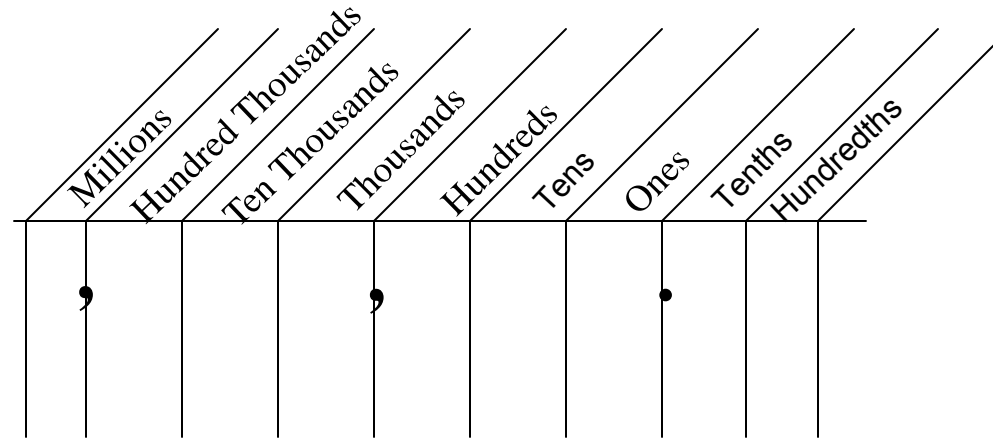


Grade 4 MCAS

- Choose a strategy**
- Draw a picture or diagram
 - Make a graph
 - Act it out
 - Make a table or list
 - Guess and check
 - Write an equation
 - Work backward
 - Solve a simpler problem



- Estimate**
- About how many
 - Not exact
 - Good guess

- Pictograph Check in for key value of picture
 Organized list Combination of items
 Line graph Changes over time

- ROUNDING**
1. Nearest 10
 2. Next 10
 3. Closer to ?
 4. Middle → round up

Data, Analysis, Statistics & Probability					
Ask a question	Collect data	Represent data	Probability		
Survey	Talley Marks	pictograph	Less often	equally likely	more often
	Chart	Bar graph	Impossible		certain
		Line graph			
		Circle graph			
		Line plot			

<u>Word Bank</u>	Key	Horizontal axis
Label	Title	Vertical axis

Good Luck!!! 😊

Approved 11/05

Patterns, Relations, Algebra

> Greater than >	< Less than <	= Equal =
		balanced on both sides
A symbol (o, Δ, □, n, a...) will always stand for the same number in the same problem.		
Input/output	Guess my 'Rule'	Function - machine
		T - Charts

Attributes of Shapes

Sides Number of sides? Equal sides? Unequal sides? Parallel? Perpendicular?	Angles Number of angles? Equal angles? Unequal angles? Right? Acute? Obtuse?	Solids Edges Number of? Equal or unequal? Parallel sets? Perpendicular sets?	Vertices Number of? Faces Number of shape? Square, circle, triangle
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Measurement

Time

60 seconds = 1 min
60 min = 1 hr
24 hr = 1 day
7 days = 1 week
52 weeks = 1 year
365 days = 1 year

Capacity

1 cup = 8 ounces
1 pint = 16 ounces
1 quart = 32 ounces
1 gallon = 128 ounces
1 pound = 16 ounces

Length

12 in = 1 ft
3 ft = 1 yd

Units of Measure (Hint: Label your answer)

second	inch	centimeter	cup	milliliter	ounce	gram	volume in cubic units
minute	foot	meter	pint	liter	pound	kilogram	length
hour	yard	kilometer	quart		ton		width
	mile		gallon				height

Word Bank

Symmetrical	Point	Line segment	Ray	Congruent shapes	Flip
Line of symmetry	End points	Parallel lines	Vertex	Open figures	Slide
Diagonal	Line	Intersecting lines	Angle	Closed figures	Turn
		Perpendicular lines			

Addition	Subtraction	Multiplication
<ul style="list-style-type: none"> Line up decimals points, ones, tens, hundreds Start with ones If 10 or greater, carry the tens digit Write the ones 	<ul style="list-style-type: none"> Line up decimals points, ones, tens, hundreds Start with ones If bottom digit is greater than the top Borrow & regroup Cross out tens and make it one less $a - b = \text{difference}$ 	<ul style="list-style-type: none"> Line up decimals points, ones, tens, hundreds Start with ones Regroup when needed Put down the ones Put up regrouped tens When multiplying by a 2 digit number, use zero place holder
Division		
<ul style="list-style-type: none"> Divide Multiply Subtract Check Bring down 		

Fractions	<u>Numerator</u> Denominator
Mixed Number = whole number +	<u>Numerator</u> Denominator

	Simplest form
$\frac{\text{Num}}{\text{Den}} \div \frac{a}{a} =$	divide numerator and denominator by the largest common factor
Equivalent Fraction	
$\frac{\text{Num}}{\text{Den}} \times \frac{a}{a} =$	Equivalent fraction

Addition & Subtraction of Fractions	
<ul style="list-style-type: none"> Common denominator Add numerators 	<ul style="list-style-type: none"> Denominator stays the same Find simplest form

ADDITION	
<u>Vocabulary</u> addend Sum, plus	<u>Problem solving words</u> Total, In all, altogether * make number line
SUBTRACTION	
<u>Vocabulary</u> minus difference	<u>Problem solving words</u> Difference, Less, Left how many more How much farther, greater, etc.
MULTIPLICATION	
<u>Vocabulary</u> multiple (skip count) factor x factor = product	<u>Problem solving words</u> In all, altogether, each total, times factor <u>X factor</u> Product
DIVISION	
<u>Vocabulary</u> quotient dividend \div divisor = quotient	<u>Problem solving words</u> How many per, each quotient dividend Divisor 