

Patty Karabetsos
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Inclusive Strategies for Building Math Confidence



Presenters



Paige Kenausis
Assistant Principal



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Introductions

Who are you?

- Name
- Role
- School

The NCTM is the most harmful organization to students learning math currently. It is honestly sad to see.

~Corey Peltier

Assistant Professor of Special
Education Educational Psychology
University of Oklahoma

Myths That Undermine Math Teaching

Sarah Powell, Elizabeth M. Hughes, Corey Peltier

August 11, 2022 ·

Conceptual understanding before procedural work

Teaching algorithms is always harmful

Inquiry-based learning is the best way to introduce new content

Productive struggle is valuable

Students' growth mindset increase achievement

What has worked for our students?

Pixel Art

Multiply the calculations below
and type in your answers.

$9 \times 9 =$

$10 \times 5 =$

$11 \times 12 =$

$8 \times 7 =$

$9 \times 4 =$

$6 \times 8 =$

$12 \times 9 =$

$7 \times 7 =$

$11 \times 5 =$

$6 \times 7 =$

$10 \times 12 =$

Multiplication and Division to 12



Divide the calculations below
and type in your answers,

$144 \div 12 =$

$72 \div 8 =$

$28 \div 4 =$

$70 \div 7 =$

$72 \div 6 =$

$96 \div 12 =$

$100 \div 10 =$

$66 \div 11 =$

$64 \div 8 =$

$45 \div 9 =$

$36 \div 6 =$

Multiplication and Division to 12

Multiply the calculations below and type in your answers.

$8 \times 9 = 72$

$7 \times 4 = 28$

$5 \times 12 = 60$

$11 \times 10 = 110$

$8 \times 7 = 56$

$6 \times 9 = 54$

$12 \times 11 = 132$

$8 \times 8 = 64$

$5 \times 10 = 50$

$6 \times 11 = 66$



Divide the calculations below and type in your answers.

$96 \div 8 = 12$

$81 \div 9 = 9$

$55 \div 5 = 11$

$72 \div 12 = 6$

$100 \div 10 = 10$

$63 \div 7 = 9$

$108 \div 12 = 9$

$48 \div 8 = 6$

$49 \div 7 = 7$

$48 \div 4 = 12$

Add or subtract the calculations below, correct answers will start to reveal a hidden picture.

$537 + 193 =$

$825 - 443 =$

$365 + 294 =$

$678 - 414 =$

$641 + 450 =$

$345 - 237 =$

$670 + 280 =$

$858 - 245 =$

$862 + 288 =$

$434 - 372 =$

$935 + 480 =$

$385 - 277 =$

$747 + 221 =$

$479 - 247 =$

$652 + 749 =$

$783 - 418 =$

$969 + 943 =$

$829 - 211 =$

$945 + 634 =$

$363 - 252 =$

$585 + 166 =$

$960 - 332 =$

$864 + 487 =$

$888 - 729 =$

Add or subtract the calculations below, correct answers will start to reveal a hidden picture.

$537 + 193 = 730$

$825 - 443 = 382$

$365 + 294 = 659$

$678 - 414 = 264$

$641 + 450 = 1091$

$345 - 237 = 108$

$670 + 280 = 950$

$858 - 245 = 613$

$862 + 288 = 1150$

$434 - 372 =$

$935 + 480 = 1415$

$385 - 277 = 108$

$747 + 221 = 968$

$479 - 247 = 232$

$652 + 749 = 1401$

$783 - 418 = 365$

$969 + 943 = 1912$

$829 - 211 = 618$

$945 + 634 = 1579$

$363 - 252 =$

$585 + 166 =$

$960 - 332 = 628$

$864 + 487 = 1351$

$888 - 729 =$



Solve each problem following the proper order of operations rules. With every correct answer you will see a little bit more of the picture. If the answer cell does not change color, you need to check your work.

1	$5 \times -92 =$	-460
2	$49 - 92 =$	-43
3	$-85 + 89 =$	4
4	$-70 \times 80 =$	-5600
5	$84 \div -21 =$	-4
6	$5 + 9^2 =$	86
7	$(4 - 9) \div (-5) =$	1
8	$7 + (-6) \div (-2) =$	10
9	$3 + 9^2 =$	84
10	$(5 + (-6)) \times (-9) =$	9

