



3

Using Strategies to Understand Multiplication, Fractions and Decimals

July 11 – 12, 2018

Rosen Shingle Creek, Orlando

www.IESConference.org

Presented by: Jason Wright





Just a few of my favorites

“Strategies are great, but it’s crunch time now, I need them to memorize their facts”

“Just give it some time...in 3 years, we will be doing something else”

“Fractions? My kids STILL can’t subtract”

“ I teach them, but when they get home, their parents make them do it their way”

“ I incorporate my own strategies in my problem of the day ”



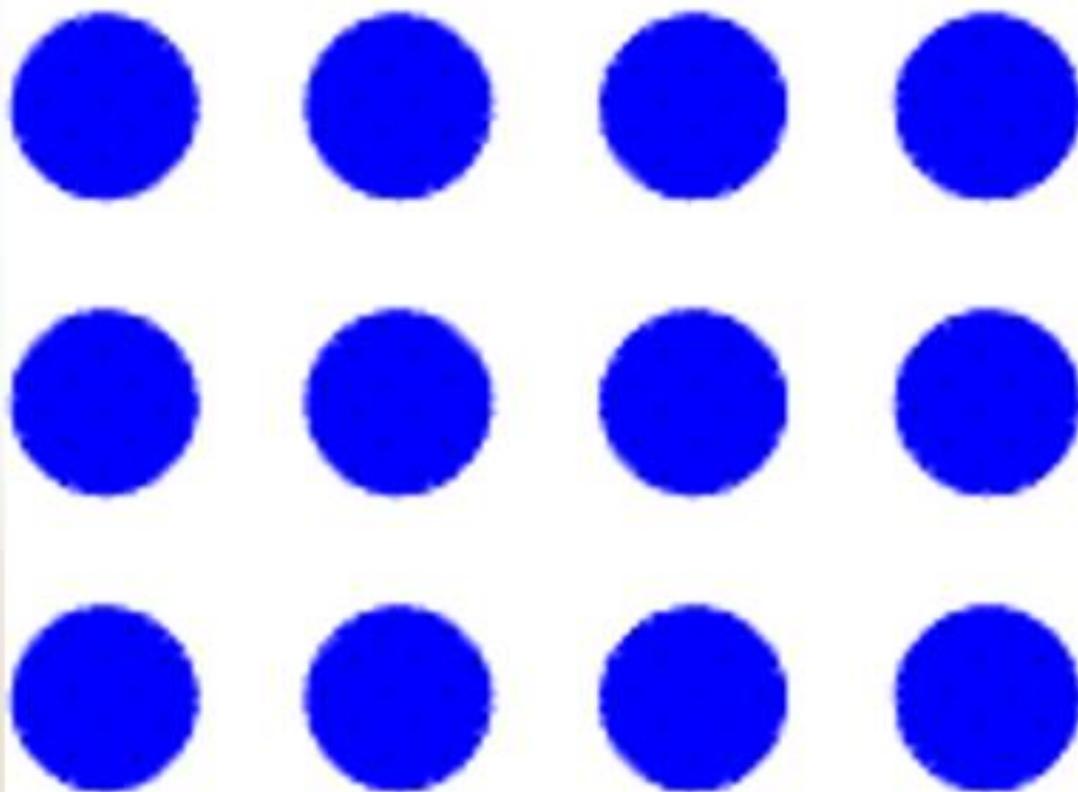


Open Dialogue and Review

- How do we teach multiplying and dividing?
- Do we take our time and make sure the connection is made with addition and subtraction?
- What are some of our biggest challenges?
- Strategies vs Algorithms
- Are we diving deep enough?



How Do You See Half?



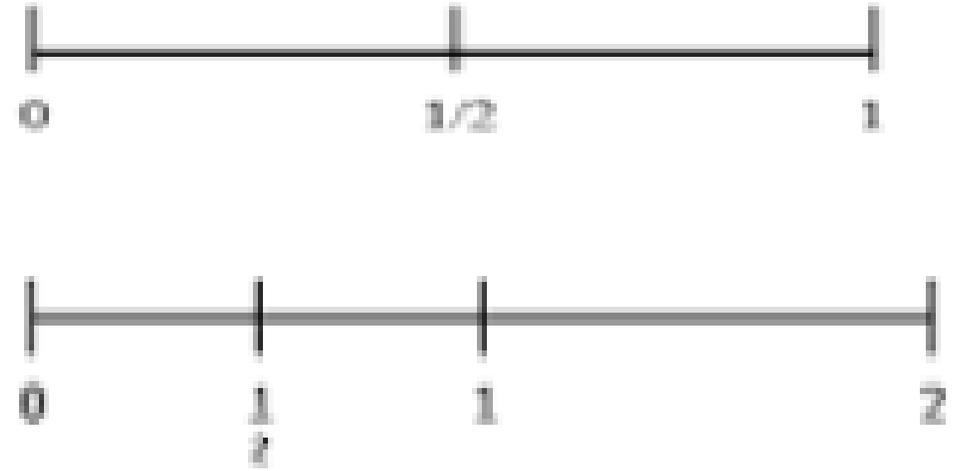


Why Memorization Does NOT Work

- I know my facts, except.....
- The misconception of speed
- Write them until you know them
- Learn the multiplication song or rap
- Learn the tricks to multiplication
- What is your intent?

