

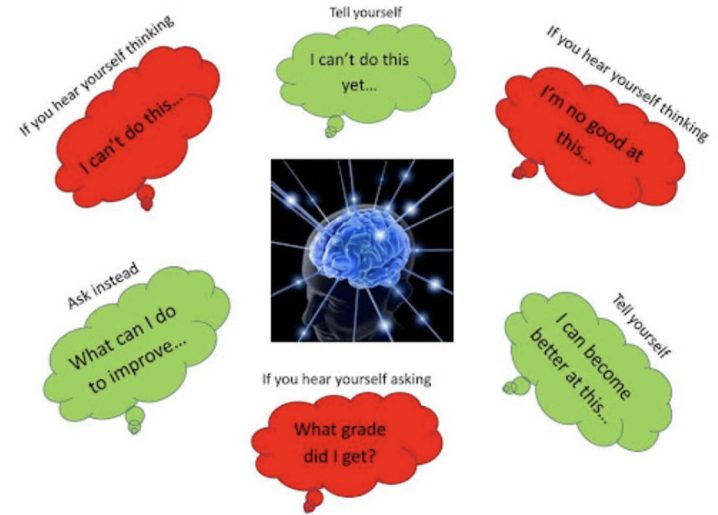
How Can I Support My Child in Math?

PTO Meeting 2/7/24

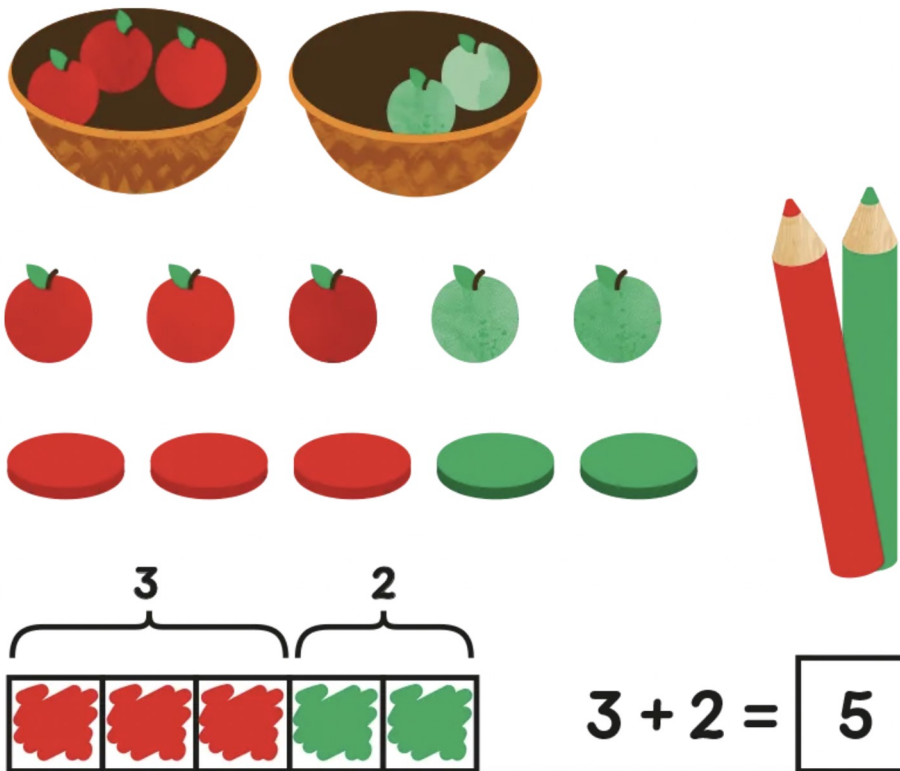
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Math Attitudes

- “I am not a math person” – *Erase* this phrase
- Model a growth mindset
- Watch messaging around mistakes
- Praise your child’s effort, not achievement
- Look for math in the world
- When your child is stuck, be curious.



CPA - Concrete/Pictorial/Abstract



Fluency of Whole Number Calculations (CCSS)

	Learn	Master
Grade K	<ul style="list-style-type: none"> • Add and subtract within 10 	<ul style="list-style-type: none"> • Add and subtract within 5
Grade 1	<ul style="list-style-type: none"> • Add and subtract within 20 • Add with 2-digit + 1-digit, 2-digit + multiple of 10 • Subtract with multiple of 10 – multiple of 10 (less than 100) 	<ul style="list-style-type: none"> • Add and subtract within 10
Grade 2	<ul style="list-style-type: none"> • Add and subtract within 100 • Add up to four 2-digit numbers • Add and subtract within 1000 	<ul style="list-style-type: none"> • Add and subtract within 20 (using mental strategies) • Add and subtract within 100
Grade 3	<ul style="list-style-type: none"> • Multiply and divide within 100 • Multiply 1-digit x multiple of 10 (e.g., 9 x 80) 	<ul style="list-style-type: none"> • Multiply and divide within 100 • Add and subtract within 1000
Grade 4	<ul style="list-style-type: none"> • Multiply up to 4-digit x 1-digit, 2-digit x 2-digit • Find whole number quotients and remainders with up to 4-digit dividends and 1-digit divisors 	<ul style="list-style-type: none"> • Add and subtract multi-digit whole numbers (standard algorithm)
Grade 5	<ul style="list-style-type: none"> • Find whole number quotients with up to 4-digit dividends and 1-digit and 2-digit divisors 	<ul style="list-style-type: none"> • Multiply multi-digit whole numbers (standard algorithm)

**K Mastery - Add and subtract within 5
Count to 100 by 1s and 10s**

**1st Mastery - Add and subtract within 10
Counting to 120, starting at any number**

Games or activities

Counting while waiting in line - Count 1-100, Count to 100 by tens, Count backwards starting at 10 then 20. What is one more than? What is one less than?

