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# Ideas with IMPACT





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Taking Advantage of Technology -At Any Level!

## Taking Advantage of Technology- At Any Level!

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## Why Technology?

The use of technology can enhance *any* classroom, as long as there is some "thought" put in to the plan (and sometimes, even if not!).

Technology can be used to:

- Engage students by
  - Allowing them to be active participants in lessons
    - Share their work to an online platform (for instant viewing)
    - Provide their answers to questions
  - Bringing the lesson directly to their screen
    - Through screen-sharing software
    - Through online textbooks
- Support Real-World Application through
  - Pre-planned activities (online programs)
  - Internet research (articles & videos)
- Encourage **\$elf-Directed** (and collaborative) Learning using
  - o Online textbooks
  - Additional websites and software
- Provide **Remediation and Review** through
  - Additional internet resources
  - Online tutorials
- Bring Fun and Games into your classroom!

For this project, I am going to review with you:

- Getting Ready! How to plan for technology in the classroom
  - Provide you with resources and ideas for implementing technology use, informing parents, and setting class norms and expectations
- Doing it! How to use technology in the classroom
  - Show (and explain) several examples of technology "trackers" and lesson plans including use of technology
  - Go over several resources and how/ when you could use them
- Print This! A resource list you can save for a "Rainy Day"

## Looking Ahead!

My goal in putting this project together is to share my love for technology in the classroom with like-minded teachers, to help encourage use of technology to promote student learning, and to get more ideas from YOU!

**So**, if you are reading this packet, PLEASE send me any additional ideas or resources you know about so I can add them to my own toolbox, and continue to share your ideas with my network!

And if you want further clarification or help with adapting my project, do not hesitate to reach out!

## Notes:

**Since** I am a high school math teacher, resources mentioned *might* be specific to older students or math, but most can be used for any age, any subject, and in any setting!

I usually use narrow margins on my handouts, so most samples have been shrunk down to fit on 1 or 2 pages. This way, you can print them straight for the packet—or you can e-mail me for a word version!

## Florida Standards:

### Math

MAFS.K12.MP.1.1 Make sense of problems and persevere in solving them

MAFS.K12.MP.2.1 Reason abstractly and quantitatively.

MAFS.K12.MP.5.1 Use appropriate tools strategically

### Language Arts

LAFS.910.RST.1.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text

## **Getting Ready**

There is a lot you must think about before beginning to use technology in your classroom. You can have a great lesson planned, but as we know, the first time you try something, it's never perfect. Here are some starter questions to consider when planning on using technology in your classroom:

- What technology tools do you have access to?
  - For yourself?
    - Your school might be willing to lend you a tablet or laptop!
  - For your students?
    - See about getting into the Media Center, a lab, or if you can borrow a "cart" with laptops or tablets.
- What technology do students already have?
  - Cell phones? Smart phones?
  - Tablets? Laptops?
    - Keep in mind, if students will be getting a device from school, there is usually paperwork and/or dues involved.
- Do you have internet access?
  - Can it handle multiple devices?
  - Will school filters prevent students from opening apps or visiting certain websites?
- What other tools might you need?
  - Surge protectors? Will students need to charge their devices?
  - Will they need keyboards? Mice?
    - If so, make sure students know to bring these things, or try to arrange to have it in advance.
- How do you want your classroom set up?
  - If you are going to another room, go ahead of time to see how you envision the room.
- What "norms" or behavior expectations do you have?
  - Does your school have a Bring Your Own Device policy in place?
  - o Do you need to communicate with parents in advance?
    - You might want to plan a mini-lesson with students or at least discuss acceptable computer use in advance.
    - You can also send a letter home to parents or a contract of acceptable use (example to follow).
- What do students need to work on?

