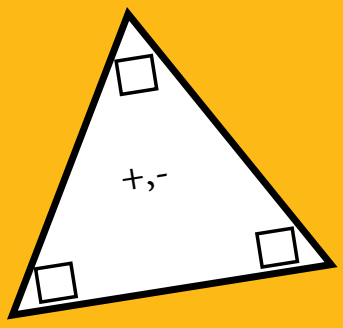
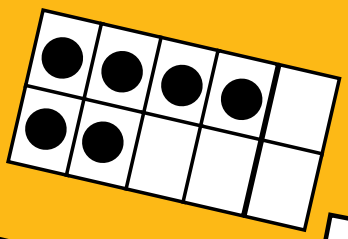
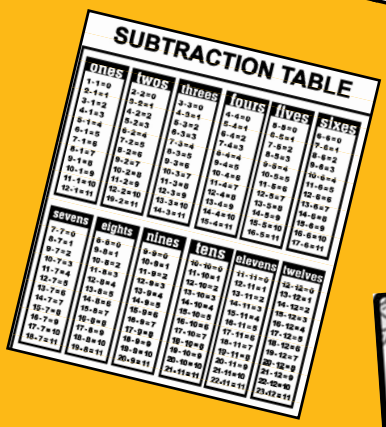
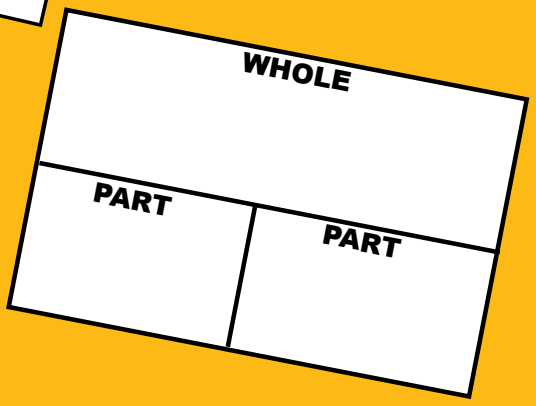
GUIDED MATH TEACHER'S SUBTRACTION TOOL KIT

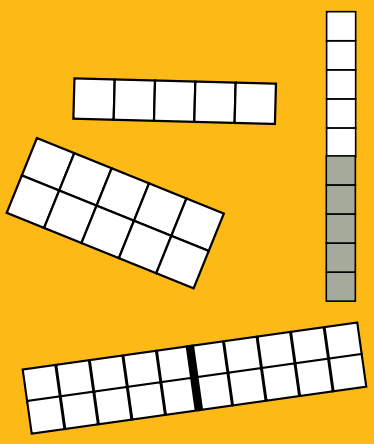
K-2



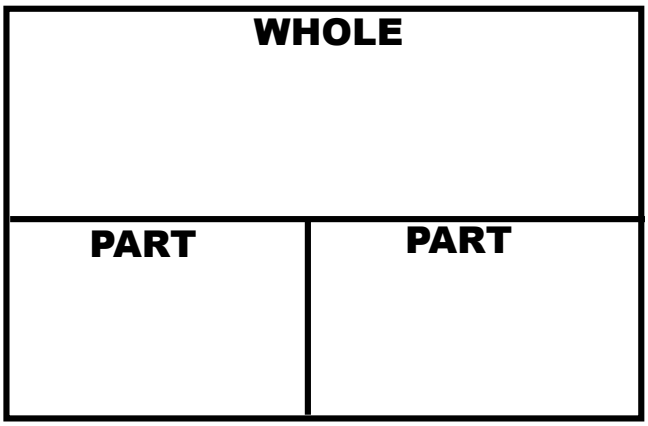


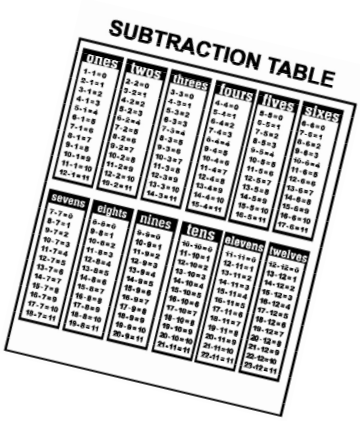




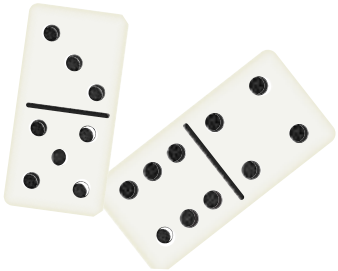


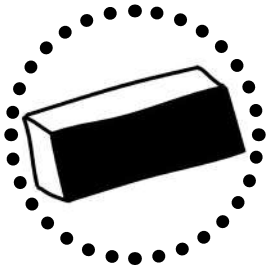
DR. NICKI NEWTON
Math Fact Fluency Playground

