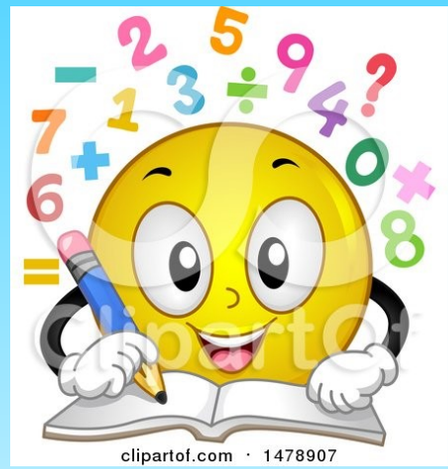
Parent Math Workshop

Powder Springs Elementary

January 21, 2023



Agenda:

*Welcome to K-2 Session
*Introduction
*Addition/Subtraction Strategies
    *Five frame/Ten frame/Double ten frame
    *Number bonds/Part-part-whole
    *Number lines
    *Hundreds chart
    *Place value models/mat
    *Expanded form/partial sums
    *Problem Solving(situations)
*Fact Fluency(Automaticity) Activity
*At home games:
    *Race to 100/0
    *Make a 10 Go Fish
    *Add/Sub War
    *Addition Bump
    *Games using 120 chart
*Closing

Welcome!

K-2 Addition and Subtraction

Introductions:

Mrs.Raven Slaughter
Academic Coach

I am the academic coach at Powder Springs. I have taught PreK-8th grade. This is my 10th year teaching in Cobb County. Students are my why!

Mrs. Shari Martin
2nd Grade Teacher

I am a Second Grade teacher at Powder Springs. I worked in First Grade for 4 years. This is my 10th year teaching in Cobb County. I love watching students become successful in math!

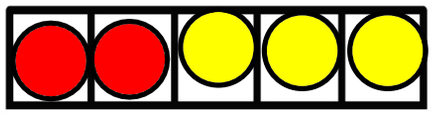
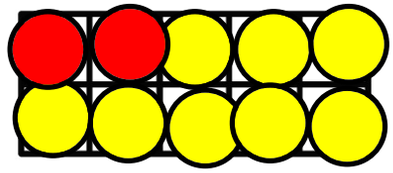
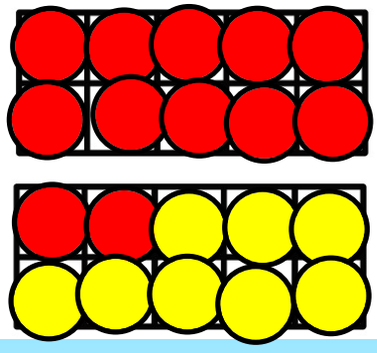
Mrs. Dina Voyles
EIP/RTI

I am an Early Intervention teacher and help with the Tier 3 Response to Intervention for the school. This is my 23rd year teaching in Cobb County. I love, love, love teaching math!

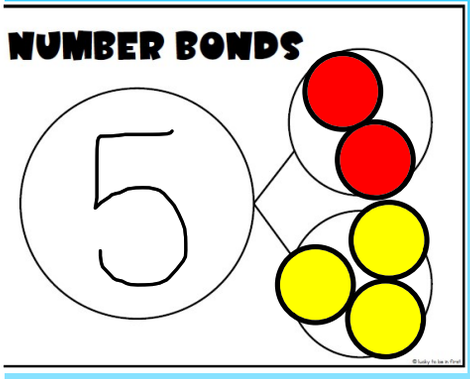
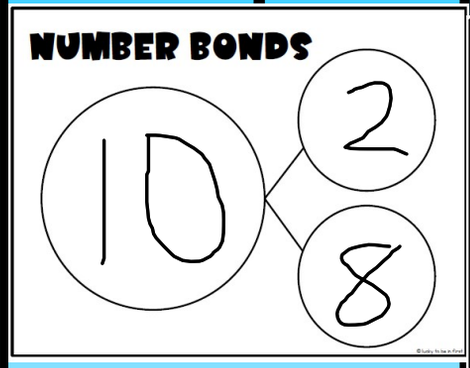
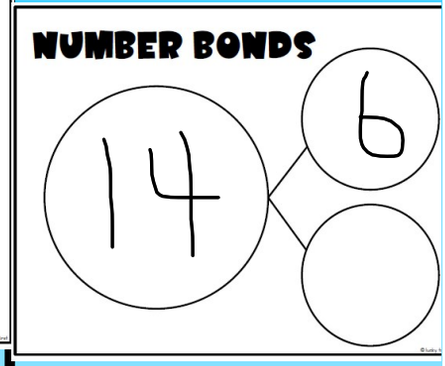
Our Learning Target!

