A resource for every algebra student & teacher
HISTORY

• 2012-2013 - University of Florida and Study Edge co-develop Algebra Nation.

• Teachers, administrators, parents, and students collaborate with UF faculty and tech designers to create Algebra Nation.

• Algebra Nation rapidly evolves into critical resource to help students succeed in algebra and on the state algebra exam.
FEATURES

• One-stop resource – videos, study guides, live help, practice activities, lesson plans, reports

• Available on web, smartphones, tablets

• Seamless access – integrated with districts; students & teachers use existing credentials to login

• Student rosters upload automatically; teachers pull reports on student usage instantly

• Facilitates blended learning, flipped classrooms, differentiated learning
COMPONENTS

• Interactive, dynamic videos feature teachers with range of styles (and with different teaching backgrounds)

• Study guides (note shells) accompany videos, allowing students to actively follow along with material

• Algebra Nation Workbooks – aggregated lessons (at teacher request); bridge for students who do not have access to technology, some teachers use as textbooks
COMPONENTS

• Test Yourself! Practice Tool – students answer questions on platform similar to end of year exam (Florida State Assessment)

• Algebra Wall - students collaborate with peers on problems; wall moderated by Study Experts and teachers

• Teacher Area, teachers-only forum with curated resources and Teacher Wall for online collaboration
Instructional Videos
FEATURING DYNAMIC TEACHERS
WORKBOOKS

- Algebra Nation distributes at least 250,000 free workbooks each year.
PRACTICE

- Online tool mimics required computerized test
- Customizable for assessment (question types, calculator)
- Immediate feedback
School: Lastinger High School
Username: Teacher
Password: guest
STUDENT AREA

Instructional videos
- New videos and materials aligned with new MAFS standards
- Multiple versions of videos (coming this fall)

Test Yourself! Practice Tool
ALGEBRA WALL

Over 2,000 daily wall posts

Algebra community of students

Peer learning, collaboration

Guided conversations
STUDENT AREA

Student tools on Algebra Wall
- Calculator
- Special characters
- Equation editor

Incentives
- Teachers can award Karma points
- Monthly iPad to leader
- Cruises for teachers
TEACHER AREA

• Launched September 2014

• 9/1/14 - 9/1/15
  - 4597 unique teacher logins
  - 71,486 total visits
  - over 19,000 wall posts
MATHEMATICAL PRACTICE VIDEOS

• Feature teachers from different areas of Florida with different styles and different students

• Show how to incorporate MP standards in daily lessons
TEACHER AREA

New Florida Mathematics Standards

- List of new standards
- Videos aligned with standards
- Testing resources
  - Calculator
  - Test item specifications
- Video Times
- Video Study Guide Answer Keys
TEACHER AREA

Algebra content resources
  • Stat Chats
    • Webinars on statistics Standards
      • Live and archived
    • Lessons and activities
  • Tutorials
    • Desmos graphing calculator
  • Resource library
    • Suggested websites
    • Teacher-submitted lessons
Teachers share best practices, ideas, resources

Connects teachers across the state, creating a statewide PLC
BENEFITS OF INTEGRATED DISTRICT

Students and teachers use district credentials to log in

Teacher rosters are automatically set up by district IT

Teachers can track:

• Videos watched
• Test Yourself! scores
• Wall posts

Questions? Email help@AlgebraNation.com
I use the videos whole group and individually, as well as the extra practice and the test yourself sections. I use the reports when I assign things at home to look at their scores and make sure that they have watched the videos. I also use the videos/practice for my Pre-Algebra classes and for remediation for my Geometry classes. (I can't wait until there is a "Geometry Nation"). I encourage my students to write on the wall when they need help or can help someone else.
I primarily use Algebra Nation as a reinforcement tool. It is a great resource for kids when they are home to re-teach the concepts that they most struggle with. Algebra Nation allows students to work at a pace that is comfortable to them instead of the classroom pace that does not meet everyone's needs all of the time.
TEACHER QUOTES

This year we watched videos together in the classroom and explored the website together. Then I have assigned the videos for homework and extra credit so my classroom can be partially flipped.

I have also utilized activities from the teacher resource section. Most recently, I ran the M & M Statistics Activity with my 3 regular Algebra I classes...The activity was a success and not just because the students were happy to have M & Ms. It correlated perfectly with the standards for the statistics section.
Average Number of Logins by School

Average Logins Per Teacher

Average Logins Per Student

End of Course Passing Rate Quartiles

Quarterly Logins

- 0-24.9%
- 25-49.9%
- 50-74.9%
- 75-100%
Average Number of MAFS Video Views by School

Average Views Per Teacher

Average Views Per Student
Average Number of MAFS Test Yourself! Questions Answered by School
TIME FOR A BREAK

15 minutes
Algebra Nation Professional Development
Did you know? Algebra Nation provides free PD locally on topics such as:

• Introducing teachers to Algebra Nation resources

• Growing teachers’ pedagogical content knowledge

• Unpacking the Mathematics Florida Standards and test item specifications

• Ways to use AN:
  • Differentiated instruction
  • Remediation
  • Lesson reinforcement
  • Flipped classroom
  • When teacher/students are absent
Mathematical Practice #1

MP #1: Make sense of problems and persevere in solving them.
Mathematical Practice #1

- What do you see?

- What questions does this video raise for you?

- What is significant about this video?

- What are the implications for our work?
Mathematical Practice #1

Debrief

- What were your experiences of or reactions to this protocol?
- What are some ways you could see yourself using the AN Mathematical Practice videos in your context?
- How could a structure like the Making Meaning Protocol be used in your context?
Real World Quadratics: Catapult Activity
Chalk Talk: Popsicle Stick Catapult Activity

Reflect on the following questions. Then, write your responses on the corresponding posters around the room.

• What mathematical connections do you believe students will make?

• What questions could you ask students to further develop these connections?

• What are some challenges in implementing this activity?

• What can you do to overcome these challenges?
How could the resources found on Algebra Nation be useful to you in your role?

➢ Think-Pair-Share
Questions?
To get more information:

Please contact Stephanie at:

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