Warm Up to Number Sense and Reasoning

Glen Lewis
Unionville-Chadds Ford School District
@MrLewis_Math
Warm Up

Graph the equations on the same coordinate system.

\[ y = 3x - 2 \]

\[ y = -\frac{1}{3}x + 4 \]
What are your goals for the first few minutes of class?
What makes a good warmup?
● Which One Doesn’t Belong?
● Estimation180
● SolveMe Mobiles
● Would You Rather...?
● Win a Prize
● Open Middle
● Mystery Grid/Who Am I?
Which One Doesn’t Belong?

Mary Bourassa
@WODBmath
@MaryBourassa
Which One Doesn’t Belong?

- On the board when they walk in
- Only take one, unique/creative answer for each option (if appropriate)
- When in doubt, choose an easier set
- Only give a few minutes to think, and stick to it
- Be okay with stopping
How many cheeseballs will fit in the tray?
How many cheeseballs will fit on the large plate?

How many cheeseballs come in the container?

How many cheeseballs will fit on the small plate?

How many cheeseballs will fit in the bowl?
| Day # | Description | ↓ Too Low | ↑ Too High | My Estimate | My Reasoning | Answer | Error | |Error| as % |
|-------|-------------|----------|-----------|-------------|--------------|--------|-------|-----------|-----------|
|       |             |          |           |             |              |        |       |           |           |
|       |             |          |           |             |              | +      |       |           |           |
|       |             |          |           |             |              | -      |       |           |           |
|       |             |          |           |             |              | +      |       |           |           |
|       |             |          |           |             |              | -      |       |           |           |
|       |             |          |           |             |              |        |       |           |           |

**Name:**

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Too LOW</th>
<th>Too HIGH</th>
<th>My Estimate</th>
<th>My Reasoning</th>
<th>The Answer</th>
<th>Error</th>
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**Building number sense one day at a time.**
Estimation 180

- On the board when they walk in
- Give them a time limit on work
- Take some responses - don’t take them all
- It’s okay if students miss it
SolveMe Mobiles
solveme.edc.org/mobiles
@EDCtweets
Puzzle 123

60

- 1 orange = 2 squares
- 1 purple = 3 squares
- 1 blue heart = 4 squares
- 1 red = 5 squares
SolveMe Mobiles

- On the board when they walk in
- Give them a time limit on work
- Wait until some/most have it
- Don’t be afraid to solve it later/tomorrow (if it proved to be tough)
Would You Rather...?

Wouldyourathermath.com

John Stevens     #wyrmath     @Jstevens009
Would You Rather...

Have the revenue from an amusement park Ferris wheel or carousel ride?

4 tickets to ride

3 tickets to ride
Go on a 5 minute shopping spree in the department store of your choice

OR

Receive a $2,000 gift card to the department store of your choice?
Would You Rather...?

- On the board when they walk in
- Not much wait, students will think while others talk
- Choose ones that are easier
- Take a few responses
- If all responses are similar, ask for an alternate answer
- End it with your personal choice
Win a Prize
Estimate this in your head. No pencil/paper or calculator.

98 ÷ 53
Estimate this in your head.

No pencil/paper or calculator.

34% of 90
Win a Prize

- On the board when they walk in
- Give a time limit
- Make it accessible
- Have them write it down
- Give a prize!
ADDITIONAL DECIMALS TO MAKE THEM AS CLOSE TO ONE AS POSSIBLE

Directions: Use the numbers 1 through 9, exactly one time each, to fill in the boxes and make three decimals whose sum is as close to 1 as possible.
ADDING MIXED NUMBERS 3

Directions: Use the digits 1-9 each once to make the largest possible sum.

\[
\begin{array}{c}
\hline
\text{ } \\
\hline
\end{array}
\quad + \\
\begin{array}{c}
\hline
\text{ } \\
\hline
\end{array}
\quad = \\
\begin{array}{c}
\hline
\text{ } \\
\hline
\end{array}
\]
Who Am I?/Mystery Grid
Solveme.edc.org
@EDCtweets
CLUES

The sum of my digits is equal to six.
My hundreds digit is equal to two more than my tens digit.
My units digit is equal to one more than my tens digit.
Tips for Successful, Efficient Warm Ups

- Have it on the board when students walk in
- Make it accessible
- It’s okay if not every kid does it; don’t let them waste your time
- It’s okay if someone misses it or doesn’t finish it
- Try to choose something that every kid can try
- Make it engaging