Math Websites

NEW YORK INSTITUTE OF TECHNOLOGY

Keystone Assignment

EDIT 624 – Spring 2017 Instructor: Dr. Uttendorfer

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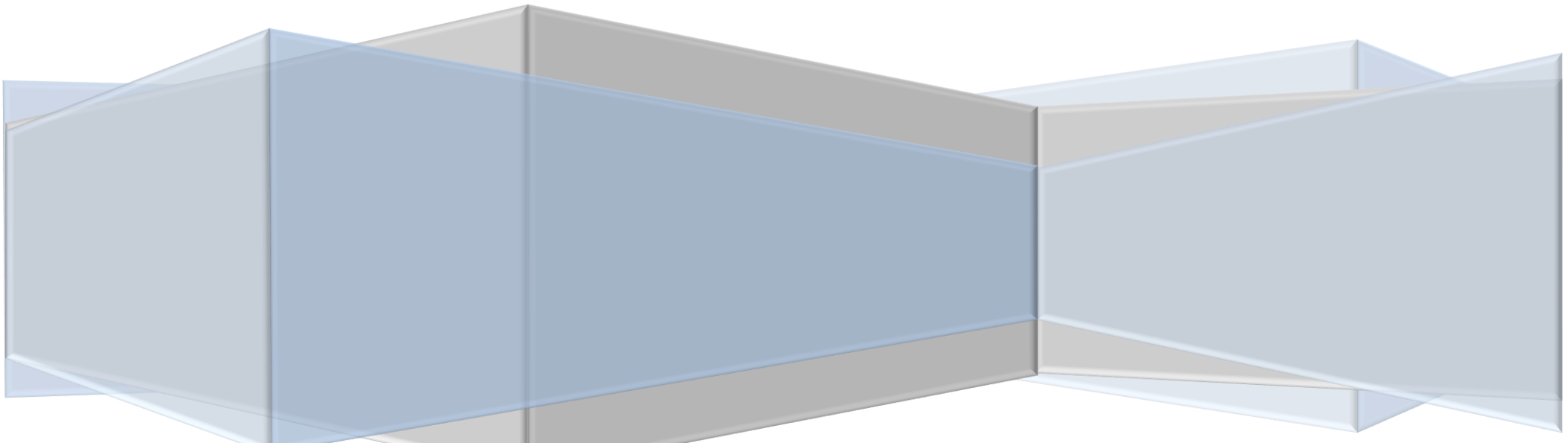


Math Websites

Table of Contents

Math Websites

I. Web Resources for Teaching Mathematics

Websites intended for Math instruction for students grades kindergarten through twelfth:

Site	URL	Description	Screenshot
MathChimp	http://www.mathchimp.com/	MathChimp has compiled games from other websites across the internet to align them in an organized fashion with the Common Core Standards. On this website, there is information for math students from grades one through eight. As resources, there are videos, worksheets, games, and their blog. All the work is grouped by grade.	
Code.org	http://www.code.org/	Code.org teaches students basic coding skills based on level of ability. This aligns with the New York State standards for the seven levels of Math Science and Technology. Incorporated are videos and student interactive lessons as well as games and game creation.	
Starfall	http://www.starfall.com/	Starfall is a publicly run website that offers subscription services as well as free services for math that is aligned with the common core standards. Curriculum is available to purchase for kindergarten and the website hosts games and lessons for grades kindergarten through second.	
Moby Max	http://www.mobymax.com/	Moby Max is aligned with Common Core and state standards and has received several notable awards for educational technology. It has integrated worksheets, student feedback, IEP goals and much more for math. Teachers can see how students perform as they learn on the computer platform as well as on their worksheets in class.	
Compass	https://www.edgenuity.com/edgenuity-and-compass/	Compass is now affiliated with edgenuity from the start of 2017, so check to make sure your web address do not change. Aligned with the common core standards, Compass Learning is available to students at home or at school. With blended, or hybrid versions of course work, curriculums, and test preparation.	
CoolMath	http://www.coolmath.com/	CoolMath is a website that is directed towards using games as a tool of instruction. It can be aligned with the common core standards but it is more useful as a reinforcing agent to what was learned in class. Mainly this website is intended for use with algebra for the lessons that it offers.	
HoodaMath	http://www.hoodamath.com/	HoodaMath is a game based website that allows teachers to create a profile and select certain games for students to use to enhance learning with the common core standards. This can be used to restrict to certain topics or be	