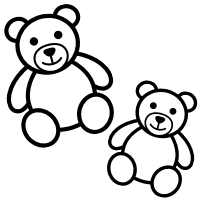


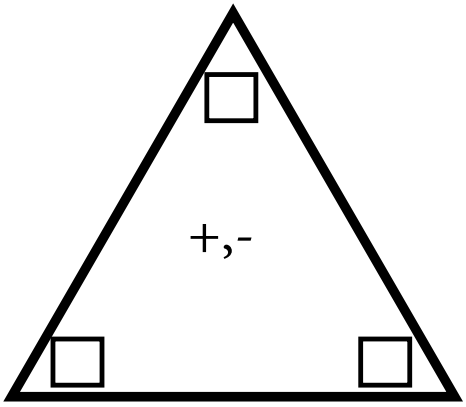


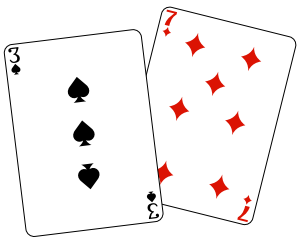
GUIDED MATH TEACHER'S SUBTRACTION TOOLKIT

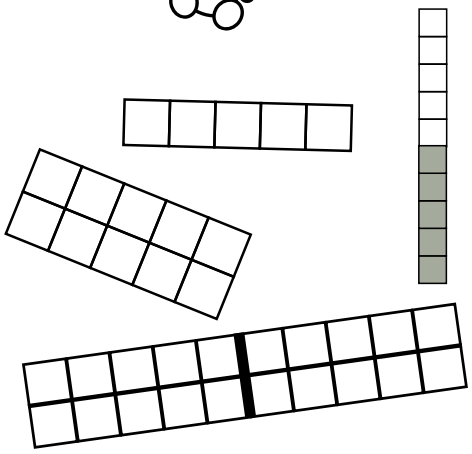












Guided Math Teacher's Subtraction Toolkit

K-2

Dr. Nicki Newton

Math Fact Fluency Playground

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Other Books in this Series

Guided Math Teacher's Addition Toolkit
Guided Math Teacher's Decimal Toolkit
Guided Math Teacher's Division Toolkit
Guided Math Teacher's Hundred Grid Toolkit
Guided Math Teacher's Multiplication Toolkit
Guided Math Teacher's Number Paths,
Number Ladders, and Number Lines Toolkit

Math Fact Fluency Playground

Dedicated to Mom and Pops, Always

CONTENTS

Acknowledgements

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Author's Note

I am so excited that you are here to share this with me. This is the everything you ever wanted, needed, thought you might need, never even knew that you needed mega book of guided math subtraction templates. This book is organized by the priority standards topics that you will teach in k-2 for adding and subtracting within 20. It is written as a k-2 book in the spirit of acceleration and differentiation. The templates are differentiated along the learning progression so that you can meet your students where they are in small groups.

How to Use this Book!

This book has templates that the teacher can use for guided math groups, whole class activities, workstations and homework!
The teacher can pull the different templates and make a binder for each person in the group. In the binder, put the templates in sheet protectors or laminate them so they can be used over and over again!
Each student will have their own binder and they can use it as needed!

Big Ideas/Priority Standards

This book is aligned to the Big Ideas/Priority standards in k-2.
It can be used as a supplement to any program. We have created a variety of templates to address the variations in state standards.
These templates will provide you a way to reach back to catch up as well as extend learning for those students who are ready to go to the next steps.

Learning Trajectories

Speaking of steps, we have based all of our templates with the learning trajectories in mind. A learning trajectory is a developmental path that shows the landscape of learning a particular concept.
Clements and Sarama have written extensively about learning trajectories (www.learningtrajectories.org).In the front of each book, you will find the learning trajectories for the topic.