I can use math strategies to add and subtract fluently in grades K-2.

Five frame/ten frame/double ten frame:

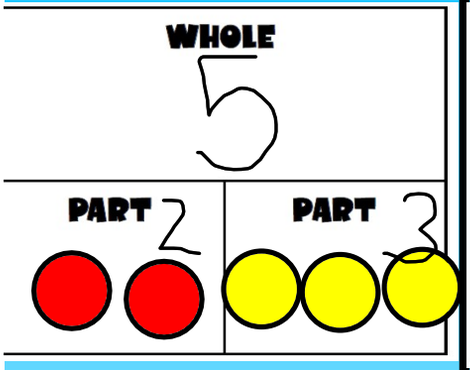
2 + 3	2 + 8	12 + 8
K	1	2
Five Frame 	TEN FRAME MAT 	TEN FRAMES MAT 

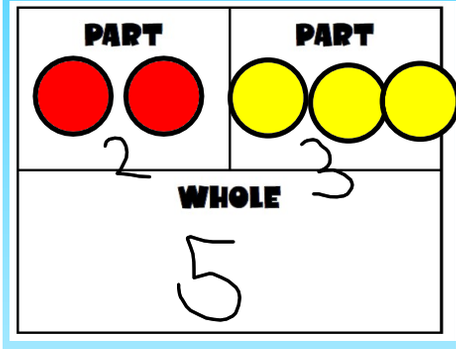
Number Bonds and Part-Part whole

