A photograph of a classroom scene from an overhead perspective. Several students are seated at light-colored desks, focused on their work. Each desk has a scientific calculator and papers. One student in the foreground is wearing glasses and earbuds, writing on a paper. Another student in the background is wearing a grey hoodie and glasses, also writing. The text 'PLAY IS THE FOUNDATION OF LEARNING' is overlaid in large, white, serif capital letters across the center of the image.

PLAY IS THE FOUNDATION OF LEARNING

Rebecca Cothran & James Hayden

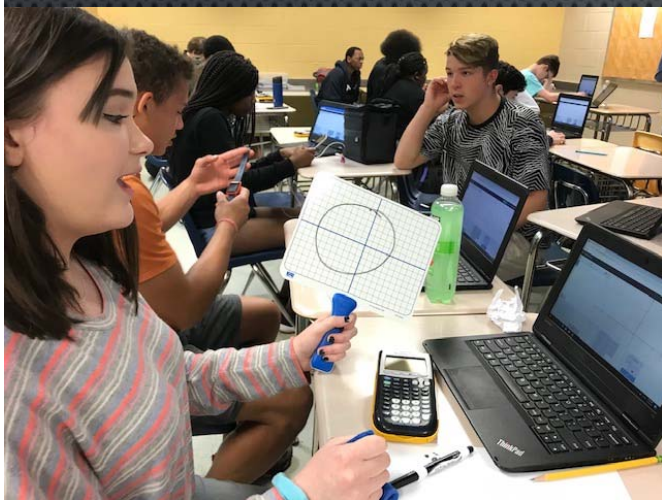


IN EVERY JOB THAT MUST BE DONE THERE IS AN
ELEMENT OF FUN....

MARY POPPINS TEACHES US THAT ANY
JOB OR TASK, AS UNPLEASANT AS IT
SEEMS, CAN BE TRANSFORMED INTO A
GAME WITH THE RIGHT MINDSET.

Visible Learning

Influence	Domain	Impact on Student Achievement	Effect Size ($n \geq 0.4$)
Teacher expectation	Teacher	Potential to accelerate	0.43 8
Teacher-student relationships	Teacher	Potential to accelerate	0.48 5
Small group learning	Classroom	Potential to accelerate	0.47 6
Deliberate practice	Student Learning Strategies	Potential to considerably accelerate	0.79 2
Classroom discussion	Teaching Strategies	Potential to considerably accelerate	0.82 1
Space vs. Mass practice	Learning Strategy	Potential to accelerate	0.65 3
Concentration-Persistence - Engagement	Student	Potential to accelerate	0.54 4
Attitude towards content domains	Student	Potential to accelerate	0.46 7



ENGAGE THE WORLD, CHANGE THE WORLD

In order to MOVE students forward we need to set high expectations, get them engaged, improve their opinions about math, get them to **practice, collaborate, and discuss math**. Piece of cake right?



Decrease anxiety by playing games in the classroom.

They must interact with each other and communicate.

Promote growth mind-set using healthy competition.

Increase achievement by getting better quality practice.

How do we use "play" to engage our students in math?

LEARNING INTENTIONS:

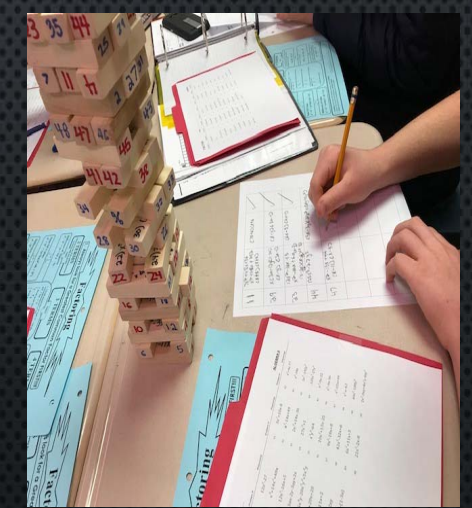
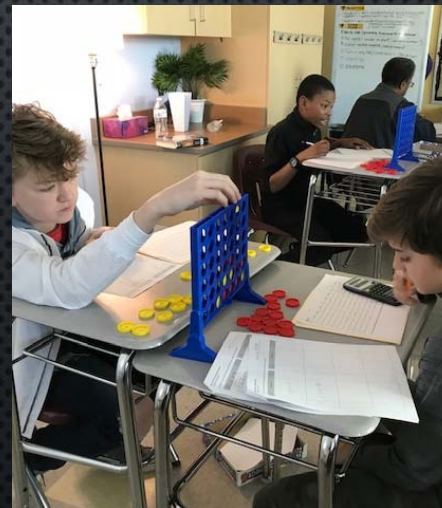
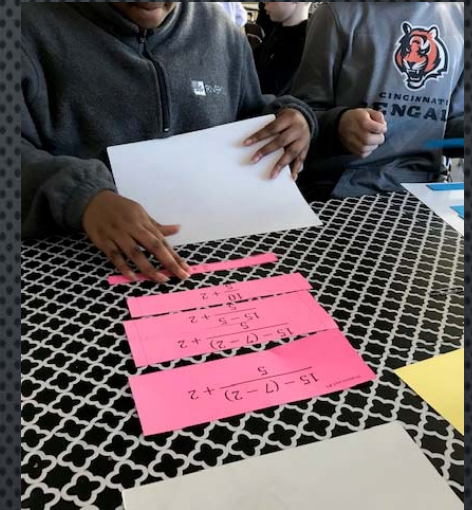
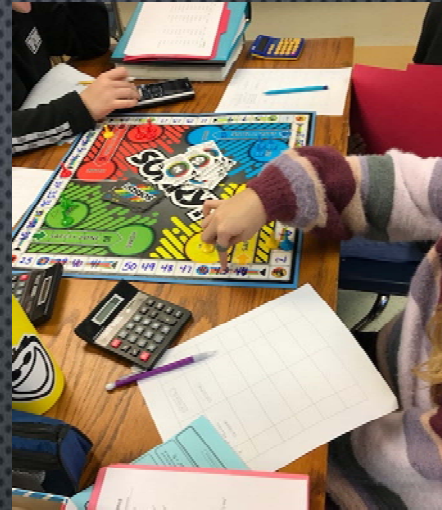
 T.V. Show games

