

I understand whole
numbers and place
value.

Georgia Performance Standard M3N1 (a) (b)

If the party starts at
1:00 and lasts until
2:30,



how long will the
party last?

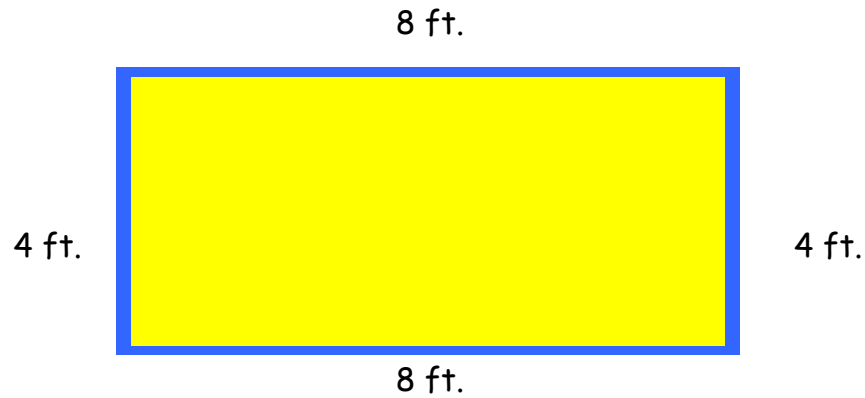
I can figure elapsed
time to a full, half
and quarter hour.

1 mile = 1.609344
kilometers so..... a
mile is longer than a
kilometer.



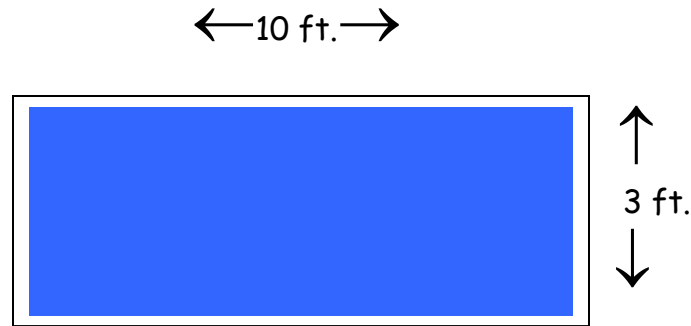
An **inch** is longer than a
centimeter, so it will take
fewer inches than
centimeters to get to the
same length.

I can estimate and
measure **length** and
compare units.



I can measure the
perimeter of simple
geometric figures.



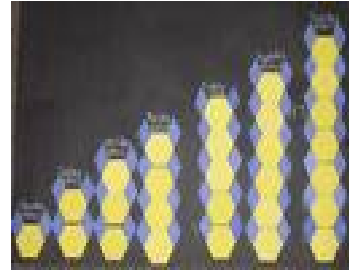


I can measure the
area of simple
geometric figures.



I can draw geometric
figures and explain
their properties.

3, 6, 9, 12.....
What comes next?



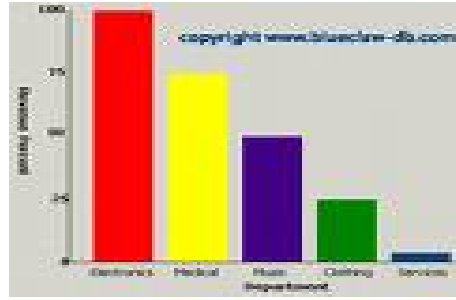
I can describe and
extend numeric and
geometric **patterns.**

$4 + 4 + 4 + 4$ is the **equation** that shows the distance around the outside of the figure (perimeter).

I can **describe** and **explain** what a math formula means.

$$25 + \square = 67$$
$$67 - 25 = 42 \text{ so}$$
$$\square \text{ must be } 42.$$

I can use a symbol to represent an unknown and figure its value in a number sentence.



I can create, interpret
and solve problems using
data in **bar graphs** and
tables.



Using various types of reasoning, I can develop and evaluate mathematical arguments and proofs.

Georgia Performance Standard M3D1 (c) (d)

Process Skills



I use lots of different strategies to solve problems.

Georgia Performance Standard M3P1 (a) (b) (c) (d)

Since I knowthen this
would have to be true.

I can reason and evaluate mathematical arguments.