K	1	2
		

Number Bonds and Part-Part whole

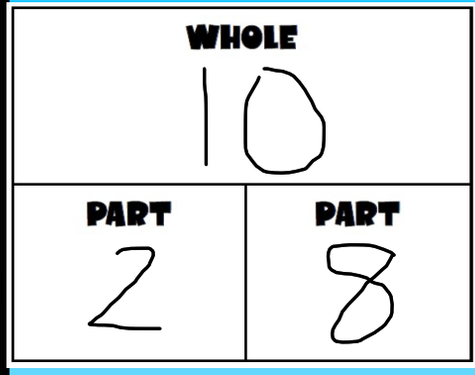
K

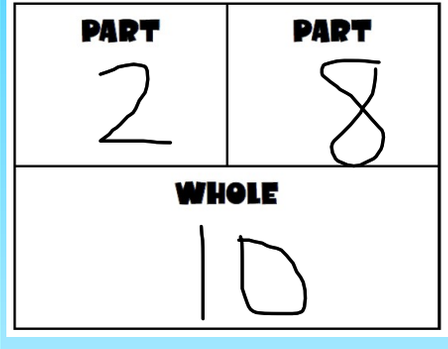




2 + 3 = 5

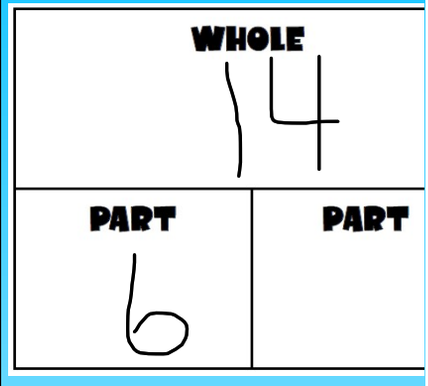
1

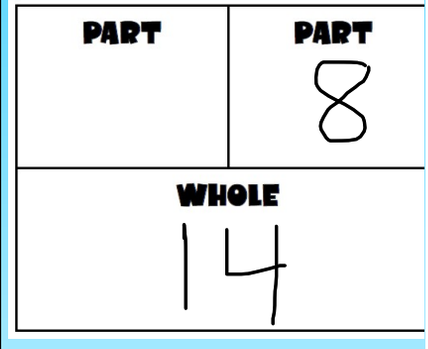




2 + 8 = 10

2

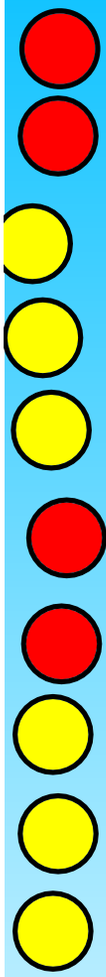


