



# 3<sup>rd</sup> Grade Math



## 1<sup>st</sup> Six Weeks

- Writing numbers up to 100,000 in standard, word, expanded form
- Comparing & order up to 100,000(  $<$ ,  $>$ ,  $=$  )
- Determine value of collection of coins and bills
- Using a number line to round, add, & subtract
- Writing to explain & justify mathematical ideas
- Adding using commutative & identity property
- Add & Sub using Mental Math
- Estimate (rounding & compatible numbers)
- Use strip diagrams to solve word problems

## 2<sup>nd</sup> Six Weeks

- 3 digit add & sub using expanded algorithm
- 3 digit add & sub using place value blocks
- 3 digit add & sub using standard algorithm
- Subtracting across 0's
- Using strip diagram: word problems, mult.
- Repeated addition, arrays, skip counting to represent multiplication
- Writing multiplication stories
- Multiplication facts up to 10 by 10
- Division as sharing & using mult facts to divide

## 3<sup>rd</sup> Six Weeks

- Using strip diagrams to divide
- Division facts
- Using divisibility to determine even & odd
- Solving mult. & division 2-step problems
- Multiply by multiples of 10
- Multiply by breaking apart & using rounding
- Mult. 2 dig by 1 dig numbers using arrays
- Mult 2 dig by 1 digit using standard algorithm

## 4<sup>th</sup> Six Weeks

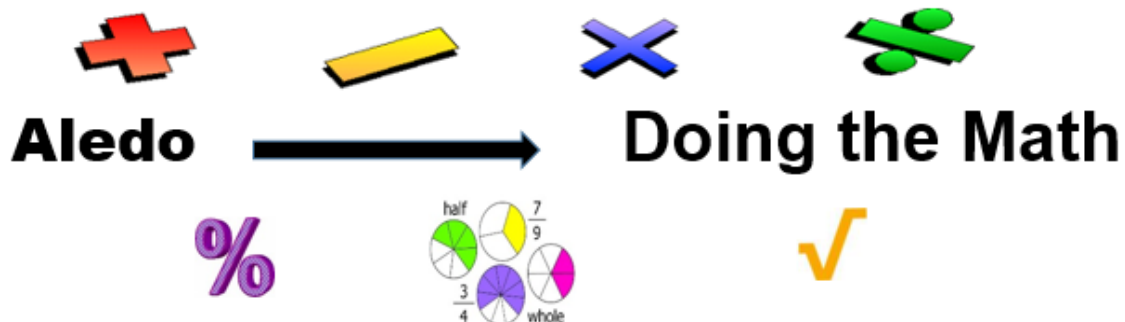
- Using equations to solve (add,sub,mult,& div)
- Use tables to represent real-world relationships
- Unit fraction is 1 part of a whole
- Represent fractions between 0 & 1 w/pictures, models, strip diag.
- Represent & locate fractions on a number line
- Break apart fractions & divide objects into part
- Compare fractions
- Find equivalent fractions w/pictures & num line
- Attributes of quadrilaterals
- Classify & sort 3-D figures based on attributes

## 5<sup>th</sup> Six Weeks

- Finding perimeter or missing measurement
- Finding area using grids, side measures
- Finding area of irregular shapes
- Find liquid volume
- Choose appropriate measure volume & mass
- Find elapsed time & solve problems w/time
- Recognize how many parts to make a whole
- Describe data using frequency table, dot plot, pictograph & bar graph
- Create pictographs & bar graphs

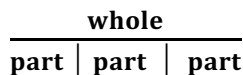
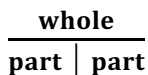
## 6<sup>th</sup> Six Weeks

- Connecting human capital/labor & income
- Difference in planned & unplanned spending
- Understand credit – must be paid back
- Investigate saving for future purchases
- Study costs & resources
- Study relationship between availability of resources & cost



# 3<sup>rd</sup> Grade Strategies

## Strip Diagram:



3 times as many

Total cost  
\$15 shirt | \$19 shorts

$$15 + 19 = ?$$

102 pounds  
6 lbs | ?

$$102 - 6 = ?$$

\$40 total cost  
8 →

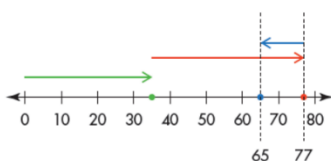
$$40 \div 8 = ? \text{ or } 8 \times ? = 40$$

60 (5 times as many)  
? ? ? ? ?

$$60 \div 5 = ? \text{ or } 5 \times ? = 60$$

## Number line:

$$35 + 42 - 12$$



## Make a table, find pattern:

Apples	16	32	48	64
Green apples	4	8	12	?

## Mental Math:

Break apart Addition:

$$25 + 14 = 25 + (10 + 4) \text{ or } (20 + 5) + (10 + 4) \text{ or } 69 + 25 = 70 + 24$$

$$= (25 + 10) + 4 \quad (20 + 10) + (5 + 4) \quad = 94$$

$$= 35 + 4 \quad 30 + 9$$

$$= 39 \quad 39$$

Subtraction:

$$\begin{array}{r} 64 - 27 \\ +3 \quad +3 \\ \hline \end{array}$$

$$67 - 30 = 37$$

## Properties:

Commutative Property - order

$$5 + 7 = 7 + 5$$

$$5 \times 6 = 6 \times 5$$

Identity Property -

$$5 + 0 = 5$$

Distributive Property -

$$7 \times 4 = (5 \times 4) + (2 \times 4)$$

## Make a 10:

$$9 + 5 = 9 + (1 + 4) = (9 + 1) + 4 = 10 + 4 = 14$$

## Draw a picture:



6 ft

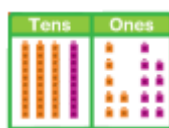
Perimeter 26 ft

?

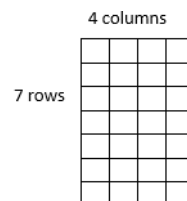
## Manipulatives:

Place Value Blocks

37 + 19 must regroup



## Array:



$$4 \times 7 = 28$$