Georgia Performance Standard M3P2 (a) (b) (c) (d)



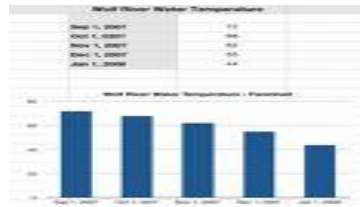
I can communicate my **math thinking** and analyze the math thinking of others.

Georgia Performance Standard M3P3 (a) (b) (c) (d)



I can see the **connections** between math ideas and can **apply** what I've learned in my life.

Georgia Performance Standard M3P4 (a) (b) (c)



I can represent mathematics in lots of ways.

Georgia Performance Standard M3P5 (a) (b) (c)

$$\begin{array}{c} \text{A} \times \text{B} \\ \hline 5 \times 10 \end{array} = \begin{array}{c} \text{B} \times \text{A} \\ \hline 10 \times 5 \end{array}$$

$$1 + (2 + 3) = 1 + 5 = 6$$

$$(1 + 2) + 3 = 3 + 3 = 6$$

$$(-3) + (1 + (-9)) = (-3) + (-8) = -11$$

$$((-3) + 1) + (-9) = (-2) + (-9) = -11$$

I can use properties
of addition and
subtraction to solve
problems.

To do this problem, I have
to think about..... So the
answer should be
somewhere around.....

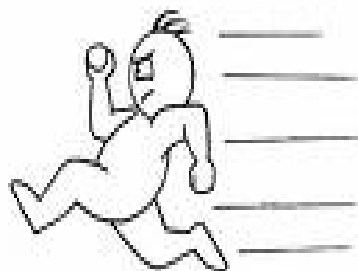


I can use mental math
and estimation to solve
addition and subtraction
problems.

Georgia Performance Standard M3N2 (b) (c)

I know how addition
and multiplication go
together.

$$4 \times 5 \text{ equals } 5 + 5 + 5 + 5$$



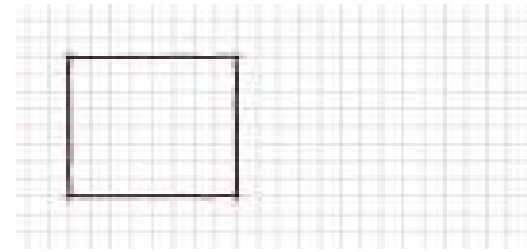
I know my
multiplication facts
with speed.

Array (0, 3) of other

	0	1	2	3
0	0	1	2	3
1	4	5	6	7
2	8	9	10	11
3	12	13	14	15

Memory

5	A0:0
4	A0:1
3	A0:2
2	A0:3
1	A0:4
0	A0:5
5	A1:0
4	A1:1
3	A1:2
2	A1:3
1	A1:4
0	A1:5
5	A2:0
4	A2:1
3	A2:2
2	A2:3
1	A2:4
0	A2:5



I can use **arrays** and **area models** to help me multiply.

$$8 \times \underline{10} = \underline{80}$$

Any number times 10
is that number with a
zero on the end.

MULTIPLYING BY 10

$$9 \times \underline{1} = 9$$

Any number
times 1 is
itself.

IDENTITY
PROPERTY

8 × 3 is
the same
as 3 × 8.

COMMUTATIVE
PROPERTY

(2 × 3) × 4 is
the same as
2 × (3 × 4).

ASSOCIATIVE
PROPERTY

I use tricks and
properties I know to
help me multiply.

To do this problem, I have to think about..... So the answer should be somewhere around.....



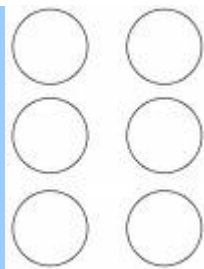
I can use mental math
and estimation to
multiply and solve
problems.

Georgia Performance Standard M3N3 (f) (g)

Since I know $4 \times 5 = 20$, I can switch it around and know that 20 divided by 5 equals 4.

20 divided by 5 is.....
 $20 - 5 - 5 - 5 - 5$ is zero. I had to go backwards 4 groups of 5 to get to 0.

I know how **division**
fits with
multiplication and
subtraction.



6 divided into 2 equal parts

I can divide using two strategies and solve division problems.