 Boardgames

 Vocabulary Review

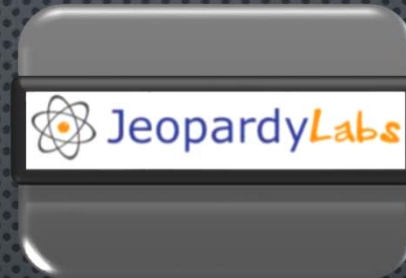
 Desmos

Success criteria:
I can turn any
worksheet into an
interactive game!





RESOURCES



JeopardyLabs.com



Thebalanceeveryday.com



[VDOE Desmos Log](#)



TRASHKETBALL

- EACH TEAM MEMBER GETS A SHEET OF PAPER WITH A LETTER ON IT: T, R, A, S, H
- WHEN THE PROBLEM IS REVEALED ALL MEMBERS IN ALL GROUPS WORK THE PROBLEM OUT ON THEIR PAPER. THEY MUST SHOW THEIR WORK AND THEY ARE EXPECTED TO HELP EACH OTHER.
- THE TEACHER CALLS ONE LETTER RANDOMLY AND THE GROUP MEMBER WITH THAT LETTER WILL COME UP WITH THEIR SHEET AND SHOW THE TEACHER THEIR ANSWER.
- IF THEY GET THE QUESTION CORRECT THEY GET ONE POINT FOR THEIR TEAM.
- THEY THEN GET TO SHOOT A BASKET WITH A BALL OF TRASH TO EARN TWO OR THREE MORE POINT FOR THEIR TEAM.
- THE TEAM WITH THE MOST POINTS AT THE END WINS, AND THE TEACHER COLLECTS ALL STUDENT WORK.

THE ORIGINAL GAME OF
CONNECT 4

Jenga



BOARD GAMES

- JENGA
- SORRY
- CONNECT 4

HOW DOES IT WORK?

- FILE FOLDERS – PROBLEMS ON THE OUTSIDE AND ANSWERS ON THE INSIDE
- WHITEBOARDS (OPTIONAL) OR PAPER FOR WORK
- TURN TAKING, PARTNER CHECKS YOUR WORK
- CORRECT ANSWERS ALLOW YOU TO PROGRESS THROUGH THE GAME
- INCORRECT ANSWER MEANS YOU LOSE A TURN

VOCABULARY GAMES


Quizlet Live - play

HeadBandz game with VDOE word wall cards



DESMOS ACTIVITY – RETRO GAMES

- [RETRO DESMOS GAME COLLECTION](#)
- GO TO [HTTPS://STUDENT.DESMOS.COM](https://student.desmos.com) TO PLAY



Super Mario Quadratics
by John Rowe **Retrodesmos All**
Edited with love by kurt salisbury

Mobile Tablet Laptop



IT IS IMPORTANT TO PLAN YOUR GROUPS WELL!

GROUPING FOR SUCCESS

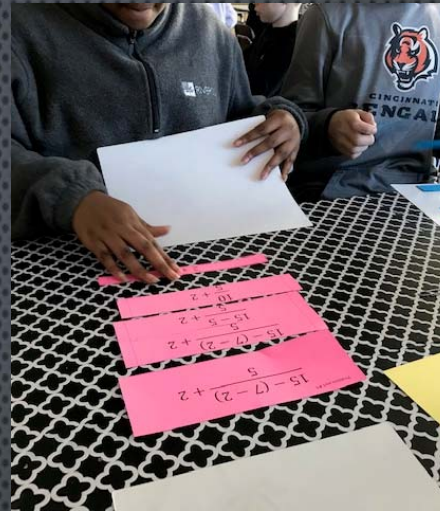
When making groups it's important that you take relationships and personalities into account.

Consider levels of readiness when creating groups and partners to avoid frustration.

Use group routines to set the tone such as clock buddies.

If playing a whole class game, do your best to level the playing field for the groups.

SMALL GROUP INSTRUCTION



Allows teachers to work with students in a small group setting to focus on areas of need.

Teachers can use task analysis to identify areas of weakness.

Can build strong teacher-student relationships. Students know you care.

Specific, real time feedback for students and accurate data for teachers.

DO'S AND DON'TS

Do

- SET CLASSROOM NORMS
- TEACH STUDENTS HOW TO WORK TOGETHER
- ENCOURAGE STUDENTS TO SUPPORT ONE ANOTHER
- PLAN YOUR GROUPS VERY CAREFULLY
- HAVE THE SAME EXPECTATIONS FOR ALL STUDENTS

Don't

- EXPECT STUDENTS TO KNOW HOW TO DO THIS
- PULL THE SAME STUDENTS TO THE TEACHER GROUP EVERY TIME
- YELL OVER TOP OF THE NOISE
- JUMP INTO SGI ALL AT ONCE
- EXPECT THINGS TO GO SMOOTHLY EVERY TIME

THANK YOU!



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