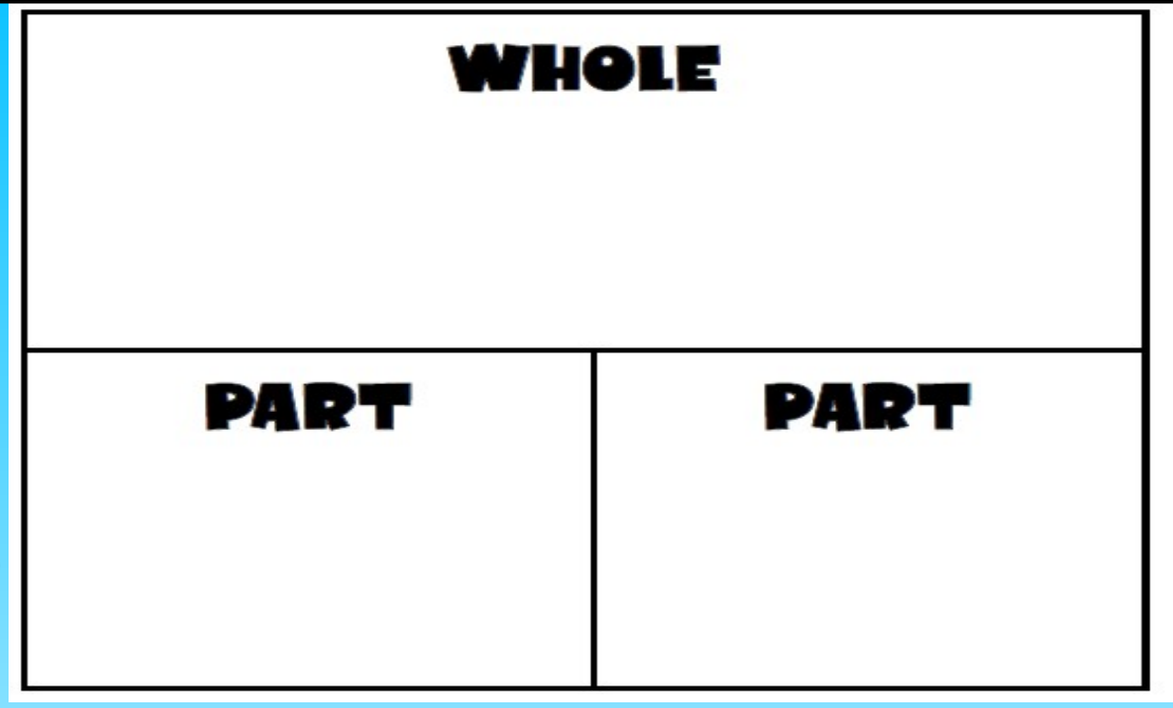


14 = 6 + _

_ + 8 = 14

Number Bonds and Part-Part whole





$2 + 2 = \_\_\_\_$

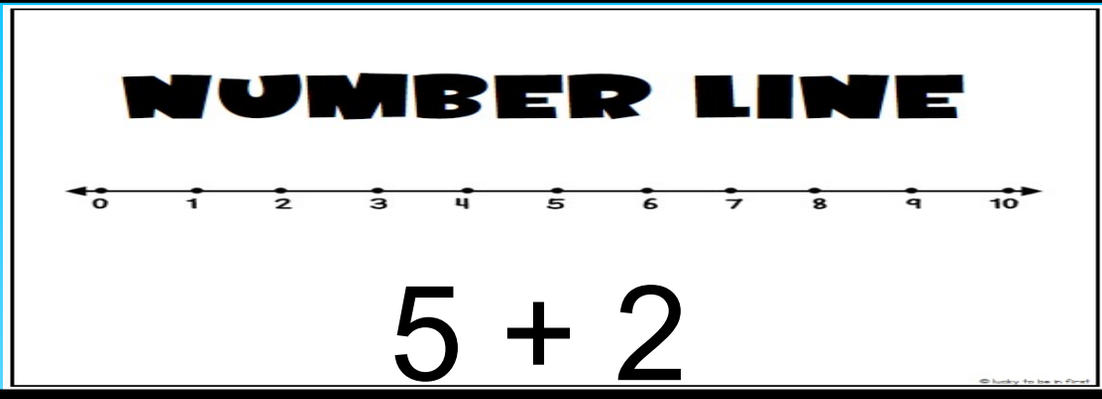
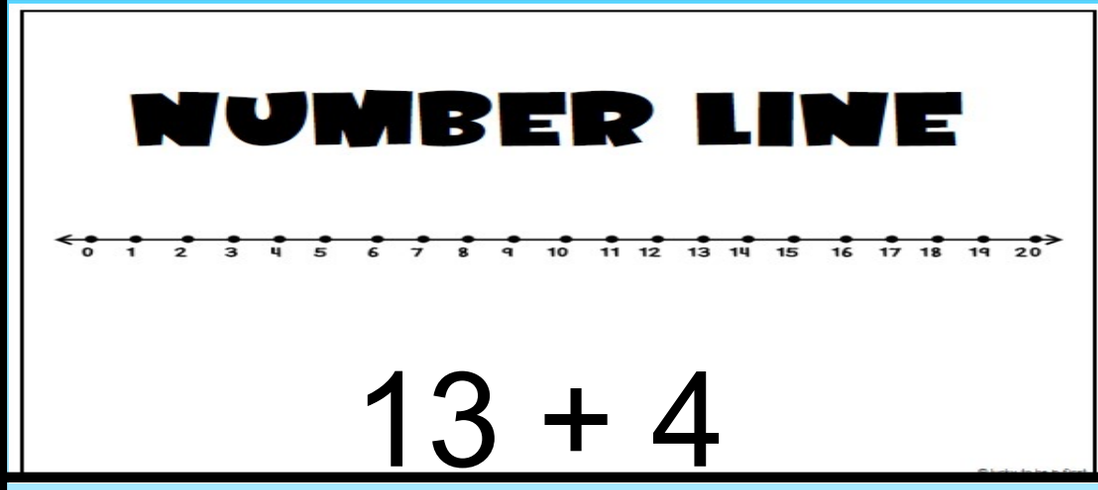
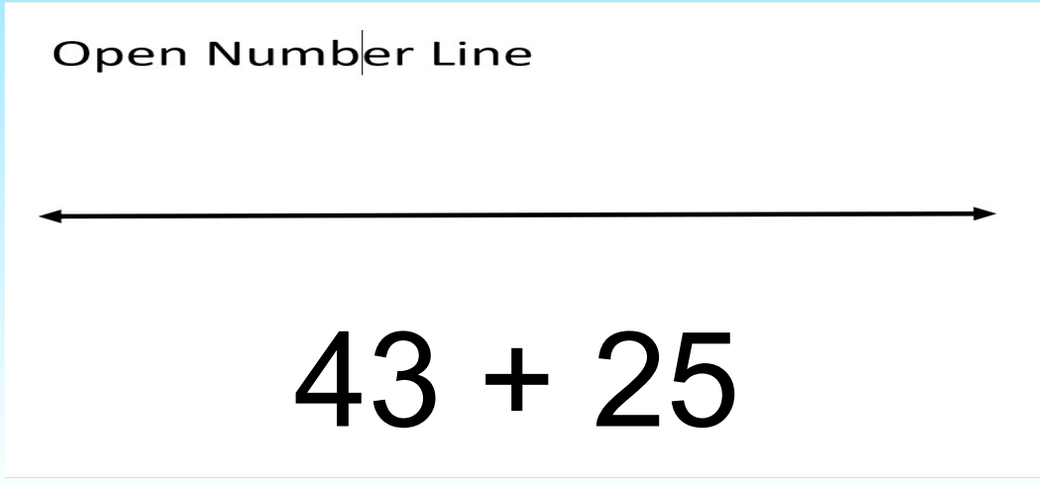
$\_\_ + 2 = 4$

