Your Classroom

ArizonaPBS and PBS have curated FREE, standards-aligned videos, interactives, lesson plans, and more just for Arizona teachers like you.

Looking for LESSONS at Your Fingertips? Visit MS EFFIE'S LifeSavers!

This is your one stop shop for High School AP English Teachers! Ms. Effie is a Master Teaching Professional who has curated, edited, and vetted all her lessons. She shares all of her experiences and lessons learned all in one place.

Pinal County Education Service Agency Suggested ELA Resources

ACHIEVE THE CORE

<https://achievethecore.org/page/3267/2020-21-priority-instructional-content-in-english-language-arts-literacy-and-mathematics>

Still Wondering What your Instructional Priorities ARE? Look No Further!

2020–21 Priority Instructional Content in English Language Arts/Literacy and Mathematics

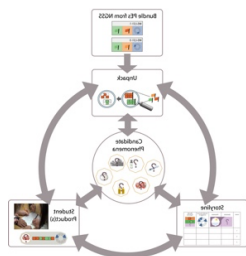
Grades K-High School

Pinal County Education Service Agency Suggested Science Resources



Looking for tools and resources for your students? The Arizona Science Teachers Associations has a resource center for parents, teachers and students.

<https://azsta.org/resources/>



Looking for ways to capture student's attention virtually. Visit PHENOMENA FOR NGSS and access free virtual science education resources.

Learn about a research scientist named TJ and his 7 years of on-air television work, phenomena has become a major way he engages students and teacher learners (both pre-service & in-service) with core science ideas that they want to figure out. Because the NGSS reflect how he thinks about science, he hopes that through curating a cache of phenomena this will open conversations and with educators across the nation who are hoping to create the next generation of student engagement in science.

www.ngssphenomena.com



Need activities that bring real scientific data into the classroom, that guide students through the entire process of science while building their quantitative abilities?

Data Nuggets are free classroom activities, co-designed by scientists and teachers, designed to bring contemporary research and authentic data into the classroom. Data Nuggets include a connection to the scientist behind the data and the true story of their research. Each activity gives students practice working with “messy data” and interpreting quantitative information. Students are guided through the entire process of science, including identifying hypotheses and predictions, visualizing and interpreting data, making evidence based claims, and asking their own questions for future research. Because of their simplicity and flexibility, Data Nuggets can be used throughout the school year and across grades K-16, as students grow in their quantitative abilities and gain confidence. Data Nuggets have the potential to improve the understanding of science in society while engaging and motivating the next generation of scientists and engineers.

<http://datanuggets.org>



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My NASA Data offers ideas pertaining to the different spheres. In this site you will find mini lessons, lesson plans and story maps, as well as data visualizations.

Schedule time with them NOW, and watch your lessons come alive!

<https://mynasadata.larc.nasa.gov>

[v](#)

Pinal County Education Service Agency Suggested Science Resources

Lifewire

The 21 Best Free Virtual Field Trips of 2021

Stuck at home? Travel virtually all over the world instead

<https://www.lifewire.com/best-free-virtual-field-trips-4800629>

Google Earth Engine

Earth Time-lapse is a global, zoomable video that lets you see how the Earth has changed over the past 35 years.

<https://earthengine.google.com/timelapse/>



**ARIZONA DEPARTMENT
OF EDUCATION**

Visit this site to get a complete summary comparison of the AZ standards VS the NGSS standards; which can aid teachers in planning.

<https://www.azed.gov/sites/default/files/2020/05/FINAL%20COMPLETE%20SET%20K-12%20PLANNING%20SUMMARIES%205.26.20.pdf?id=5ebddf503e2b318544c21d3>



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