

Making Learning Visible

Centers with share <https://padlet.com/penchevable/nctm>

Book-based

- K- 10 Black Dots book- make an art project with 10 dots
- 3- Door Bell Rang- Greenscreen math video *ipad
- 4- Eating Fractions- paper plate fractions
- 2- Great Graph Contest- complete google forms, view graphs *ipad [results to share](#)

Non-book

- 1- Osmo *ipad
- 5- Math in your life with Slides *ipad
- 4- Pic Collage with angles or numbers *ipad
- 5- Create a math game
- 2- Ozobot write a math story and draw a path
- 3- Lego story problems
- 1- Maker Math

Ten Tech Tools

Illustrative math- Buncee, Doodle Buddy, Chatterkid, Pic Collage, Adobe Spark

Game based math- Kahoot, Quizizz

Teaching Math- Khan, EdPuzzle

Little Bit of Everything Google Apps

Math and Art

CCSS.MATH.CONTENT.K.CC.B.5

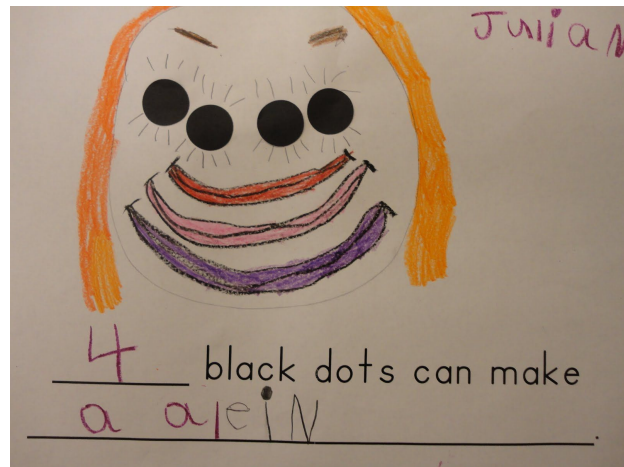
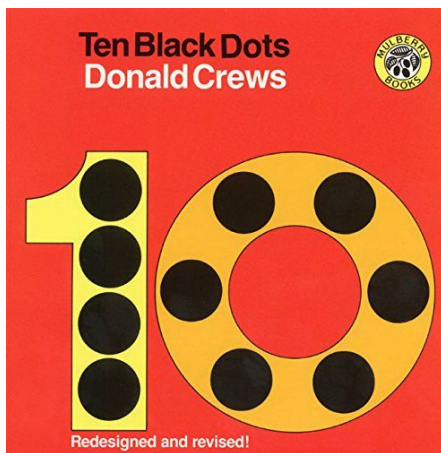
Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

10 Black Dots book- make an art project with 10 dots

Read the book 10 Black Dots.

Select a few dot stickers and create a picture.

Write a math story about your picture.



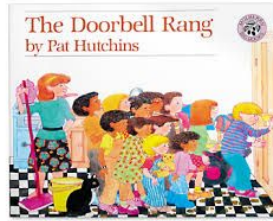
Take a picture of your artwork and post it to

<https://padlet.com/penchevable/nctm>

Door Bell Rang- Greenscreen math video

CCSS.MATH.CONTENT.3.OA.A.3

Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹



Use the Green Screen folder, cookies, and iPad to create a movie to illustrate a scene from the story.

Do Ink



1. **Record your video in front of the green screen using the camera app.**
2. **Locate the background image you want and and save to camera roll.**
3. Open the app
4. Click the + sign in the top right
5. On the bottom right click the top plus sign and put your green screen video.
6. Click the second plus sign and add the background.
7. You can move and resize the images by clicking on the video or image on the bottom screen, then squeeze, move, etc.
8. Click save, Then save to camera roll.
9. Load your movie to <https://padlet.com/penchevable/nctm>

Eating Fractions- paper plate fractions



CCSS.MATH.CONTENT.4.NF.A.2

Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

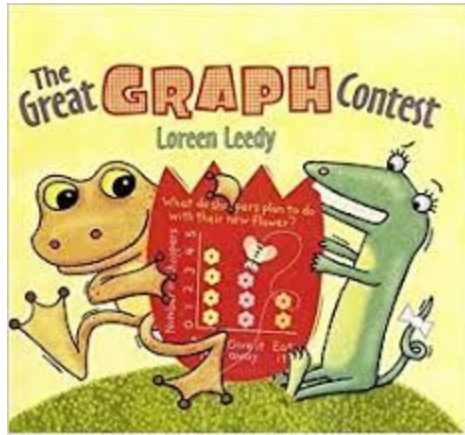
1. Read Fraction book
2. Watch the movie about paper plate fractions