Math Websites

		left open for students to explore on their own. Based for grades kindergarten through high school.	
Brain pop	https://www.brainpop.com/math/	Brainpop is a website that has videos and interactive lessons for grades from kindergarten through high school. Brainpop is organized by content area and grade levels. Games and activities are available as well for alignment with common core standards.	
Math - Play	http://www.math-play.com/	Math-Games is a website that is based on education through games. The games are grouped by type and grade as well, each classroom game has the common core standards stated for alignment. It is set up for grades kindergarten through eighth grade.	
Open Stax	https://openstax.org/subjects/math	OpenStax is a website that is based on presenting information freely to the public. It can be used as a secondary source to reinforce common core standards. It is free and the text books are useful for AP students.	
Common Core Conversation	http://www.commoncoreconversation.com/#sthash.DQW0OV2v.dpbs	Common Core Conversation is a website dedicated to presenting information to teachers to find more resources for instruction. Their webtools library and videos are the most useful part of this website. It is as also aligned with the common core standards for student's kindergarten through twelfth grade.	

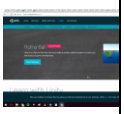
Websites for Science.

Websites intended for Science instruction for students grades kindergarten through twelfth:

Site	URL	Description	Screenshot
Code.org	http://www.code.org/	Code.org teaches students basic coding skills based on level of ability. This aligns with the New York State standards for the seven levels of Math Science and Technology. Incorporated are videos and student interactive lessons as well as games and game creation.	
Moby Max	http://www.mobymax.com/	Moby Max is aligned with Common Core and state standards and has received several notable awards for educational technology. It has integrated worksheets, student feedback, IEP goals and much more for math. Teachers can see how students perform as they learn on the computer platform as well as on their worksheets in class.	
Compass	https://www.edgenuity.com/edgenuity-and-compass/	Compass is now affiliated with edgenuity from the start of 2017, so check to make sure your web address do not change. Aligned with the common core standards, Compass Learning is available to students at home or at school. With blended, or hybrid versions of course work, curriculums, and test preparation.	
Brain pop	https://www.brainpop.com/science/	Brainpop is a website that has videos and interactive lessons for grades from kindergarten through high school. Brainpop is organized by content area and grade levels. Games and activities are available as well for alignment with common core standards.	
Open Stax	https://openstax.org/subjects/science	OpenStax is a website that is based on presenting information freely to the public. It can be used as a secondary source to reinforce common core standards. It is free and the text books are useful for AP students.	
Common Core Conversation	http://www.commoncoreconversation.com/#sthash.DQW0OV2v.dpbs	Common Core Conversation is a website dedicated to presenting information to teachers to find more resources for instruction. Their webtools library and videos are the most useful part of this website. It is as also aligned with the common core standards for student's kindergarten through twelfth grade.	

Math Websites

Websites intended for Technology instruction for students grades kindergarten through twelfth:

Site	URL	Description	Screenshot
Code.org	http://www.code.org/	Code.org teaches students basic coding skills based on level of ability. This aligns with the New York State standards for the seven levels of Math Science and Technology. Incorporated are videos and student interactive lessons as well as games and game creation.	
Common Core Conversation	http://www.commoncoreconversation.com/#sthash.DQW0OV2v.dpbs	Common Core Conversation is a website dedicated to presenting information to teachers to find more resources for instruction. Their webtools library and videos are the most useful part of this website. It is as also aligned with the common core standards for student's kindergarten through twelfth grade.	
Quakit	http://www.quackit.com	Quackit is a website based on tutorials and samples of how to code in the coding language HTML. It is a common coding language and has information on how to create websites and for other tools. It includes other coding languages for color. This website also explains how to host a website and implement the information in a cogent way.	
Unity3D	https://unity3d.com/learn	Unity3D is a video game creating software that uses C# and JavaScript to create video games. There are basic tutorials and a store integrated to find assets such as items, characters and scripts with code already functioning. Programs can also be created in this application.	
MakeUseOf	http://www.makeuseof.com	MakeUseOf is a website that has information about technology and new technologies. It allows students to look at new information along with videos and reviews. It is important for students to be able to learn about new technologies so that they can adapt to them and learn what is useful and what is not.	