Here are some additional tips to consider when implementing a tool (or technology in general) for the first time:

- Always have a "paper" back up plan (you never know when the school's wi-fi will decide to stop working!)
- Plan for the activity to take longer than—or not as long as—you anticipated.
  - If students are using self-directed technology, think about what they can do if they finish early (using technology or otherwise)
- Play around with the technology tool before using it with your class
  - See if you have a couple of students who will be your guinea pigs
- Think about what to do if there are not enough technology tools for everyone
  - Can students partner up?
  - On that note, do you need to offer an incentive for students to ensure they come prepared?
- Don't be shy! Sign up for workshops on new technology, join an online "Personal Learning Community", or reach out to someone you know. Always ask more questions until you fully understand how to use a resource, and if possible, go observe someone else!
- If it looks good, take pictures!
  - This may seem silly, but if you are trying to adapt this project, or apply for another grant or classroom donation, excellent pictures of students utilizing technology can go a long way!
- Ask students what they want to work on!
  - Make sure students feel comfortable coming to you if they need help—this can help you determine when would be an appropriate time to use technology and what resources students can benefit from.
  - You can have a "parking lot" in your class—a board where students can post notes of what they need help with or want to work on
  - I used to have little slips of paper where students could fill out what they needed help on, and an example problem if applicable.

### Samples

On the following pages are a couple of examples of documents I use in my classroom related to technology use.

**BYOD Policy-** After a few years of dealing with the same issues, I decided to send home this contract **before** beginning to use technology in my class. This contract was a way of notifying students and families that I was requiring technology, reviewing appropriate and inappropriate use, and discussing possible consequences. M-DCPS also has a BYOD policy, but I found that requiring this to be signed and returned was a better way of ensuring everyone knew what the rules and expectations were.

Handout- My school has a diverse population, and I am constantly getting new students throughout the year. After a while of explaining how they go about getting tablets and what internet resources I recommend, I decided a simple one-page handout might be an easier way for students to remember what they need to do. You'll notice this is short on text and spaced out nicely—I did this so my English Language Learners wouldn't be overwhelmed with the text and to provide them space to translate.

#### Ms. Levenson's "BYOD" Electronic Use Policy

#### November 2016

**Purpose**: The purpose of this contract is to ensure all students and parents are familiar with the MDCPS Acceptable Use Policy and Ms. Levenson's personal expectations of acceptable use of students' electronic devices in the classroom.

**Cell Phones:** Cell Phones should be **turned off** during all class periods, unless otherwise instructed by Ms. Levenson. Cell Phones can be used in rare occurrences, to take pictures of the board, have students sign up for or use a technology resource, or for other specified purposes.

During times when cell phones are not requested, if a student's cell phone is seen or heard during class, it will be turned into the Parent Resource Center until a parent comes in to retrieve the device.

**School Tablets**: All students were instructed to "rent" a tablet from the school (either through their 9<sup>th</sup> grade History or 10<sup>th</sup> grade English teacher) for a minimal fee.

**BYOD**: In the event that a student does not want to take the school's tablet, they should have agreed to bring their own electronic device, a *tablet or laptop*, to school.

BYOD refers to both school issued tablets & personal tablets or laptops.

**Use in class:** Students are **required** to bring their Electronic Devices to class on a *daily basis*. These devices must be *charged* so that they can be used during class.

Students will use these devices in place of their in-class textbook, to use other math resources, and they can also take notes on their devices (and later transfer them to their binder).

Unacceptable Use: Students are not to visit any other unapproved websites during class, including email and gradebook.

*If a student is caught using the device inappropriately, a referral will be written and sent to the administrator.* 

**Grades:** Students will be issued grades based on having (and using) their devices during class, and grades will also be assigned as a result of work students complete on the various math resources used online.

The bottom of this paper must be signed by both student and parent acknowledging receipt and review of this contract. *This is worth a grade and required for your student to use their device in class.* 

Parents, please call 305-532-4515 or e-mail <u>hlevenson@dadeschools.net</u> with any questions or concerns.

\_\_\_\_\_

We understand and agree to follow the rules and expectations for acceptable use of Electronic Devices in your class.

\_\_\_\_ My student already has their OWN device

\_\_\_\_ My student already has the SCHOOL tablet

\_\_\_ My student will be getting a device BY: \_\_\_\_\_

Student name: \_\_\_\_\_\_ Student signature: \_\_\_\_\_

Parent name:	Parent signature:
	0

Additional comments:

#### **BYOD- Bring Your Own Device**

- 1) Get paper signed by parent
- 2) Bring \$5 (free/reduced lunch) or \$20 to Treasurer
- 3) Bring receipt and signed paper to History teacher
- 4) SAVE YOUR RECEIPT!!!
- 5) Put tape on back of tablet that says your name
- 6) Bring tablet charged to class

#### Math Online

#### 1) HOMEWORK

- a. Go to Student Portal
- b. Find Algebra 1 and click the Red Book
- c. See "My Assignments" on bottom of page. Make sure to finish BEFORE DUE DATE!
- d. On top of page, select Algebra 1
- e. Use Interactive Student Edition
  - i. To find the lessons & videos explaining each concept
  - ii. Click Resource Locker--- you can find book in Spanish!!