<https://safeshare.tv/x/eD61vtiV80I>

3. Create a paper plate fraction example
4. Take a picture of your fraction plate and post it to <https://padlet.com/penchevable/nctm>

Great Graph Contest- complete google forms, view graphs



CCSS.MATH.CONTENT.2.MD.D.10

Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

1. Read the Great Graph Contest
2. Create a google form survey for students to complete
3. Look at examples of graphing data provided by Google Forms
4. Add a comment to

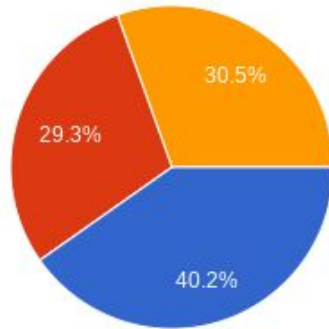
<https://padlet.com/penchevable/nctm>

to share an idea about using google forms in the math class

Google Form Results

Which option is best for you?

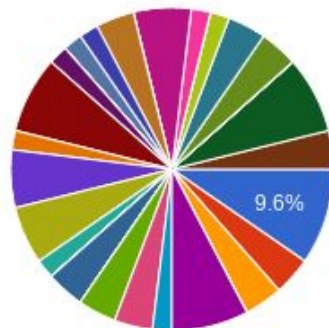
82 responses



- Building and programming robots
- Greeters/Decor
- Researcher/Designer

What do you want the robot area to be named?

52 responses



- robo workshop
- robo wall
- robot garage
- robot house
- lab-ot
- robot riot range
- rockin robos
- to infinity and beyond

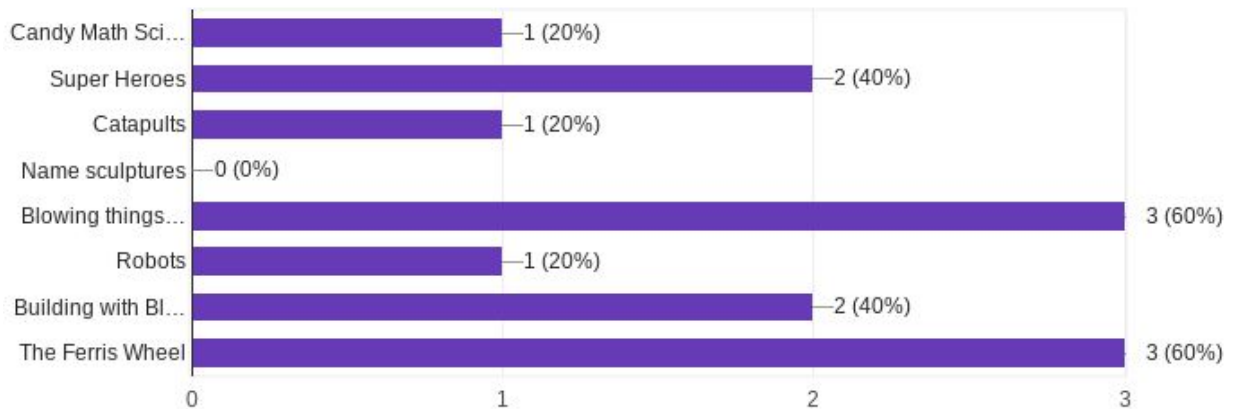
▲ 1/4 ▼

What would you like to name the robot area of our I LAB? Think of a fun, exciting name for the area. You have until 3/31 to submit a suggestion. We will then have a vote on the top choices. The winner gets a prize...and I am not telling what it is!^{33 responses}

- Roboroom
- Robotron 2.0
- Robot Shelfathon
- robot space station
- ROBAT JUNGLE
- Robelandiaaaa
- Robots Rock And Roll Area
- Robotmania
- robot heven
- beeb bob
- Robzilla
- Bot world
- robocloset
- do not touch they are dangers

What activities below helped you think deeply and learn?