Guided Math

Guided Math is a way of teaching students in small groups. Small groups allow us to get up close and personal with our students and their learning. In a small guided math group, there should be no more than 3-5 students. Groups meet for 10-15 minutes. The focus is on DOING MATH. These templates help you to do just that! They provide a space for students to explore, think, talk and work.

In the small guided math group, students will make sense of math through working with their peers, their teacher and the different math materials (thinking mats, manipulatives,vocabulary/language talk frames). While students are working together, the teacher guides them, asks important questions and provides the necessary feedback on their attempts at making sense of the math so that they can make the necessary connections and corrections and build a deeper understanding of the math concepts.

The learning spirals and children build on prior knowledge as they engage in new experiences. (Dewey 1933/1998; Piaget, 1972; Vygotsky, 1978; Bruner. 1973, 1990). In the guided math group, the student's should spend most of the time doing math rather than listening to the teacher talk about math. Experiences are scaffolded in a way to maximize the learning opportunities. Students are working in their Zone of Proximal Development, meaning that they are working at a level that is just right, not too easy and not too difficult (Vygotsky, 1978) Through interaction with more capable peers, adults who are facilitating their learning and artifacts (in this case appropriately selected materials such as manipulatives, books, computer programs etc.), students make meaning of the math (Vygotsky).

Differentiated Instruction

As Coco Aguirre (my mentor teacher) had hanging above the threshold of her door, “If a student doesn’t learn the way you teach, then teach the way they learn.” This is a simple but powerful truth. Meet the children where they are and then take them to the next level. For me, differentiation is about always asking myself, “If they aren’t getting it, what can I do differently?” These templates provide you an option to scaffold the learning so that all students have access to the grade level content!

Tomlinson (1999) speaks of how differentiated instruction results in academically responsive classrooms. In this type of classroom teachers are aware of the academic levels of their students and create curriculum designed to respond to their needs. Tomlinson stated that at its most basic level, differentiating instruction means “shaking up” what goes on in the classroom so that students have multiple options for taking in information, making sense of ideas, and expressing what they learn. In other words, a differentiated classroom provides different avenues to acquiring content, to processing or making sense of ideas, and to developing products so that each student can learn effectively (2001).

While differentiation "advocates attending to students as individuals, it does not assume a separate assignment for each learner" (Tomlinson). "Differentiation needs to be student-centered, rooted in assessment, and dynamic" Serravello, 2010. We are constantly adjusting our teaching in response to what students are telling and showing us in their work and talk. Teachers who differentiate must take the time to get to know their students well. They have to understand them as people, learners and know what motivates them to reach their goals.

Robb notes that "Differentiation is a way of teaching, it's not a program or a package of worksheets. It asks teachers to know their students well so they can provide each one with experiences and tasks that will improve learning" (2008, p.13).

Math Talk

One of the most important things that happen in the math class is the discussion. We have to teach students to be active participants and engaged listeners. We want them to respect each other deeply and seek to truly understand each other without judgment. They have to learn to develop and defend their thinking, justify their answers and respectfully disagree with each other. The National Council of Teachers of Mathematics (NCTM) defines math talk as "the ways of representing, thinking, talking, and agreeing and disagreeing that teachers and students use to engage in [mathematical] tasks" (NCTM, 1991).

Questioning

It is so important to ask good questions. The questions should reach beyond the answer. As Phil Daro notes, we have to go "beyond answer-getting (https://vimeo.com/79916037)." The questions in the guided math group should be designed to get students to understand more fundamentally the mathematics of the grade level. Good questions don't just happen, they are planned for. The teacher should know ahead of time the types of questions that she will ask and why she will ask them. In the plan for the lesson, the teacher should brainstorm some possible questions that push student thinking. These are not yes or no questions, but rather ones that require students to explain themselves, show what they know and defend and justify their thinking.

