Fractions

Take Aways:

\*fractions by grade:

-1st: divide circles and squares

-2nd: add thirds

-3rd: introduce the official domain

-4th: adding like denominators

\*teach through games

-games should be academically focused

-rigorous

\*do 3 or 4 of the items:

-fraction of the day (beginning in 3rd grade)

-shape of the day

-number of the day

\*area (divide a shape)

\*set (2 sided counters)

\*linear (cuisonare and fraction strips, number line—very important)

\*in 1st and 2nd, fractions is housed in geometry

\*kids need to do lots of explanations

-begin in 2nd grade: explain your answer

-3rd: -kids understand the whole

-explain equal parts

-put a fraction on a number line

-compare with another fraction

-draw fraction (area)

\*kids need physical experiences with fraction strips, bars, circles

\*concrete-pictoral-abstract

models-draw it-numbers

\*use pattern blocks to teach fractions

-rhomboids on top of hexagons

\*when using number lines, have a pictoral representation as well

\*kids need to be using NON examples

-these are thirds

-these are NOT thirds

-kids can make posters

\*in the CCSS, kids are expected to draw pictues

\*in the CCSS, kids are expected to be as exact as possible

\*Fraction War: draw the picture, write the expression using comparison signs (<, >, or =)

\*4th grade: add and subtract fractions with like denominators

-multiply a fraction by whole number

\*ask kids, “When would you ever use this?” to contextualize it

\*ask kids, “Draw two models”

\*homework:

-decontextualizing (give them a word problem)

-contextualizing (have them create a word problem)

-solve w/ models

-show calculations

-reflection

\*double number line mentioned in CCSS

Resources:

North Carolina CCSS math pdf

Unpacked standards

<http://www.ncpublicschools.org/acre/standards/common-core-tools/>

Dr. Nicki’s Blog

Adding and subtracting fractions activity

<https://inside.seattleschools.org/area/math/MIGs/grade5/Gr5Sup6-CCAP9AddSubFractions.pdf>

Sparklebox

Go to “numbers”

Go to “place value”

Go to “10s and 1s bingo”

<http://www.sparklebox.co.uk/usa/#.URqXjqXt-fQ>

Inside Mathematics

Tons of activities and explanations. Really worthwhile!

<http://insidemathematics.org/index.php/mathematical-content-standards>

K-5 Teaching resources

Tons of CCSS activities

<http://www.k-5mathteachingresources.com>

South Dakota Counts

Different types of word problems

<http://sdesa.k12.sd.us/esa5/docs/sdcounts/SDCountsMathProblemBooklet.pdf>