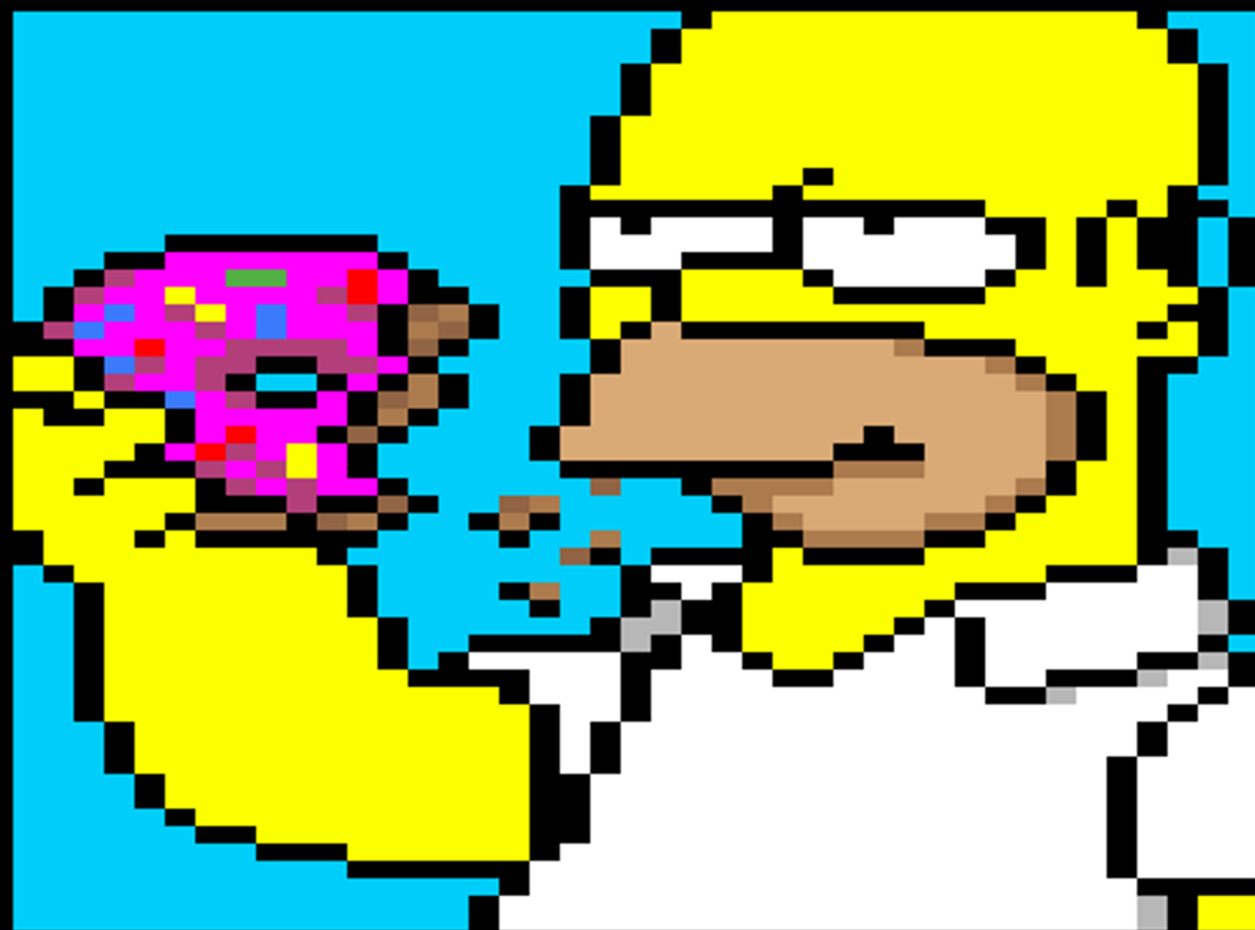
11	$(-2) + (-3)^3 =$	-29
12	$9 \times (7 - 6) =$	9
13	$(-2) \times 2 + 10 =$	6
14	$((-10) + 5) \times (-6) =$	30
15	$6 - 8 \times 9 =$	-66
16	$(-5)^2 - 2 \times (-9) + 6 =$	49
17	$3 \times 10 + 8 - 4^2 =$	22
18	$(-9) - (-8) + 2 \times 4^2 =$	31
19	$(-3)^3 - 2 + 8 \div (-8) =$	-30
20	$8 \div (-4) \times (-6)^2 + 7 =$	-65