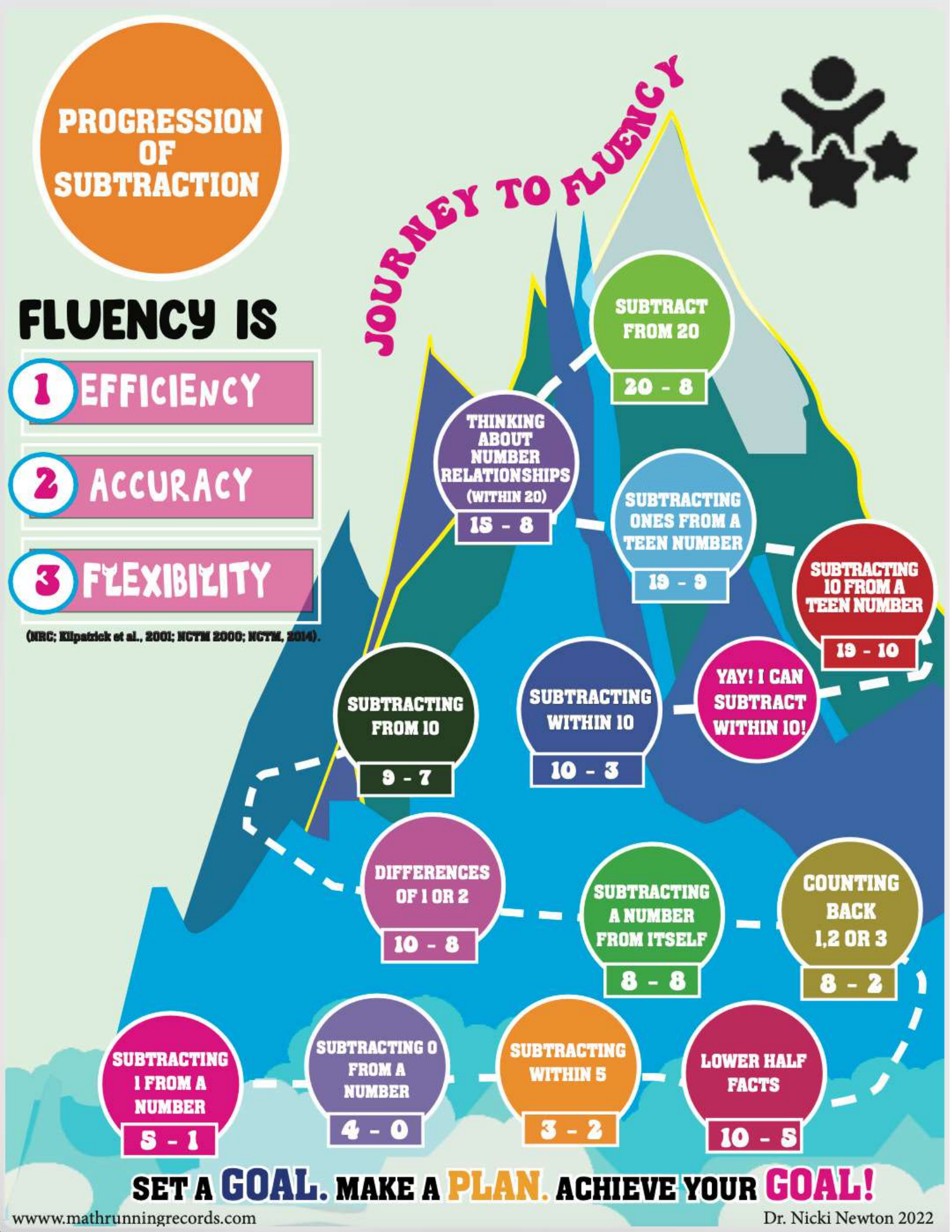
More Subtraction Posters!

PROGRESSION OF SUBTRACTION

FLUENCY IS

1. EFFICIENCY
2. ACCURACY
3. FLEXIBILITY

(NRC; Kilpatrick et al., 2001; NCTM 2000; NCTM, 2014).



SET A GOAL. MAKE A PLAN. ACHIEVE YOUR GOAL!