Board games, dice games, Junior Yahtzee, Bump, Dominoes, Snap games, and Rummikub.

Point out numbers in the world, read and name these numbers with you.

Look for ways you are using math and get your child involved. For example, if you are volunteering and you're counting items, have your child help you count or match items.

Addition facts to 10: Look for patterns below. What do you notice? Look in all directions.

1+1	2+1	3+1	4+1	5+1	6+1	7+1	8+1	9+1
1+2	2+2	3+2	4+2	5+2	6+2	7+2	8+2	
1+3	2+3	3+3	4+3	5+3	6+3	7+3		
1+4	2+4	3+4	4+4	5+4	6+4			
1+5	2+5	3+5	4+5	5+5				
1+6	2+6	3+6	4+6					
1+7	2+7	3+7						
1+8	2+8							
1+9								

1st
Grade

$9+2$

$8+3$

$7+4$

$6+5$

$5+6$

$4+7$

$3+8$

$2+9$

$9+3$

$8+4$

$7+5$

$6+6$

$5+7$

$4+8$

$3+9$

$9+4$

$8+5$

$7+6$

$6+7$

$5+8$

$4+9$

$9+5$

$8+6$

$7+7$

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$8+8$

$7+9$

$9+8$

$8+9$

$9+9$

2nd Grade

Add and subtract within 20

Count within 1,000; skip-count by 5s, 10s, and 100s.

Use strategies to strengthen math fact fluency.

Examples include : near doubles, -1, +1, and make 10.

Use a double ten frame with counters to reinforce adding and subtracting facts to 20. These should be secure by the end of the year.

Securing the addition double facts (4+4) will help your child develop multiplication facts.

$11 - 2$

$11 - 3$

$12 - 3$

$11 - 4$

$12 - 4$

$13 - 4$

$11 - 5$

$12 - 5$

$13 - 5$

$14 - 5$

$11 - 6$

$12 - 6$

$13 - 6$

$14 - 6$

$15 - 6$

$11 - 7$

$12 - 7$

$13 - 7$

$14 - 7$

$15 - 7$

$16 - 7$

$11 - 8$

$12 - 8$

$13 - 8$

$14 - 8$

$15 - 8$

$16 - 8$

$17 - 8$

$11 - 9$

$12 - 9$

$13 - 9$

$14 - 9$

$15 - 9$

$16 - 9$

$17 - 9$

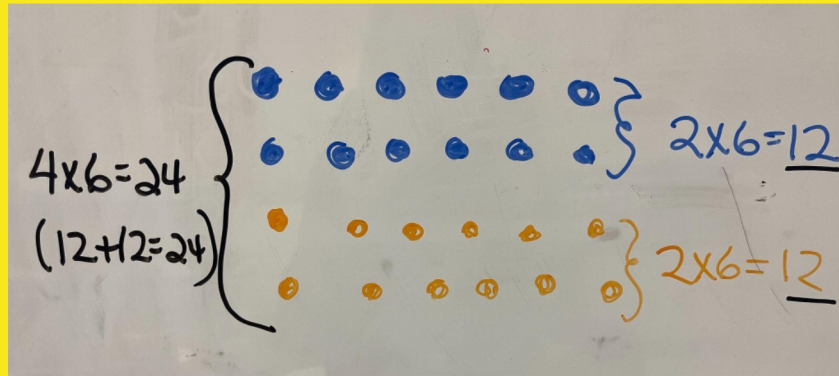
$18 - 9$

DOUBLE TEN FRAME

Can be used to recognize numbers, add and subtract numbers 1-20.

3rd/ 4th /5th Grade Multiplication and Division Facts

- Children should understand that multiplication involves groups of items. (Repeated addition)
- You can't tackle all of the facts at once. Select a few facts at a time.
- Short sessions done with frequency are more beneficial than longer sessions.



Strategies or activities that promote multiplication/ division fact retention.

- Systematic review (2, 5, 10)
- Online programs - Example: Reflex
- Games - memory, fly swat, snowball, concentration/ matching
- Cover, copy, and compare
- Have your child make up songs, poems, chants for the facts that they are stuck on.

Below are the 36 unique multiplication facts (i.e. "turn-around facts" removed).

- 2 x 2 to 5 x 5 (black) - easiest
- 2 x 6 to 5 x 9 (blue)
- 6 x 6 to 9 x 9 (green) – most difficult

2	3	4	5	6	7	8	
2 x 2							
2 x 3	3 x 3						
2 x 4	3 x 4	4 x 4					
2 x 5	3 x 5	4 x 5	5 x 5				
2 x 6	3 x 6	4 x 6	5 x 6	6 x 6			
2 x 7	3 x 7	4 x 7	5 x 7	6 x 7	7 x 7		
2 x 8	3 x 8	4 x 8	5 x 8	6 x 8	7 x 8	8 x 8	
2 x 9	3 x 9	4 x 9	5 x 9	6 x 9	7 x 9	8 x 9	9 x 9

Multiplication & Division Algorithms You May Not Know

Multiplication	Division
<u>Partial Products</u>	<u>Partial Quotients</u>
<u>Area Model</u>	<u>Box Method</u>

Thank you for your attention!!!

MATH

the only subject that counts ♡

As the kids would say jk- just kidding!

"Math gives us hope that every problem has a solution." -unknown

Contact Information

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Sources

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