$2 + \_\_ = 4$

$4 = \_\_ + 2$

$3 + 1 = \_\_ + 2$

Numberline

K	
1	
2	

Numberline

Open Number Line

46 + 27

Hundreds Chart

K

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

5 + 4

1

120 CHART

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

13 + 4

2

120 CHART

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

46 + 27

Hundreds Chart

46 + 27

10 more ;10 less

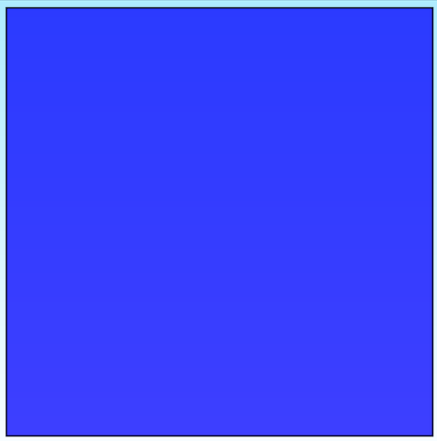
120 CHART

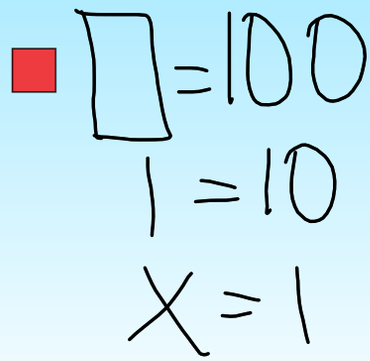
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

Base Ten Models

5 + 2 13 + 4 43 + 25

H	T	O





Expanded Form/partial sums:

43 + 25

Problem Solving

Addition and Subtraction Situations

	Result Unknown	Change Unknown	Start Unknown
Add to	◊Two bunnies sat on the grass. Three more bunnies hopped there. How many bunnies are on the grass now? 2 + 3 = ?	Two bunnies were sitting on the grass. Some more bunnies hopped there. Then there were five bunnies. How many bunnies hopped over to the first *A* bunnies? 2 + ? = 5	*Some bunnies were sitting on the grass. Three more bunnies hopped there. Then there were five bunnies. How many bunnies were on the grass before? ? + 3 = 5
Take From	◊Five apples were on the table. I ate two apples. How many apples are on the table now? 5 – 2 = ?	Five apples were on the table. I ate some apples. Then there were three apples. How many apples did I eat? 5 - ? = 3	*Some apples were on the table. I ate two apples. Then there were three apples. How many apples were on the table before? ? – 2 = 3
	Total Unknown	**Both Addends Unknown[1]**	**Addend Unknown[2]**
Put together/Take apart	◊Three toy cars and two toy boats are on the table. How many toys are on the table? 3 + 2 = ?	◊Grandma has five flowers. How many can she put in her red vase and how many in her blue vase? 5 = 0 + 5 5 = 5 + 0 5 = 1 + 4 5 = 4 + 1 5 = 2 + 3 5 = 3 + 2 3 + ? = 5 5 – 3 = ?	Five toys are on the table. Three are cars and the rest are boats. How many toys are boats? 3 + ? = 5 5 – 3 = ?
	Difference Unknown	**Bigger Unknown**	**Smaller Unknown**
Compare	***"How many more?" version:*** Lucy has two apples. Julie has five apples. How many more apples does Julie have than Lucy? ***"How many fewer?" version:*** Lucy has two apples. Julie has five apples. How many fewer apples does Lucy have than Julie? 2 + ? = 5 5 – 2 = ?	***"More" version suggests the operation:*** Julie has three more apples than Lucy. Lucy has two apples. How many apples does Julie have? * ***"Fewer" version suggests the wrong operation:*** Lucy has three fewer apples than Julie. Lucy has two apples. How many apples does Julie have? 2 + 3 = ? 3 + 2 = ?	***"Fewer" version suggests the operation:*** Lucy has three fewer apples than Julie. Julie has five apples. How many apples does Lucy have? * ***"More" version suggests the wrong operation:*** Julie has three more apples than Lucy. Julie has five apples. How many apples does Lucy have? 5 – 3 = ? ? + 3 = 5