(equal parts of a whole or size of the parts when whole is separated in equal parts)

$$\begin{array}{r} \text{quotient} \rightarrow 5 \\ \text{divisor} \rightarrow 3 \overline{)16} \\ \text{dividend} \nearrow 15 \\ \text{remainder} \rightarrow 1 \end{array}$$

I can explain the meaning
of a **remainder** in division
in different
circumstances.

$$\begin{array}{r} 34 \\ 2 \overline{)68} \\ \underline{-6} \\ 08 \\ \underline{0} \\ 8 \end{array} \quad 4 \times 2 = 8$$

I can **divide** 2- and
3-digit numbers and
solve problems with
them.



$$\begin{array}{l} \frac{3}{10} = .3 \\ \frac{17}{100} = .17 \\ \frac{5}{100} = .05 \\ \frac{323}{1000} = .323 \\ \frac{47}{1000} = .047 \\ \frac{9}{1000} = .009 \end{array}$$

I know that decimal
and common
fractions represent
parts of a whole.



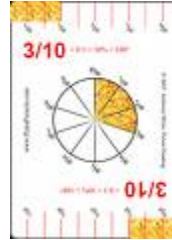
$6/10$ 6 equal parts out of the 10 parts there are in all.

I know that a/b represents
 a equal sized parts of a
whole that is divided into b
equal parts.

→ .1 equals one
tenth ($1/10$)

I know that a one
place decimal
fraction stands for
tenths.

Georgia Performance Standard M3N5 (c)



I can use **decimal** and **common fractions** to represent the size of parts created by equal divisions of a whole.

$$\frac{3}{10} + \frac{4}{10} = \frac{7}{10} \leftarrow$$

I can model, add and subtract,
and solve problems using
decimal fractions and common
fractions with like
denominators.

If the



how

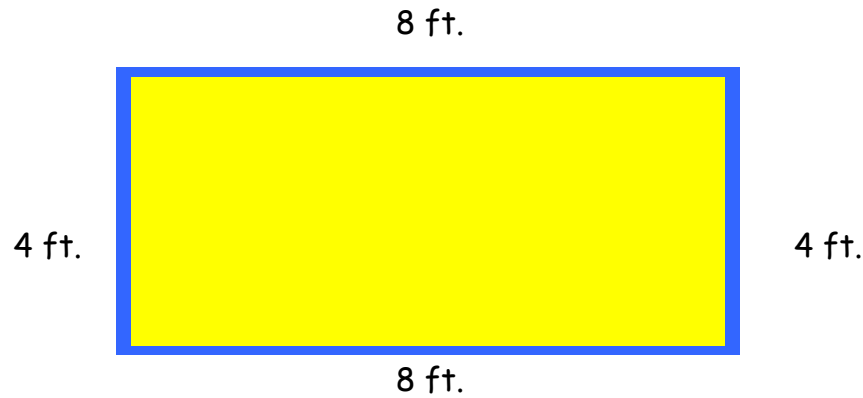
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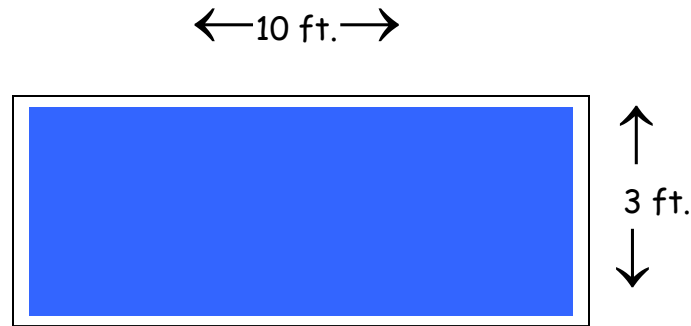
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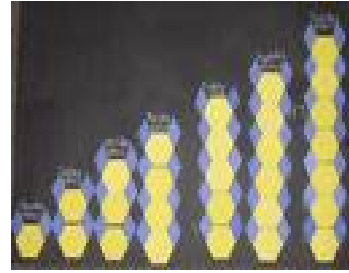


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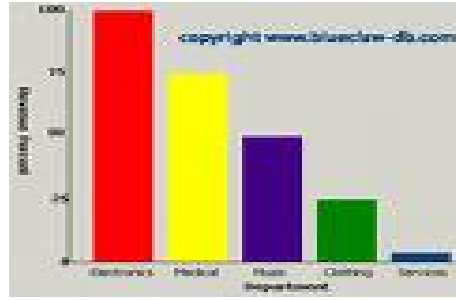
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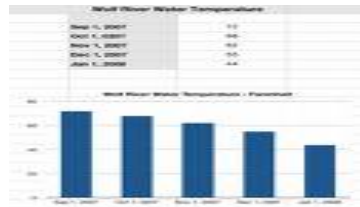
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