Dr. Nicki Newton 2022

PROGRESSION OF SUBTRACTION

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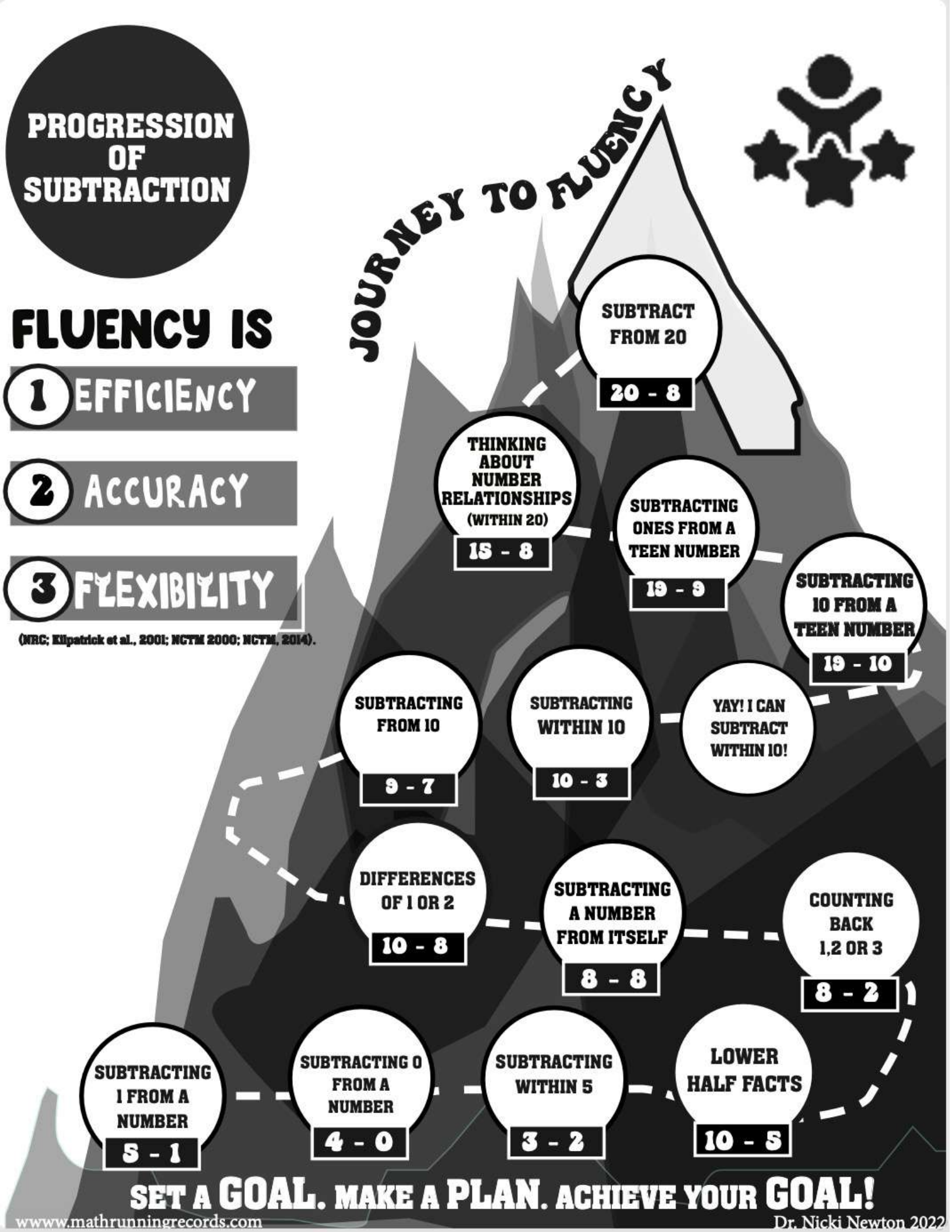
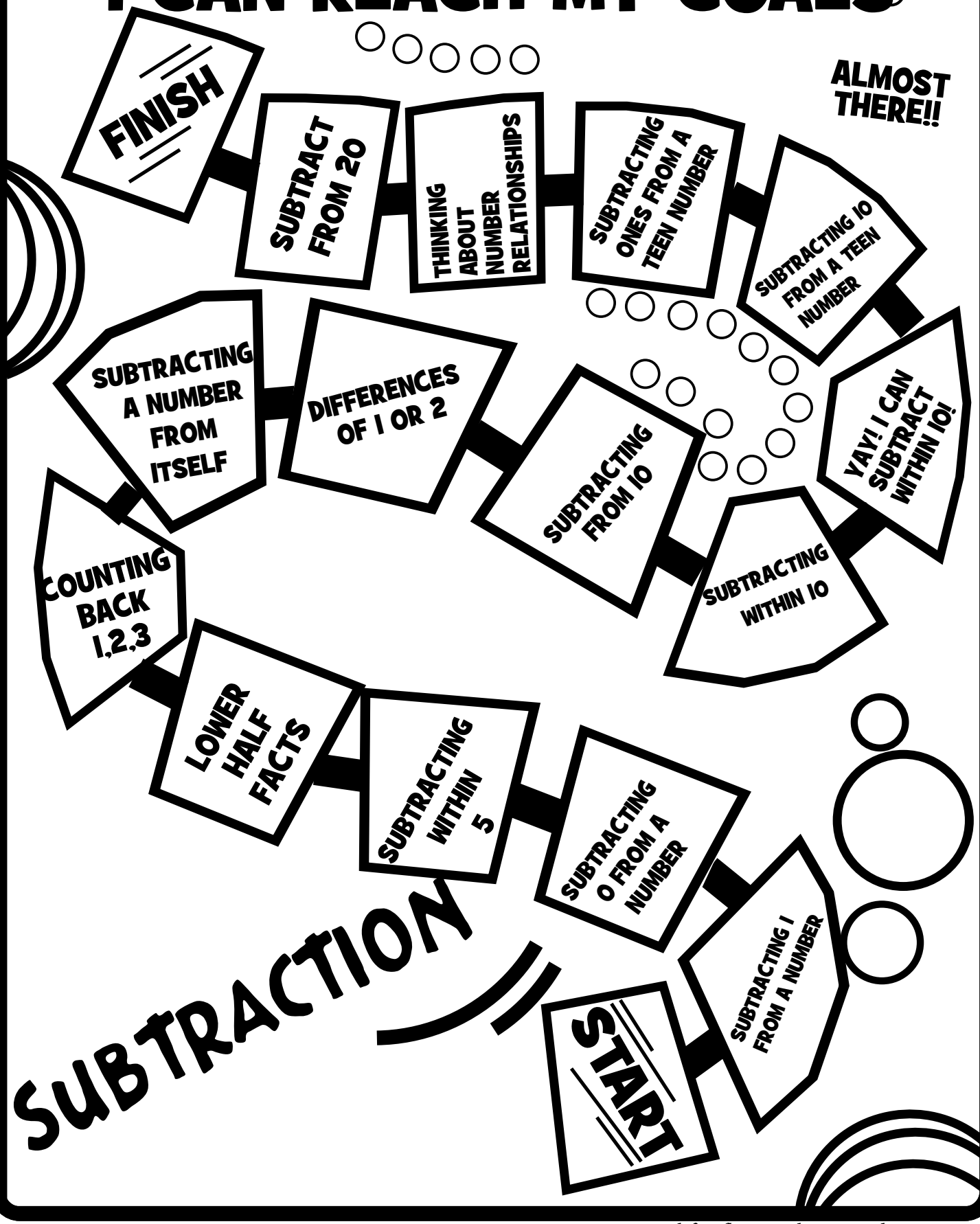