1. This can be used to show all decompositions of a given number, especially important for numbers within 10. Equations with totals on the left help children understand that = does not always mean "makes" or "results in" but always means "is the same number as." Such problems are not a problem subtype with one unknown, as is the Addend Unknown subtype to the right. These problems are a productive variation with two unknowns that give experience with finding all of the decompositions of a number and reflecting on the patterns involved.

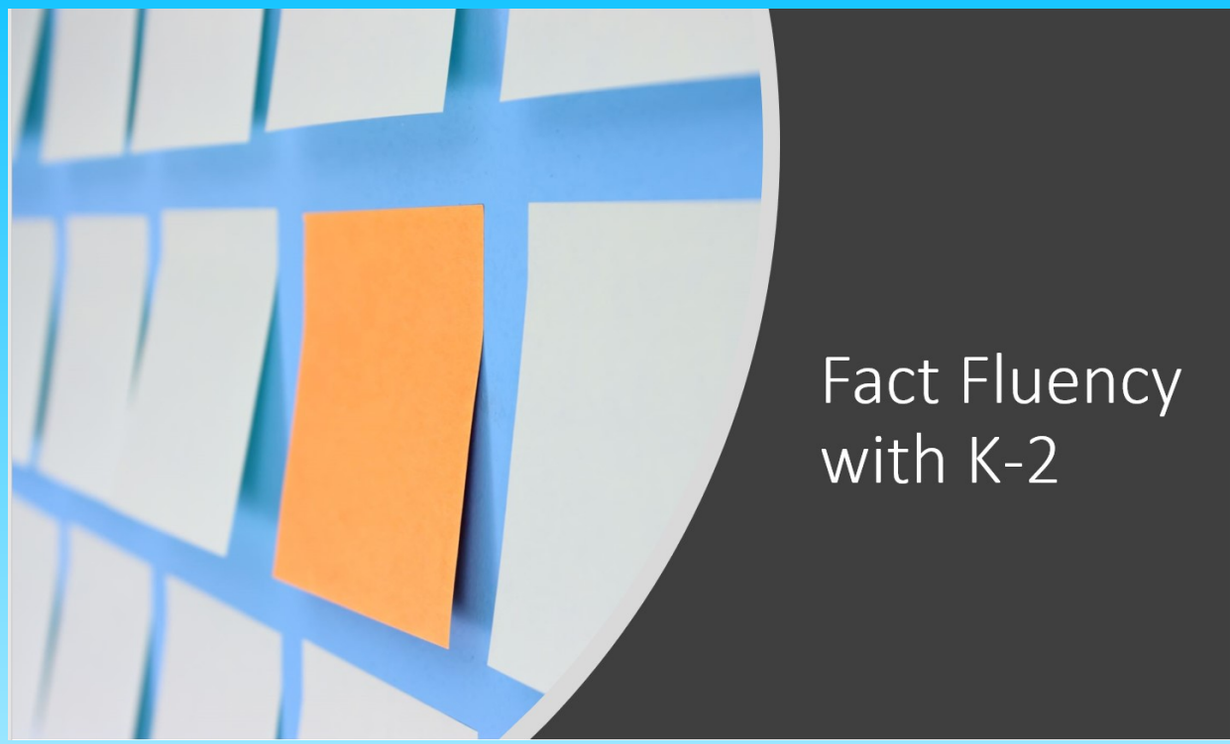
2. Either addend can be unknown; both variations should be included.

◊ Problem subtypes with a ◊ indicate the four kindergarten problem subtypes.

* Grade 1 and Grade 2 students work with all subtypes. Problems with a * indicate the four difficult subtypes that students should work with in grade 1 but need not master until grade 2.

See Progressions for the Common Core State Standards for Mathematics: K, Counting and Cardinality; K-5 Operations and Algebraic Thinking for further information.