#### **EXTRA HELP**

#### 2) MATH NATION

- a. You should have Blue book that says Math Nation
- b. Go to Student Portal
  - i. Click Apps, Services, and Sites
  - ii. Find, star, then open Math Nation
  - iii. Select Algebra 1 on top right, and then Videos and More
  - iv. Find the page in book that matches the video
  - v. Watch and Learn!

#### 3) KHAN ACADEMY

- a. Go to khanacademy.org OR khanacademy.org/espanol
- b. Create account with Gmail or Email. NOT FACEBOOK!
- c. Go to khan academy.org/coaches and "Add a coach"
  - i. My email is hadassa1909@gmail.com
- d. Ask me for recommendations on what to work on OR start Algebra 1 mission
- e. Watch, Learn, & Practice

## Doing It!

In addition to the tips I mentioned before, I'd like to give you more advice on planning specific lessons with technology.

Here are some additional suggestions on how you can incorporate the different types of resources in your lessons and planning:

#### • Engage students

- Online textbooks
  - A good portion of textbooks we use have online versions, and if students have technology, they can follow along with the lesson on their device. For example, the HMH textbooks used in the Algebras and Geometry have a online edition—as the teacher you can display the online version on your board (if you have a "Smart" board"), and students can follow along (or move at their own pace!) using their devices.
- Academic Support Websites (like Khan Academy, Math Nation, Edgenuity, Edx)
  - There are many websites out there that have lessons, videos, AND practice available for students! You can show the videos to the whole class, and then have the students complete the practice individually.
- Screen-sharing software
  - M-DCPS has licenses for several screen-sharing programs, one of which is Promethean ClassFlow. For these programs, you pull up the website on your computer, to display it, and students can go to the same website (students can log on through their portal, or you can give them a unique url) and follow along.
  - Nearpod is another (similar) option. Both of these sites allow you to question students during the lesson, and you are able to save the results to view later!
- Virtual Blackboards
  - Padlet is an interactive whiteboard where anyone can post responses. For example, you can create a Padlet and put a question (or an image) there, and have students "post" their response. They can type, draw, or put an image! What's neat about Padlet is the page can be saved—I once attended a PD

where the facilitator directed us to her Padlet for more information, she had saved pages that explained her product and answered many FAQs!

 Microsoft and Google online tools can also serve as virtual blackboards where students can view or post material from class.

#### • Support Real-World Application

- o **Google** 
  - I have to put this first, because Google can end up being your best friend, and give you more tailored suggestions than I can! Something as simple as Googling "polynomials real world application" can introduce you to amazing resources that you can use in your classroom.
  - For example, did you know that NASA has online books devoted to connecting their material to math education? One of my students found this by googling "algebra 2 astrophysics"
- Online textbook
  - Again, your online textbook can be a great friend to you. If your book is online, I am pretty sure they have real-world connection videos or handouts that you can use in class.
- o Explore Learning
  - Also known as Gizmos, this site has exercises that allow students to get hands-on practice and use manipulative and interactive tools to solve real-world problems.
- Next Generation Personal Finance
  - This resource is good for any math class or ANYONE trying to teach financial literacy! It is a massive (and constantly growing) database with complete lesson and activity plans and supporting documents. It can be overwhelming, but trust me, it's worth it to have students see the value of financial literacy and its connection to your class.
- Encourage **\$elf-Directed** (and collaborative) Learning
  - Online textbooks
    - As mentioned above, students can use online textbooks to move at their own pace. Instead of teaching to the whole class, you can have students go through the online lesson at their own pace, while you work with a small group or individual students.