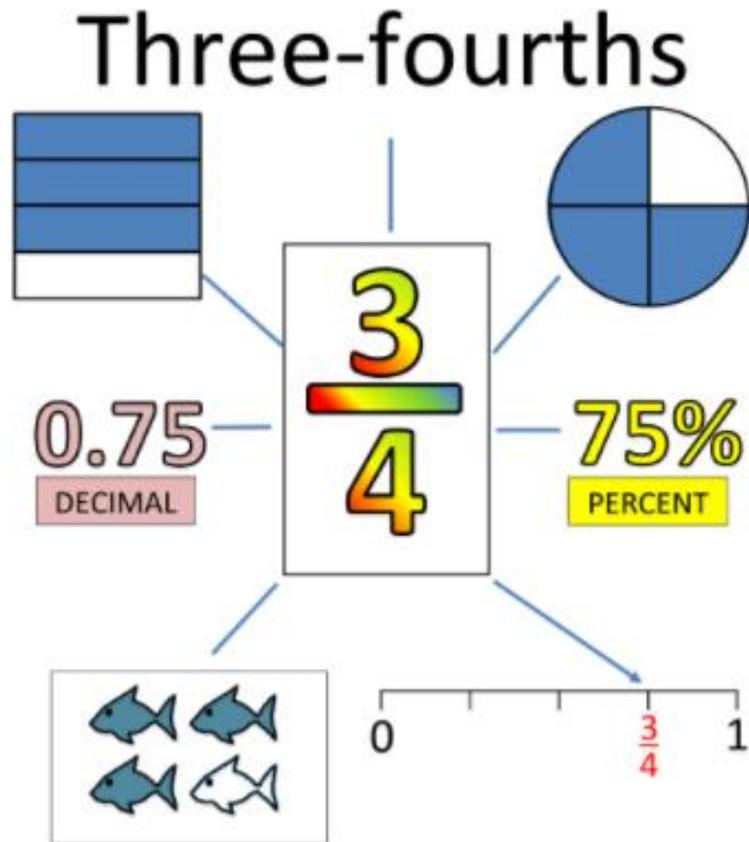


HERE IS WHERE WE ARE NOW





Unconsciously Creating Misconceptions



“ There are three ways to pronounce this fraction; three fourths, three over four and three divided by four”