5 responses



OSMO Numbers



CCSS.MATH.CONTENT.1.OA.A.1

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.¹

Open the OSMO Numbers APP.

Touch the PLAY button.

Start with the number 1 and follow the directions to play the game.

Take turns and continue to play.

You can also play Pizza Company!

How could teachers use these games in the classroom?

Paste a comment on <https://padlet.com/penchevable/nctm>

PicCollage Math



CCSS.MATH.CONTENT.4.G.A.1

Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

Pick a math topic you teach that is visual. For example, shapes, angles, numbers, patterns, measurement, etc.

1. Take 3 to 5 pictures that illustrate the topic.
2. Open the PicCollage app.
3. You can choose grids, templates, or freestyle
(I like grid because it is more organized)
4. Add your pictures.
5. Add text to explain what you are showing and add a text title.
6. Save your Pic Collage to the camera roll
7. Add your collage to the padlet

<https://padlet.com/penchevable/nctm>



Code sheet

CCSS.MATH.CONTENT.2.NBT.B.5

Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

1. At the red-blue-red pause write a math problem.
2. When the robot reaches the math problem, try to solve the problem before the robot continues on the path.
3. Draw a path of your own. Add codes and math problems.

Lego Math



CCSS.MATH.CONTENT.3.OA.D.8

Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.³

Create a visual representation of a math problem.

1. Choose a math problem below.
2. Use the lego kit to create a visual representation of the math problem.
3. Take a picture of your creation and post it to

<https://padlet.com/penchevable/nctm>

Farmer John planted pumpkins in his garden. He planted 10 seeds, but only half grew into pumpkins. How many pumpkins grew?

My mom went bird watching. On Tuesday she saw 3 crows and 2 bluejays. On Wednesday she saw 5 bluejays and 1 redbird. On Thursday she saw 2 crows and 5 redbirds. How many crows did she see?

My dad loves ice cream. He ate two scoops of ice cream per day for 4 days. How many scoops did he eat in all?

My dog had 10 bones in his house on Monday morning. Each night he hid 1 bone. How many bones were left on Saturday morning?

Math Lego ideas

[27 ideas article](#)

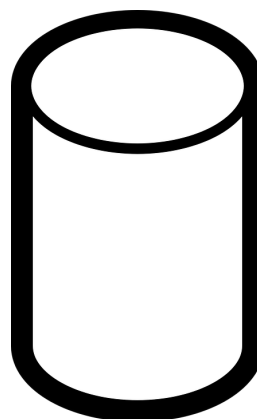
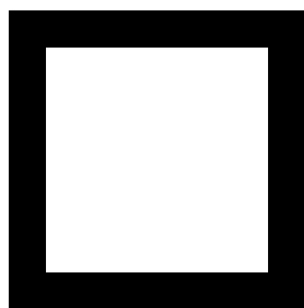
[Scholastic math lego article](#)

Maker Math

CCSS.MATH.CONTENT.1.G.A.2

Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.1

Use the maker supplies and create a 1, 2 ,
or 3 dimensional shape.



Math About Me Posters

CCSS.MATH.CONTENT.5.OA.A.1

What questions can you answer about yourself with a number? Age? How many miles from your favorite place? Siblings? Pets? Turn this simple information about yourself into expressions for your peers to solve and practice their math skills.

Create a poster to share using Google Drawings, Pic Collage, Google Slides, or any other tool to share!

Upload your poster to

<https://padlet.com/penchevable/nctm> when you are done!

The poster is purple and features four math problems arranged around a central image of a woman thinking. The problems are:

- Age** (purple text): $(4 \times 6) + (5 + 2)$
- Miles from Home** (green text): 277.5×5
- Years @** (blue text): $120 \div 2 - 53$
- Class Room Number** (pink text): $[90 - (30 \times 2)] + 39$

Other elements on the poster include a map of Michigan in the top right and a Hillel logo in the bottom left.

Creating Math Games

Games are a fun and engaging way for students to practice math concepts, and what better way to show they understand by creating a game for their peers to play.

Choose a topic, standard, or specific skill and design a game.

Games can be based off other games and changed for new concepts.

Examples -

Card Games - War (multiplication, addition, subtraction)

Bump - many students love this game concept and use it to design their own games!

<http://www.teachjunkie.com/math-subject/roll-cover-bump-cool-math-games/>