- Collaboration comes in when students work together. You can pair them up, sit them in "pods", or allow them to choose how they want to work.
- Academic Support Websites (like Khan Academy, Math Nation, Edgenuity, Edx)
  - These websites include full course plans, so students could essentially "teach themselves" the subject. This can be a great resource for both remediation, and enrichment.
  - Khan Academy (and Math Nation) have many teacher tools that allow you to monitor student progress. Just this summer, Khan Academy added several new options to make it even easier for teachers to use Khan Academy in their classroom and for graded assignments.
  - These sites are great resources to use during differentiated instruction, whole class, or for individual students who require a different approach
- Videos from TED, YouTube, TCH
  - Again, Google is your friend. You can almost always find a video related to the topic you teach if you spend long enough looking. (Or get your students to look for you!)
  - Instead of watching these videos as a group, allow students to watch them on their device. That way, they can move at their own pace, and pause or rewind as needed.
  - The "Crash Course" series by the Green brothers on Youtube is an engaging set of videos that covers most subjects (except math) taught in school (and includes real-world applications).
- Provide **Remediation and Review** through
  - Academic Support Websites (like Khan Academy, Math Nation, Edgenuity, Edx)
    - Once more, these sites are great for students who need additional practice. On Khan Academy, you can recommend videos or practice for students (and then check if they completed it).
  - Interactive Software and Websites (like Quia, Quizlet)
    - Check with your school if they have a license to any type of online software, but if not, you can find many on the internet!
    - If you do have access to an online program, find out what restrictions there are. For example, on Edgenuity (included for

M-DCPS teachers), many courses have two options—students must complete each component before moving on, or they can move around and work on whatever they want. I love the second option because it allows me to incorporate Edgenuity as I see fit and not as a full program.

- Quia has both Quia Web and IXL, which contain various games and drill exercises that students can use in class or at home. Quia does have a purchase option, and sometimes students will get told they "used up" their free questions, but it is still worth mentioning and trying.
- Polling Websites and Applications (like Kahoot, Socrative, Quizlet Live)
  - If students have their own devices (or can pair up), these resources will help you get instant reactions and results from students.
  - You can create quizzes (or take from the databases on these sites) and instantly deliver them to students' devices. For some, students can move at their own pace, and for others, you move together as a class. For these programs, you can save the results (to assign grades or track student data).
  - You can also display these results and have students engage in conversations about what the correct answer is and why someone may have gotten the question wrong.
  - Plickers is an amazing resource I just heard about where students don't even need technology! You print up a set of cards—each student gets one card that they can turn to represent a multiple-choice answer. With YOUR device, you scan the room, and voila! Data saved!
- Bring Fun and Games into your classroom!
  - Interactive Applications & Websites (like Kahoot, Socrative, Quia, Quizlet Live)
    - Students often thrive on competition, and many love playing Kahoot or Quizlet Live during class. You can devote a whole day, or just a portion of the day to these activities, and it can be a great "break" from the normal classroom routine.
  - Production Websites (like Flocabulary, Powtoon)

- While Flocabulary requires a purchase, Powtoon has some free options. Both of these sites are great for students to create their own interesting and engaging projects!
- Flocabulary helps students create rap songs for any subject (and a subscription allows you access to their library).
- Powtoon is a presentation tool website, where students can create unique and exciting presentations they can use for class.

#### Student Aid;

- Online calculators (Desmos, Geogebra)
  - Desmos is a great online calculator that students can use in class, and they can also play around on desmos if you want them to investigate certain properties of functions.
  - Geogebra is software that can be installed on devices and while it is also a graphing calculator, it can change the way students view statistics!
- Presentation and Note Taking Tools (Microsoft and Google tools; Prezi, Powtoon)
  - If your school has a license for Microsoft for Education or Google Classroom, there are multiple programs that students can use to help them take notes, create assignments, and make presentations.
  - There are also online resources students can use as well

#### Communication

- Safe texting (Remind)
  - While this isn't necessarily for use inside the classroom, it's important to mention resources that can help you stay in touch with students. Remind is a great app where students (and families) can sign up to receive alerts from you.
  - This is great for classroom announcements or important reminders. You can also allow students to reply to text messages, so they can ask you questions without having your phone number.
- o **Edmodo** 
  - Edmodo is like Facebook for school, but it's also so much more. You can send and grade assignments and quizzes on Edmodo, and it's a great way for students to communicate with one another when they need help.

