Fabulous Fractions **CAMT 2015**



Developing Long Term Memory Paths

Use manipulatives to model <u>before</u> procedures.

Get students talking fractions!

Context

Models

Fraction Sense Development

Informal methods

Estimate

Multiple meanings

Model with Manipulatives

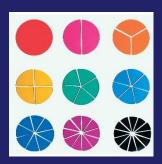
Area Models

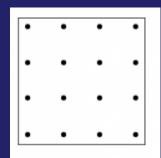
Length Models

Set Models

Model with Manipulatives

Area Models

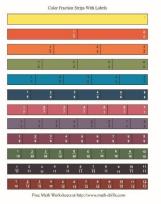


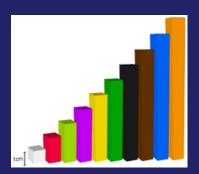


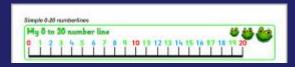


Length

Models







Set Models







Foundation

(2nd – 4th Grades)

- Meaning of fractions
- Models of fractions
- Unit fractions
- Equivalence & Comparing

Operations

(4th – 7th Grades)

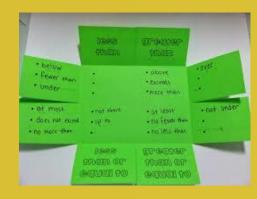
- Add
- Subtract
- Multiply
- Divide

Benchmarks & estimation



Fractions are Fun!

Foldables





- Games
- Act out fractions
- Get students out of their desks when possible.
- Technology



Fraction Pieces

Important tool for 3^{rd} , 4^{th} , 5^{th} grade students



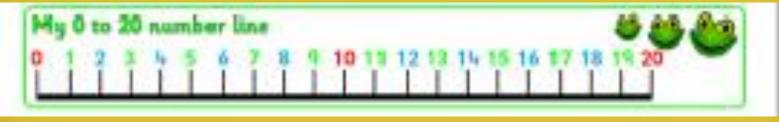
Fraction Vocabulary

The numerator counts.

The denominator tells what is being counted.



Number Lines



Number lines are critical for understanding fractions and for mastery of the TEKS.



Use your fraction pieces to model.

Grandma is making cornbread and gingerbread for dinner. She needs $1\frac{5}{8}$ cups of buttermilk for one recipe and $1\frac{1}{8}$ cups for the other recipe. How much buttermilk does she need for both recipes?



Use two-color counters to model.

Xavier works in a plant nursery and creates flower arrangements in pots of different sizes. One pot needs $\frac{3}{8}$ cubic feet of dirt and another one needs $\frac{1}{4}$ cubic feet of dirt. How much dirt will Xavier need for both pots?



Use circle fractions to model.

Wesley filled 5 glasses with $\frac{2}{3}$ liter of soda in each glass. How much soda did Wesley use?



Use a number line to model this problem.

Maria is going to have a birthday party. Her mom orders 6 pints of ice cream from Mitch and Bob's Ice Cream Factory. If she serves $\frac{1}{4}$ of a pint of ice cream to each guest, how many guests can be served?



Mathematically Speaking!

Great strategy to involve ELL students.

Pair up a stronger with a weaker student and allow the stronger student to first explain how to solve the problem using the given words.