Fact Fluency in Grades K-2

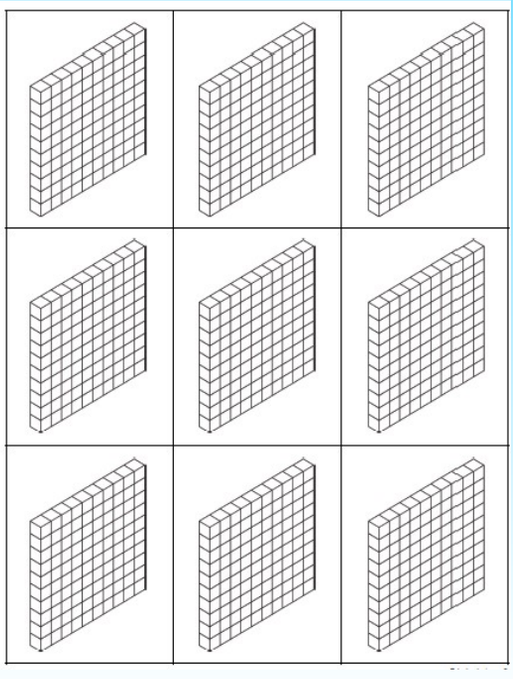


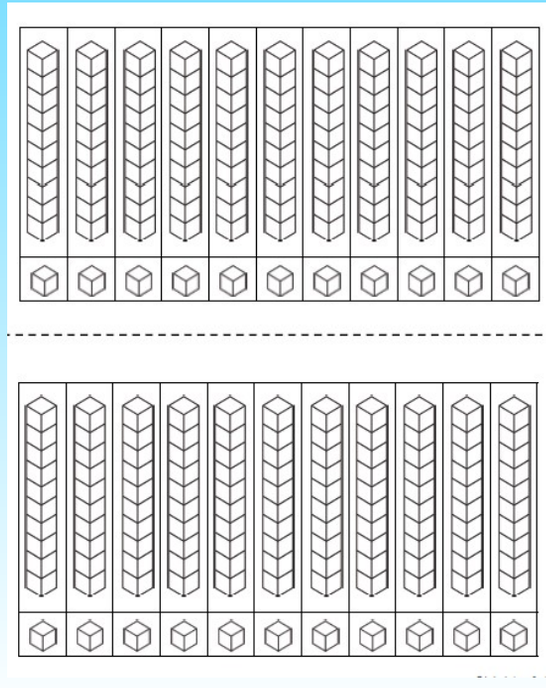
At Home Game 1:

RACE to 100/0

HUNDREDS	TENS	ONES

HUNDREDS	TENS	ONES





At Home Game 2:

Make a 10 Go Fish/Make a "___" Go Fish

Materials Needed:

Deck of cards(with 10 and face cards removed)

Ten frame/five frame

Counters(any thing will do(beans, pennies, beads)

Object of Game:

Make as many number pairs that add up to the given number as you can

How to Play:

1. Deal each player 7 cards.
2. Each player looks at hand to find any matches that add up to 10 or the given number.
3. Each player places matches in front of them.
4. The first player looks at hand and asks another player for a number to match with one of their cards to make 10 or the given number. If the asked player has the number, he/she gives their card. If the asked player does not have the number, he/she says "Go fish" and the player draws a card from the pile. If a match is made the player gets another turn. If a match is not made, the next player will begin their turn.
5. The game ends when all of the cards are played. The players write down all of their number pairs that made 10 or the given number. The winner is the person with the most number pairs.