Now that I shared with you so many examples of resources and how you can use them, let's talk about implementation.

**Just** as I give students a contract before we start, I like to make sure that there is a way for me to hold students accountable for the work they do using technology inside and outside of class. On the next pages are a couple of examples of how I monitor students' usage.

**Technology Tracker-** This is a very basic tracker that I give to all my students (with varying degrees of success). It was most useful a few years back, when students were spending 30 minutes a day on a math software program (Carnegie Learning), but its still worth using. Students record the time spent on the computer, what they were working on, what they still need help with, and how they felt about their work.

**Learning Log-** This is a more specific tracker that can be collected every week (or every other week). This is good for students who use technology in class several times a week, on an assigned program. Again, this can be modified to fit your program.

Self- grading 1-5						
Time spent:						
Skills that still need work						
Skills mastered						
Subject/ topic/ module						
Resource						
Date						

## **Carnegie Learning Log**

Name	Beginning Date								
Write Day & Date	Example of problems completed:	Current Section							

Name	page 2
What are you proud of this w	veek?
What are you struggling with	n this week?
What can I help you with?	
What can I help jou when	
Progress Made Last Week:	
Time Spent:	Problems Completed:
Sections Completed:	
*	
Grade Sheet (Teacher Use Or	nly)
Time/Participation (10%):	(in hoursdivided by the total allotted time)
Problems Completed (10%):	/
Sections Completed (10%):	/ 3
Mastered Skills (60%):/	
Lab Learning Log (10%)	/ 10 Grade:

Sample Lesson Plans- My lesson plans are not very detailed, and often rely on whatever textbook I am using, but I wanted to include a couple examples to show you several ways you can incorporate technology into your daily lessons.

"Systems of Equations"- For this lesson, students worked in pairs on an assignment (after an introduction), and they were responsible for posting their answers on the Padlet. This was a great way for me to check students' understanding and for students to check their own answers against their peers. My favorite part about this activity is when one student approaches another to discuss a discrepancy in answers, and together, they agree on the right answer!

I also showed Desmos.com/graphing to my students as a way for them to "Check" their work. This can be dangerous, as students might get in the habit of looking at Desmos **before** doing the work.

	OBJECTIVE	ST	ANDARD:						
PRE-PLANNING	PRIMARY MAFS.912.A-REI.3.6: Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. (MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8) SECONDARY MAFS.912.A-REI.4.12: Graph the solutions to a linear inequality in two variables as a half plane, and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. (MP.4, MP.5)								
	ASSESSMENT "Begin with the End in Mind"								
	Page 364 # 34 "Cell Phone Plan"								
	ESSENTIAL QUESTION								
	How can you find the solution to a system of equations?								
	HIGHER ORDER QUESTIONS (3-5)								
	How does the context of a problem change the do What types of solutions are there to a system of ec	main and range of a function? uation?							
	VOCABULARY								
	Consistent solution; inconsistent solution; infinite solutions; parallel								
	BELLRINGER CITY YEAR								
	Page 363 Tell students to graph the equations in # 1-4 in one graph (each)       Assist students in getting settled and doing the BR								
	<b>INTRODUCTION/ MODELING</b> "I DO"			30					