Math Websites

II. Professional Development Videos

A. Video 1 - Content Description: Illuminations lesson website.

   Link to the video 1: https://www.screencast.com/t/uKLhelnxlV5

B. Video 2 - Content Description: Geometry Lesson.

   Link to the video 2: https://www.screencast.com/t/ZEqJWhUOvUl

C. Video 3 - Content Description: Stop a creature with higher order thinking.

   Link to the video 3: https://www.screencast.com/t/TgmpQVSu

D. Video 4- Content Description: Problem Based Learning.

   Link to video: https://www.screencast.com/t/Dtd6FJC3csc and https://www.screencast.com/t/EbvXubI5

Math Websites

III. Professional Development Workshop Outline

Charles Lynch
Unit 10
Professional Development
EngageNY Usage

A. **Workshop Description**:

- This workshop will assist teachers in the ability to find, and use information from the website: Engage NY. This website has several useful resources for all grades kindergarten through twelfth grade for all subject areas. Teachers will use school computers and be able to find and use a lesson of their choosing will comparing with another teacher or a group of teachers on what they have found will tracking data on a sheet provided below.

B. Workshop Summary

1. The anticipated length for this work shop would be one hour. It is designed to not dwell on finding new resources but to allow teachers to find their own and refer back to the information with their own notes and personal print off's by the end of the session. It would most likely take place right after school as an extended faculty meeting.
2. Format will be face to face with a group.
3. Targeting the teachers and teaching assistants of the buildings staff is the prime reason for the lesson.
4. Roughly 30 to 50 teachers and teaching assistants would be adequate for a lesson of this nature.

C. **Learning Outcomes for Participants**

- The learning outcomes for the participants are as follows:
    - Having the ability to recreate the given lesson.
    - Find lessons pertaining to the teachers class level and content area they wish to use it for.

- **2. Design and develop digital age**
- **learning experiences and assessments**
- Teachers design, develop, and evaluate
- authentic learning experiences and assessments
- incorporating contemporary tools and resources
- to maximize content learning in context and
- to develop the knowledge, skills, and attitudes
- identified in the Standards•S.

- **3. Model digital age work and learning**
- Teachers exhibit knowledge, skills, and work
- processes representative of an innovative
- professional in a global and digital society.

D. List of resources used for workshop such as:

a. Print/electronic resources (Word, PDF, etc.)
    i. The teachers will need the ability to print documents from a laptop computer.

b. Presentation files (PowerPoint, Prezi, Google Slides, Keynote, etc.)
    i. This will be a live lesson where the instructor will be demonstrating how to find and use lessons from EngageNY.
c. Videos (YouTube, your own video titles)
    i. This is a lesson that can be shown to instruct teachers on how to find a simple lesson on the website engageny.org.
        1. https://www.screencast.com/t/csL3ahWaZ82a
d. AV equipment (Projector, interactive whiteboard, etc.)
    i. A Projector will be required to show information on for all to see.
    ii. A computer lap or a teacher set of computers so that teachers can find their own lessons and print them as well.
    iii. Saving them to a common or personal drive on the computer or a flashdrive would work as well if printing is not available.

E. **Participant activities**
a. The participants will engage in active listening to the instructor as they give directions on how to find lessons.
b. Take notes.
c. Find and print their own lessons from engage ny
d. Share their lesson with a peer or peers for comments.

F. Evaluation

Teachers will pair off into groups of two to four peers and share their new found lesson plans. They will then complete a part of the handout that is meant to take notes on, to add their lesson if they liked it or not. Also to state if it would work in their classroom.

Outline:

- Short introduction and over view of topic – 5 minutes.
- Instruct visually the set up and creation of an account. – 5 minutes.
- Explain how to find an appropriate lesson and print and download it.– 15 minutes.
- Allow teachers to find their own lesson and print and save it. – 15 minutes.
- Allow teachers to review each others work and comment on what they found. – 10 minutes
- Show teachers where to find the video above to review how to find lessons at home or at school, the video is directed by me. – 10 minutes
    - https://www.screencast.com/t/csL3ahWaZ82a
- Thank the teachers from coming.

Teacher notes and instructions

Use this page to take notes on

_____

_____

_____

_____

Engage NY Account:_____

Password Hint:_____

Topic of lesson found:_____

Name of Lesson found:_____

URL for lesson found:_____

Comments for another teacher:

_____

_____

_____

Comments from another teacher:

_____

_____

_____

IV. Evaluation Plan

Teachers will pair off into groups of two to four peers and share their new-found lesson plans. They will then complete a part of the handout that is meant to take notes on, to add their lesson if they liked it or not. Also to state if it would work in their classroom.

Google Form link:
https://docs.google.com/a/nyit.edu/forms/d/e/1FAIpQLSeyB1eFtXgr3wDIlN7tPJtSbwWTn-qxvj9vfOucQWUY301yeQ/viewform