

Anchor Charts

Throughout every math unit, you can use anchor charts as a visual reference to support students' reasoning, problem solving, and thinking. Create every anchor chart with the students – actively engaging them in the learning process. Place these anchor charts around the classroom, so students can see their daily mathematical learning and use them as a reference. Every child keeps a spiral notebook containing all math anchor charts, which becomes an invaluable resource throughout the course of the year.

5.NBT.7

Adding and Subtracting Decimals

$23.5 + 12.41 = 35.91$ $\square = 1 \text{ whole}$

★ We are adding and subtracting hundredths from hundredths, tenths from tenths, ones from ones, etc. This is why we line up the decimal!

$$\begin{array}{r} 23.50 \\ + 12.41 \\ \hline 35.91 \end{array}$$

$$\begin{array}{r} 23.5 \\ - 12.4 \\ \hline 11.1 \end{array}$$

5.NBT.7

Multiplying Decimals

Decimal by Whole Number:

$.6 \times 3$ (read as $\frac{6}{10} \times 3$)

1 whole plus 8 tenths are colored = 1.8

Decimal by Decimal:

$.4 \times .3$

The overlapping portion shows 4 groups of the ten in .3 or .30 = .12

We got a product smaller than either factor!

The Algorithm:

- 1 Multiply as if there is no decimal
- 2 Count how many digits come after the decimal(s)
- 3 Move over that many places in the product and place the decimal

$\begin{array}{r} .4 \\ \times .3 \\ \hline .12 \end{array}$

5.NF.1

Fraction Review

← numerator
← denominator

numerator = how many parts of the whole I have
denominator = tells how many parts are in a whole

Improper Fractions and Mixed Numbers

$\frac{5}{4} = 1\frac{1}{4}$

to Improper: $1\frac{1}{4} = \frac{5}{4}$

to Mixed: $\frac{5}{4} = 1\frac{1}{4}$

1) Denominator \times whole #
2) Add in the numerator
3) This is your new numerator
4) Denominator stays the same

1) Divide the numerator by the denominator
2) Quotient = whole #
3) Remainder = numerator
4) Denominator stays the same

Adding/Subtracting Fractions

Review: $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

* We do not add the denominators since they are of pieces in a whole did not change

1) Find the LCM
2) Change each denominator to the LCM
3) Multiply your numerator by the same thing you multiplied the denominator by to get the LCM
4) Add or subtract your numerators
5) Simplify

$\frac{13}{16} + \frac{8}{9} = \frac{116}{144} + \frac{128}{144} = \frac{244}{144} = \frac{61}{36}$

$\frac{1}{8} + \frac{3}{4} = \frac{1}{8} + \frac{6}{8} = \frac{7}{8}$

Adding and Subtracting Mixed Numbers

$4\frac{3}{5} + 3\frac{2}{5} = 7\frac{5}{5} = 8$

$7\frac{1}{5} - 3\frac{3}{5} = 3\frac{2}{5} = 3\frac{4}{10} - 3\frac{6}{10} = 2\frac{4}{10} = 2\frac{2}{5}$

Decomposing a Whole when subtracting a Mixed Number

$3\frac{1}{2} - 1\frac{3}{4} = 2\frac{2}{4} - 1\frac{3}{4} = 1\frac{2-3}{4} = 1\frac{-1}{4} = 1 - \frac{1}{4} = \frac{3}{4}$