

Math Standards

\* Priority Operations and Algebraic Thinking  
3.O.A.1 \*

3.O.A.2 \*

Number and Operations  
3.N.F.1 \* Fractions

3.N.F.2 \*

I can Statements

I can understand multiplication by thinking of equal groups of objects.

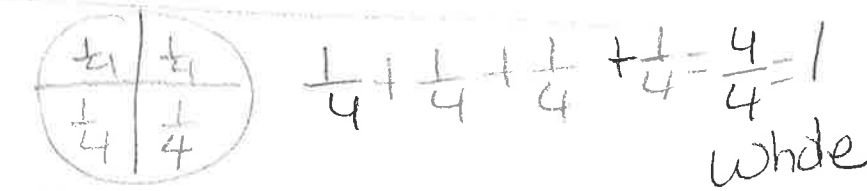
I can understand, understand what the numbers in multiplication mean. (factor x factor = product)  
 $7 \times 8 = 56$

I can understand division by thinking about how a larger group can be made into smaller equal groups. (Dividend ÷ divisor = Quotient)  
 $56 \div 7 = 8$

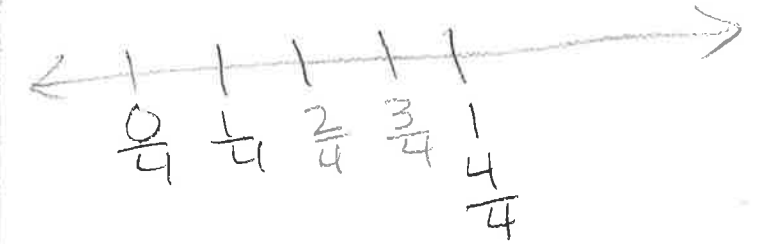
Examples

- Arrays
- groups/pictures
- Skip counting
- number lines
- number bonds
- tape diagrams
- memorization
- pictures/groups
- Skip counting
- number lines
- fact families
- tape diagrams
- arrays
- number bonds
- Memorization

I can Show and understand that fractions are an equal part of a whole



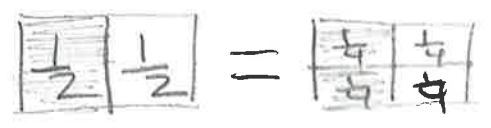
I can understand that fractions are found between whole numbers



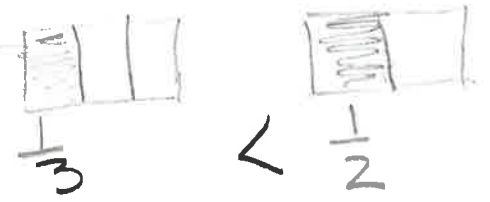
I can show a fraction on a number line by making off equal parts (intervals) between whole numbers.

3.N.F.3 \*

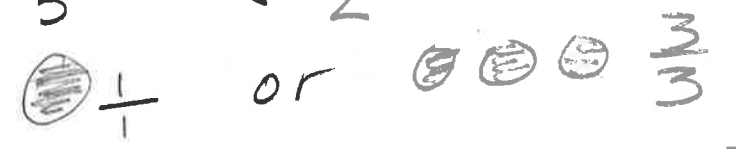
I can show in words or pictures how two fractions can sometimes be equal.



I can look at and compare fractions by their size.



I can show whole numbers as fractions



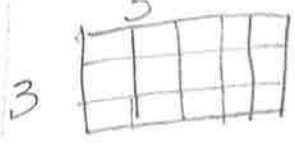
I can show fractions as one whole.



1/3 + 1/3 + 1/3 = 3/3

3.MD.7 \*

I can find the area of a rectangle by drawing in the number of lines for the side lengths.



There are 15 blocks/tiles.

I can multiply side lengths to find the area of a rectangle.



3 x 5 = 15 or 5 x 3 = 15

Support Standards

3.OA.3

I can use multiplication within a 100 to solve word problems.