****The players may use a ten/five frame and counters if desired.****

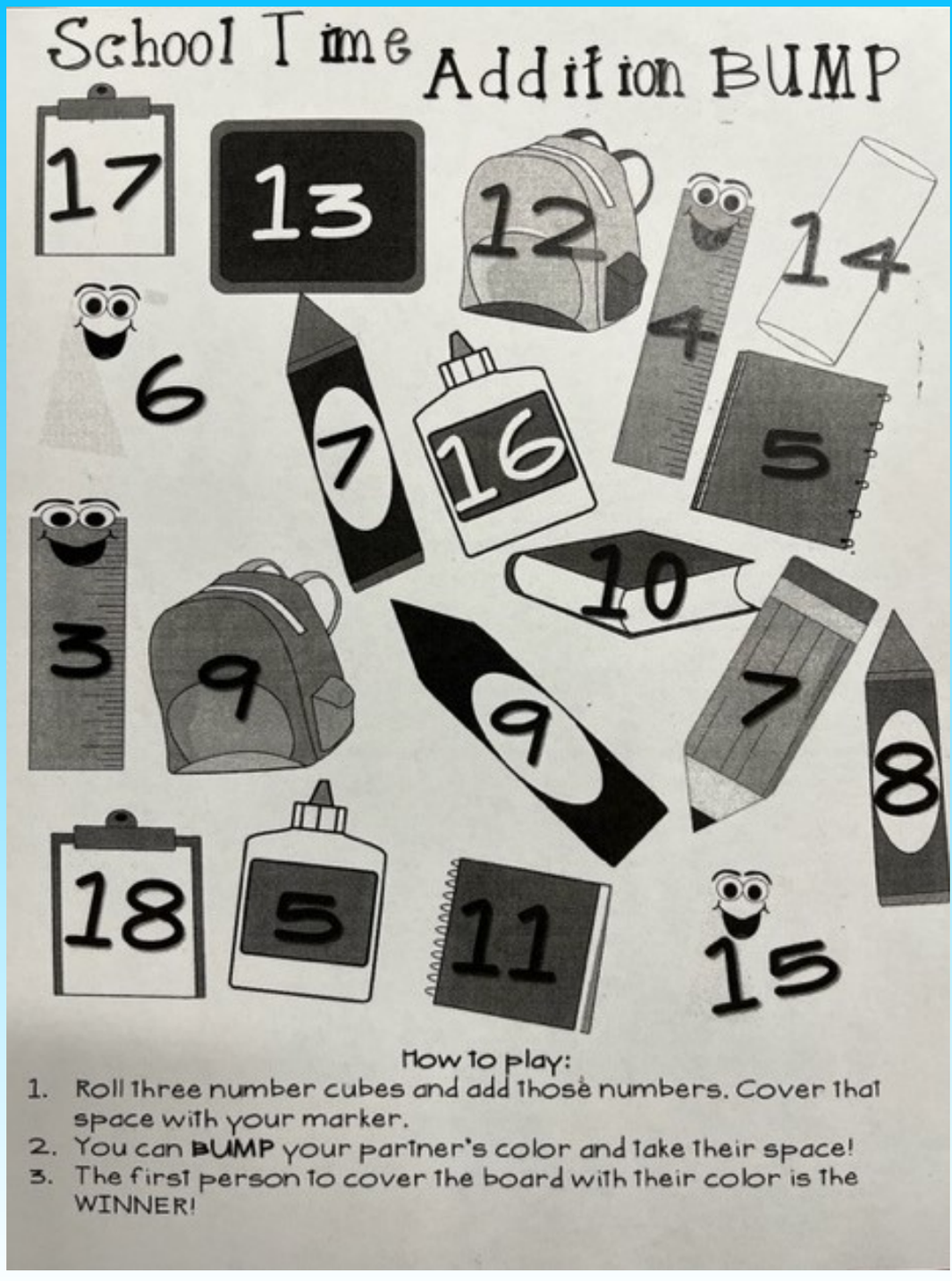
At Home Game 3:

Addition Fact War

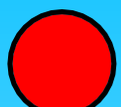
Skill: Addition facts
Objective: To win the most cards
Materials: 1 deck of cards (Ace=1, Face Cards=10)

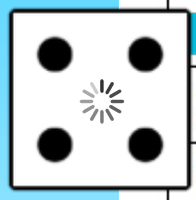
- Each player gets half of the deck of cards.
- The players hold their stack of cards facing down, calls out "ready, set, battle", and then flips over their top card.
- The first person to ADD up the sum of both cards wins the cards. If there is a tie, 2 more cards are flipped over and compared. The winner takes all 4 cards.
- Play until time is up. The person with the most cards or the person with all the cards wins.

At Home Game 4:



At Home Game Extras:





120 CHART

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Closing:

Abbott & Costello - 2 Classic Bits... $28 and Loafing