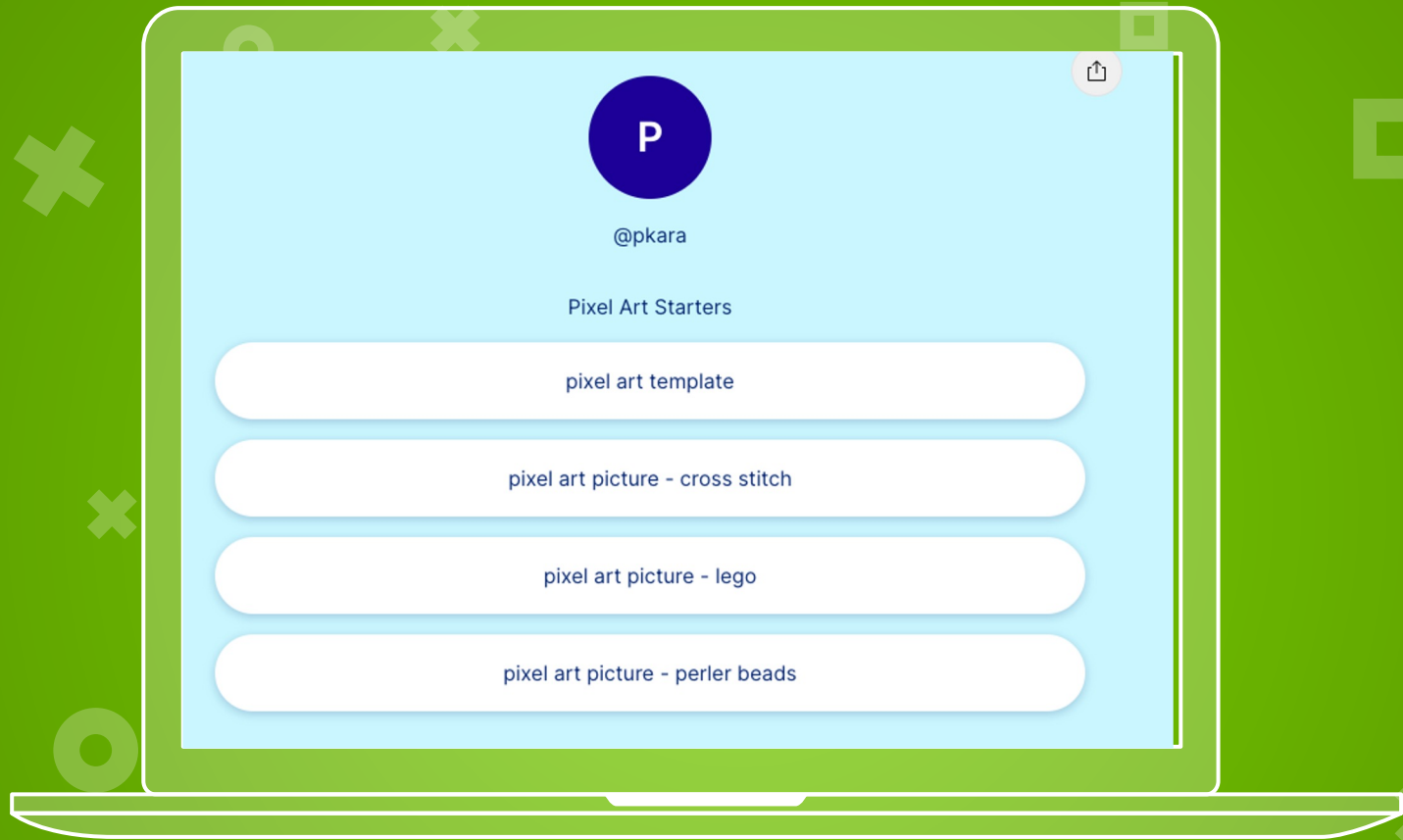


Directions: Solve the following one and two-step equations. Type your solution into the PINK field -- JUST THE NUMBER

If your answer is correct, the boxes on the blue box on the right will light up. In the end, they will reveal a Magic Lite Brite Picture!

ANSWERS ↓		
1.	$-15 + n = -9$	6
2.	$14b = -56$	-4
3.	$26 = 8 + v$	18
4.	$9x - 7 = -7$	0
5.	$8n + 7 = 31$	3
6.	$2(n + 5) = -2$	-6
7.	$7(9 + k) = 84$	3
8.	$-6 = \frac{b}{18}$	-108
9.	$\frac{v}{8} = 2$	16
10.	$6 = \frac{a}{4} + 2$	16





<https://linktr.ee/pkara>

template

Type Title Here

Directions:

Question	Answer

CREATE MATH PIXEL ART

step-by-step guide

by Lindsay Bowden



What has worked for our students?

Would You Rather Math Prompts

Would you rather have...



3 packages of
ghost Peeps



or 4 packages of
pumpkin Peeps?

Whichever option you choose, justify your decision
with words, numbers, and pictures.

Would You Rather?

Have 4 baskets of 10 apples
OR
5 baskets of 6 apples?



Would You Rather?

Have a box of 24 chocolates
and share them equally with 8 friends
or

Have a box of 16 chocolates and
share them equally with 4 friends?



Would You Rather?

6 $\frac{1}{2}$'s of a pizza
OR
10 $\frac{1}{4}$'s of a pizza?



Would You Rather?

Have 8 groups of 10 lollipops?

OR

15 groups 5 lollipops?



Would You Rather?

11 bags of 10 heart candies
or
Have 6 bags of 20 heart candies?



What has worked for our students?

Community Based Instruction

Share Time



What resources or strategies have worked for your challenging learners?



Thanks!

Any questions?

You can find us at

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Resources



<https://linktr.ee/pkara>



<https://linktr.ee/pixelart4education>



LindsayBowden.com