I can use division within 100 to solve word problems

3.OA.4

I can find the missing number in a multiplication or division equation.

3 x □ = 12  
12 ÷ □ = 3

3.OA.5

I can multiply and divide using the commutative property.

3 x 4 = 12 Three groups of four = 12  
4 x 3 = 12 Four groups of three = 12

I understand commutative property does not work in division.  
I can use the associative property to multiply three numbers. I can use parentheses to group two numbers to multiply first, and then multiply the 3rd number.

12 x 5 = 60  
(3 x 4) x 5 = 60  
15 x 4 = 60  
(5 x 3) x 4 = 60  
20 x 3 = 60  
(5 x 4) x 3 = 60

3A.0.5  
cont'd

3A.0.6

3A.0.7

3A.0.8

3A.0.9.

Number and Operations  
in Base 10

3.NBT.1

I can use the distributive property to solve multiplication

8 x 7 = 8 x (5 + 2)

(8 x 5) + (8 x 2)  
40 + 16 = 56

8 x 4 = 32

so  
32 ÷ 8 = 4

I can get the answer to a division problem by thinking of the related multiplication fact (fact family) and knowing the missing factor

I can fluently multiply within 100. I can memorize my multiplication facts for 0-10.

I can solve two-step word problems using the four operation (+, -, x, ÷)

I can use a letter to stand for an unknown.

c + 3 = 10 so c = 7

c - 5 = 5 so c = 10

c x 3 = 15 so c = 5

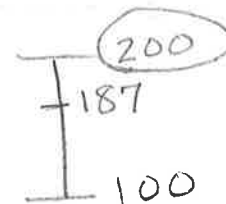
c ÷ 5 = 3 so c = 15

I can decide if my answers are reasonable by using mental math, computation, or estimation.

I can find patterns in addition and multiplication tables and explain. The product of 4 x 4 is even because both numbers are even.

- Any number multiplied by ten ends in a zero.  
- The answer to an even number added to an odd number will be odd.

I can round numbers to the nearest 10 and 100.



13 is between 10 and 20. It is closer to 10 so it rounds to 10.



3.NBT.2

I can add and subtract within 1000.

$$\begin{array}{r} 576 \\ + 318 \\ \hline 894 \end{array}$$

$$\begin{array}{r} 694 \\ - 531 \\ \hline 163 \end{array}$$

page 4  
 $300 + 200 = 500$   
 $700 - 300 = 400$

3.NBT.3

I can multiply one digit numbers by 10.

$$\begin{array}{l} 1 \times 10 = 10 \\ 2 \times 10 = 20 \\ 3 \times 10 = 30 \end{array}$$

Any digit  $\times 10$  is that number followed by 0.

Measurement and Data  
3.MD.1

- I can tell and write time to the nearest minute.
- I can solve word problems involving time by adding and subtracting.



2:35

2:35

Beth left at 4:42 and it took 11 minutes to drive to her destination. What time did she arrive?

$$\begin{array}{r} 4:42 \\ + 11 \\ \hline 4:53 \end{array}$$

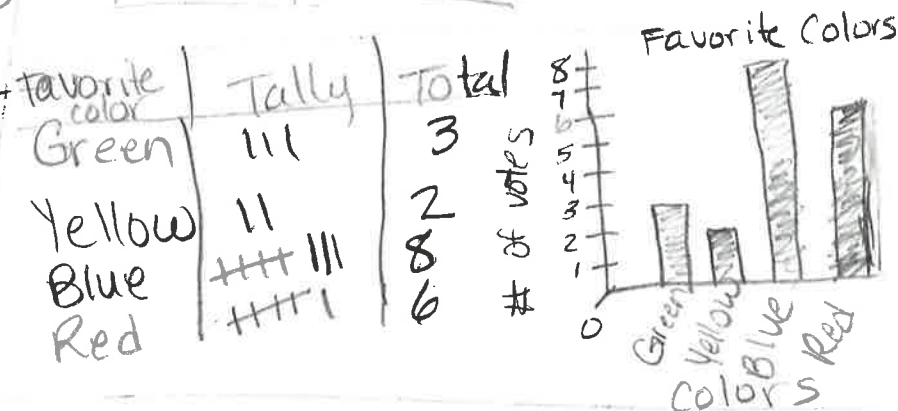
3.MD.2

- I can measure liquids and solids with liters, grams, and kilograms.
- I can solve word problems involving mass and volume using  $+$ ,  $-$ ,  $\times$ ,  $\div$ .