then graphically check that point in both equations and see what they notice (it fits both). Explain how that is the solution to the "system". Notes: Give students vocab words, and have them try to define them using the section. Review the vocabulary together and solve # 4 in notes as an example. **At the end of the lesson, show students how they can use Desmos.com/graphing to check their work. They will graph both equations and see if the point of intersection is the same as what they found in pairs. GUIDED PRACTICE "WE DO" Have students work in pairs— pages 363-364 #16-21, #42 Each pair is responsible for posting one answer on the padlet for this lesson. They can either type the ordered pair (or no solution) or insert a picture of their graph. Extra Credit if students post the vocabulary definitions on the Padlet. INDEPENDENT PRACTICE "YOU DO" Have students complete exit ticket, and add a short reflection to their classwork on what they understood about today's lesson, what they need more help with, and how they could get that help. TECHNOLOGY Padlet; students can access textbook online and use internet for notes CLOSURE Clean Up HOME-LEARNING Alerbra Nation Section 3 Video 4	two equations. Ask them what they notice (point of intersection). Have them		miı
(it fits both). Explain how that is the solution to the "system".       Model note taking;         Notes: Give students vocab words, and have them try to define them using the section. Review the vocabulary together and solve # 4 in notes as an example.       Model note taking;         **At the end of the lesson, show students how they can use       Ensure students are on task         Desmos.com/graphing to check their work. They will graph both equations and see if the point of intersection is the same as what they found in pairs.       Assist students         GUIDED PRACTICE "WE DO"       Have students work in pairs— pages 363-364 #16-21, #42       Assist students in targeted groups         Each pair is responsible for posting one answer on the padlet for this lesson. They can either type the ordered pair (or no solution) or insert a picture of their graph.       Assist students in targeted groups         Extra Credit if students post the vocabulary definitions on the Padlet.       Integret of their classwork on what they understood about today's lesson, what they need more help with, and how they could get that help.       15 r         TECHNOLOGY       0 n         Padlet; students can access textbook online and use internet for notes       0 n         CLOSURE       0 n         Clean Up       0 n         HOME-LEARNING       Nideo A	then graphically check that point in both equations and see what they notice		
Model note taking;         Notes: Give students vocab words, and have them try to define them using the section. Review the vocabulary together and solve # 4 in notes as an example.       Model note taking;         **At the end of the lesson, show students how they can use       Ensure students are on task         Desmos.com/graphing to check their work. They will graph both equations and see if the point of intersection is the same as what they found in pairs.       GUIDED PRACTICE "WE DO"         Have students work in pairs— pages 363-364 #16-21, #42       Assist students in targeted groups       25 r         Each pair is responsible for posting one answer on the padlet for this lesson. They can either type the ordered pair (or no solution) or insert a picture of their graph.       Assist students       25 r         Extra Credit if students post the vocabulary definitions on the Padlet.       Interpret table to their classwork on what they understood about today's lesson, what they need more help with, and how they could get that help.       15 r         TECHNOLOGY       0 n       0 n         Padlet; students can access textbook online and use internet for notes       0 n         Closure       0 n       0 n         Closure Nation Section 3 Video 4       4	(it fits both). Explain how that is the solution to the "system".		
Notes: Give students vocab words, and have them try to define them using the section. Review the vocabulary together and solve # 4 in notes as an example.       Ensure students are on task         **At the end of the lesson, show students how they can use Desmos.com/graphing to check their work. They will graph both equations and see if the point of intersection is the same as what they found in pairs.       Image: Comparison of the point of intersection is the same as what they found in pairs.         GUIDED PRACTICE "WE DO"       Assist students in the same as what they found in pairs.       Assist students in the same as what they found in pairs.         GUIDED PRACTICE "WE DO"       Assist students in the same as what they found in pairs.       Assist students in the same as what they found in pairs.         GUIDED PRACTICE "WE DO"       Assist students in the same as work in pairs.       Assist students in the same as what they found in pairs.         Each pair is responsible for posting one answer on the padlet for this lesson. They can either type the ordered pair (or no solution) or insert a picture of their graph.       Assist students       Assist students in targeted groups       25 r         Extra Credit if students post the vocabulary definitions on the Padlet.       NDEPENDENT PRACTICE "YOU DO"       Image: Assist students in targeted groups       15 r         Have students complete exit ticket, and add a short reflection to their classwork on what they understood about today's lesson, what they need more help with, and how they could get that help.       0 n       0 n         TECHNOLOGY       0 n		Model note taking;	
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"Systems of Inequalities"- This lesson is from the same unit, but later on (and a different year and school!). This lesson was actually the last before we took the unit test, so I gave the students a "break" and we played a game of Kahoot instead. As you can see, after the game was finished, I had a worksheet for them to complete. This goes back to what I mentioned above about allotting for extra time.