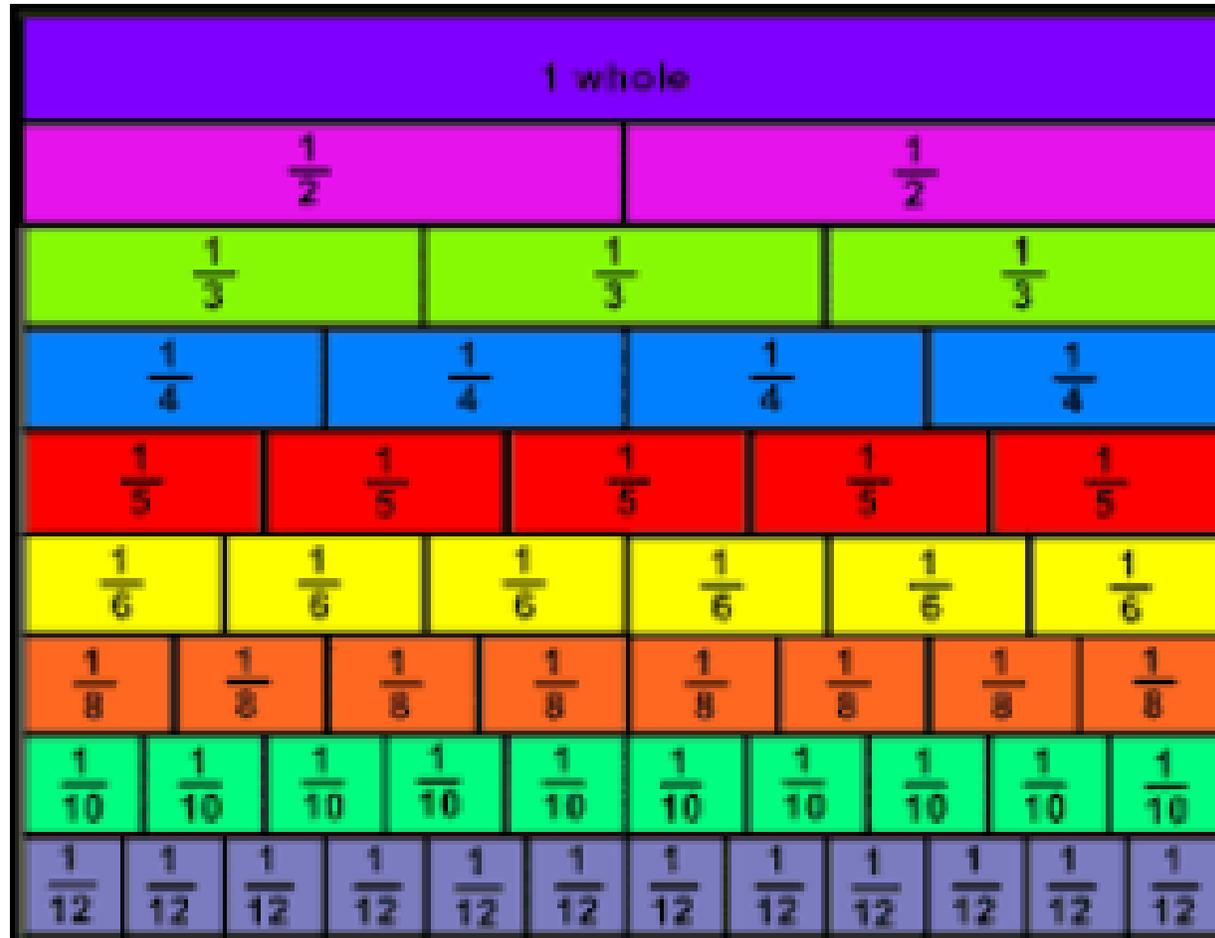
-Jason Wright

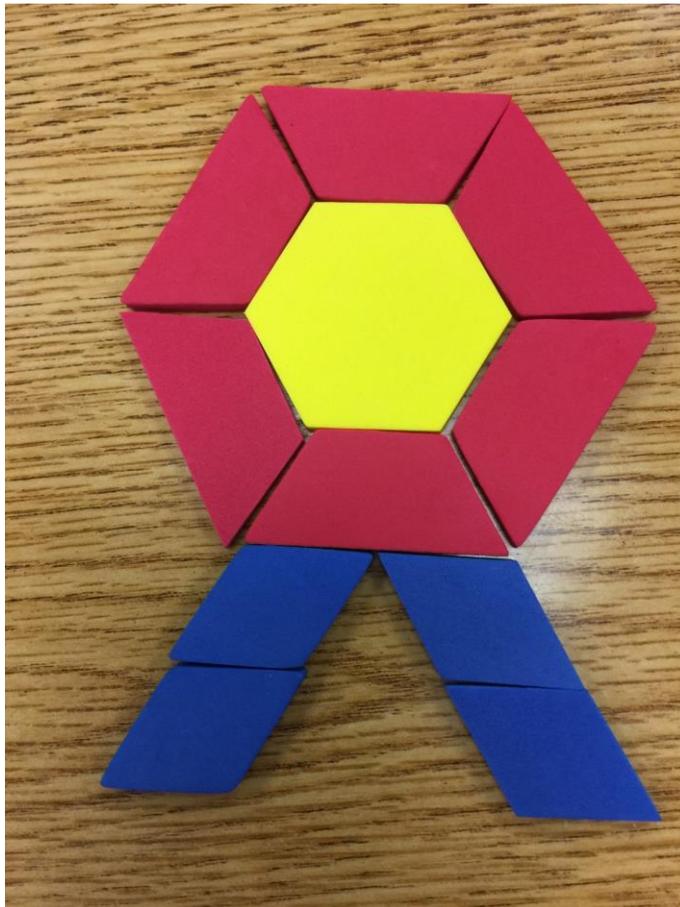
What is incorrect about this statement?





What do you notice?





Construct this shape using the geometric tiles at your table

Assuming that the blue tile represents a whole, find the area of this shape.





Looking Deeper into Ordering Fractions

- $1/3$, $1/5$, $1/9$ $1/2$
- $2/7$, $7/7$, $3/7$, $1/7$
- $1/3$, $5/6$, $4/8$, $4/6$
- $2/3$, 75%, $2/5$, .43, 27%





A Fraction of a Fraction

Dan and his brother ate half of the extra large pizza they ordered. When their father came home, he ate $\frac{2}{3}$ of the remaining pizza. What fraction of the pizza remained uneaten?

Stacy celebrated her 9th birthday with a large sheet cake for all of her friends to share. During the party, three quarters of the cake was consumed. After the party, 5 children wanted to divide the leftovers evenly and give a slice to their parents. What fraction did each child receive?





Let's Look through a Different Lens

- $6/8 + 3/6 = ?$
- $6/8 = 4/8 + 2/8$
- $6/8 = 1/2 + 1/4$
- $3/6 = 1/2$
- $1/2 + 1/2 + 1/4 = 1 1/4$

When we decompose $6/8$ into smaller fractions, that can be simplified into more recognizable fractions.

We can easily visualize and combine recognizable fractions because we have been exposed to them more often.



Closing Questions





Thank you!