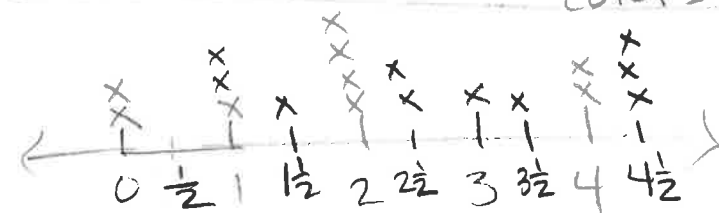
3.MD.3

I can create a picture or bar graph to show data and solve problems using information from the graphs.



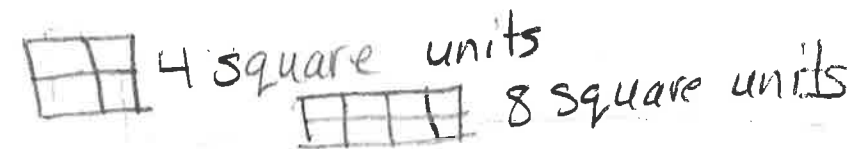
3.MD.4

I can create a line plot from measurement data where the measured objects have been measured to the nearest whole.



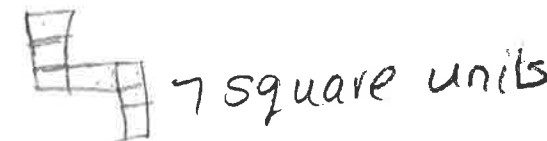
3.MD.5

I can understand area of plane shapes can be measured in square units



3.MD.6

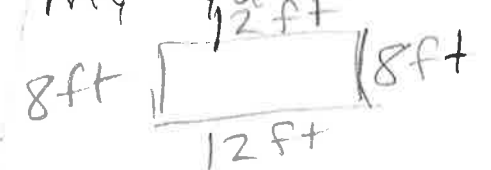
I can measure area by counting unit squares.



3 MD. 8

-I can solve real world math problems using what I know about the perimeter of shapes.

I put a fence around my rectangular back yard. The long side is 12 ft long and the short side is 8 ft long. What is the perimeter of my yard?



$12 + 8 + 12 + 8$   
 $20 + 20$   
 $40 \text{ ft.}$

Geometry  
3.G.1

-I can place shapes into categories based on their attributes.

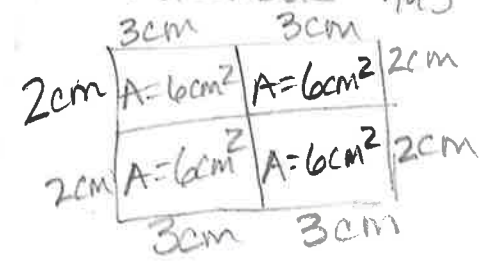
-Rectangles have 4 sides <sup>right</sup> and 4 angles with opposite sides being equal.

-Triangles have 3 sides with the angles adding up to  $180^\circ$ .

-A Rhombus has 4 equal sides

3.G.2.

-I can divide shapes into parts with equal areas and show those areas as fractions.



$\frac{1}{4}$  of the area is  $6\text{cm}^2$ .

$\frac{1}{2}$  of the area is  $12\text{cm}^2$ .

$\frac{3}{4}$  of the area is  $18\text{cm}^2$ .

The total area is  $24\text{cm}^2$ .