OBJECTIVE	STANDARD
Solve Linear Systems of Inequalities	MAFS.912.A-REI.4.12: Graph the solutions to a linear inequality in two variables as a half plane, and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. (MP.4, MP.5)
ASSESSMENT	

	Unit 5 Assessment next class							
	ESSENTIAL QUESTION							
	How can you find the solutions to a system of linear inequalities?							
	HIGHER ORDER QUESTIONS							
	What types of systems are there? How do you solve a linear system by graphing? Substitution? Elimination? How do you create a system of equations?							
	BELLRINGER	TIME Approximate						
	As students enter class, the code for Kahoot will be written on the board. Students may work alone or in pairs. The name on their Kahoot MUST be their actual name or names. No nicknames allowed. Students are also expected to have pencil, graph paper, and calculator in front of them to assist them with the work.	15 min						
	INM							
CYCLE	**Review questions during Kahoot	45 min						
N	GUIDED PRACTICE "WE DO"							
ESSC	After Kahoot, students will work on worksheet reviewing linear inequalities	20 min						
Ι	INDEPENDENT PRACTICE "YOU DO"							
	Review worksheet for Unit 5 (systems of equations and inequalities)	10 min						
	CLOSURE							
		0 min						
	HOME-LEARNING							
	HW #44							

## **PRINT THIS!**

Here is a list of all of the resources I mentioned above, in a handy chart that tells you what they can be used for, whether they cost money, and if you can download an "App". (If both free and pay are checked it means there are options for both!)

Here is the code for the chart:

E= Engage Students RW= Real-World Application SD= Self-Directed RR= Review & Remediation FG= Fun & Games SA= Student Aids C= Communication

### **Resource List**

Name	Website	Арр	Free	Pay	E	R W	S D	R R	F G	S A	С
ClassFlow	Classflow.com			X	X						X
Desmos	Desmos.com/c alculator	X	X		X					X	
Edmodo	Edmodo.com	X	X		X						X
Edx	Edx.org	X	X			Х	X	Х			
Flocabular	Flocabulary.co			X					X	X	
У	m										
Geogebra	Geogebra.org	X	X		X					Х	
Gizmos	ExploreLearni ng.com			X	X	X	X	X	X		
Google	Google.com	X	X	X						X	
Kahoot	Getkahoot.com	X	X		X			X	X		
Khan Academy	Khanacademy. org	X	X		X		X	X			
Microsoft	Microsoft.com	X		X						Х	
Nearpod	Nearpod.com	X	X	X	X			X	X		
Next Gen Personal Finance	nextgenperson alfinance.org		X		×	X					
Padlet	Padlet.com		X	X	X						
Powtoon	Powtoon.com		X	X						X	
Prezi	Prezi.com		X	X						X	
Quia Web/ IXL	Quia.com		X	X	X		X	X	X		
Quizlet	Quizlet.com	X	X		X		X	X	X	X	
Remind	Remind.com	X	X								X
Socrative	Socrative.com	X	X	X	X			X	X		
Tch	Teachingchan nel.org		X		X	X	X	X			
TED	Ted.com	X	X			X	Χ				
Youtube	Youtube.com	X	X	X		Х	X	Х			



FOR EXCELLENCE IN MIAMI-DADE PUBLIC SCHOOLS

## Apply for an Ideas with IMPACT Adapter Grant!

All Miami-Dade County public school teachers, media specialists, counselors or assistant principals may request funds to implement any project idea, teaching strategy or project from the 2017 Idea EXPO workshops and/or curriculum ideas profiled annually in the *Ideas with IMPACT* catalogs from 1990 to the current year, 2017-18. Most catalogs can be viewed on The Education Fund's website at educationfund.org under the heading, "Publications."

- Open to all K-12 M-DCPS teachers, counselors, media specialists
- Quick and easy reporting requirements
- Grants range from \$150 \$400
- Grant recipients recognized at an Awards Reception

To apply, you must contact the teacher who developed the idea before submitting your application. Contact can be made by attending a workshop given by the disseminator, communicating via email or telephone, by visiting the disseminator in their classroom, or by having the disseminator visit your classroom.

Project funds are to be spent within the current school year or an extension may be requested. An expense report with receipts is required by Friday, June 1, 2018.

## APPLICATION DEADLINE: December 13, 2017

Apply online at educationfund.org

#### For more information, contact:

Edwina Lau, Program Director 305.558.4544, ext. 113 elau@educationfund.org



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Gold Star





Ford Motor Company Fund

Humana Foundation







PL Dodge FOUNDATION





Silver Star

TriMix Foundation



Rod and Lucy Petrey

Raj Rawal and Anne Marie Miller Robert Russell Memorial Foundation

Bronze Star

The Jack Chester Foundation





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