SET A GOAL. MAKE A PLAN. ACHIEVE YOUR GOAL!

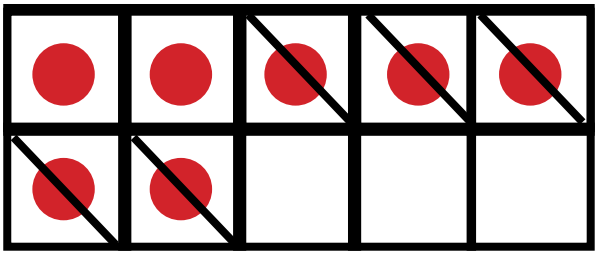
I CAN REACH MY GOALS



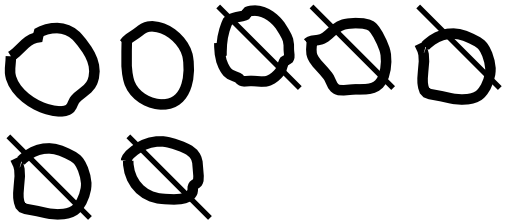
I Can Model Subtraction

7 - 5 = 2

TEN FRAMES



MATH SKETCH



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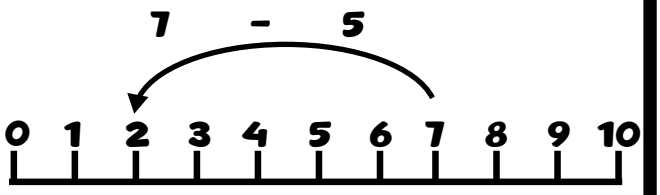
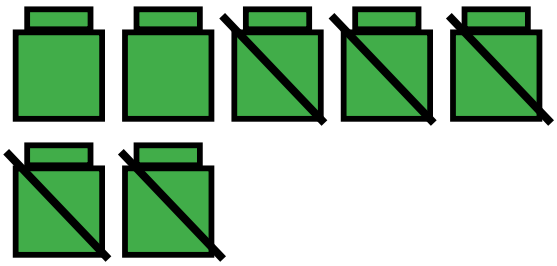


NUMBER SENTENCE

7 - 5 = 2

COUNTERS



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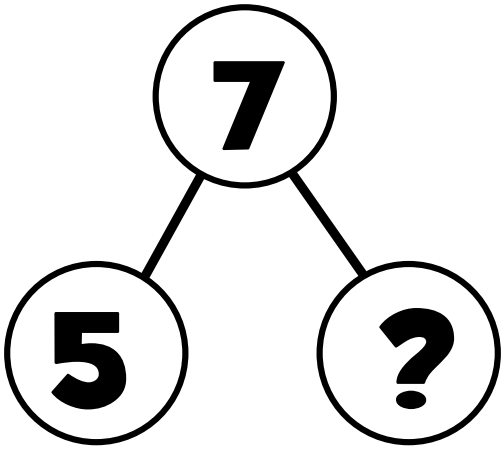


VOCABULARY CARDS

SUBTRACTION

3 − 1 = 2

MINUS SIGN

(take away)

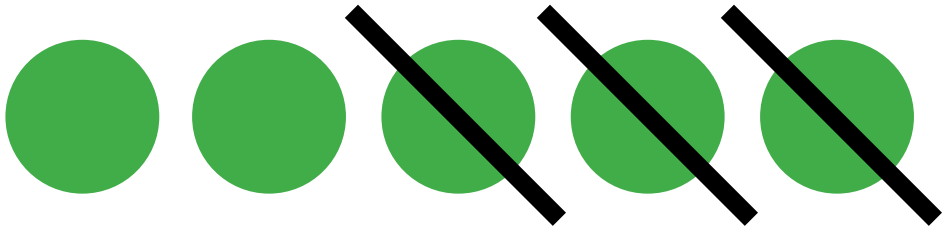
4 − 3 = 1

DIFFERENCE

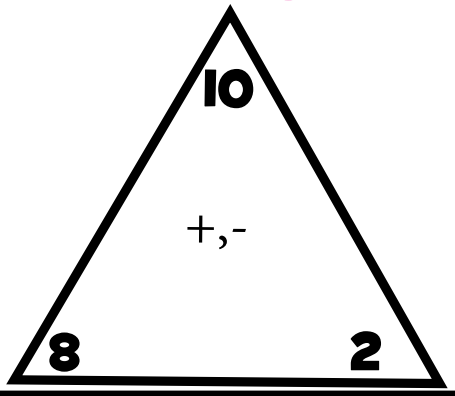
5 − 3 = 2

VOCABULARY CARDS

MINUS



RELATED FACTS



2 + 8 = 10

8 + 2 = 10

10 - 8 = 2

10 - 2 = 8

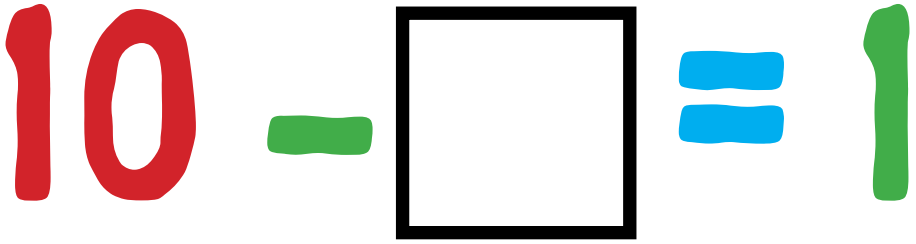
EQUAL SIGN

6 - 4 = 2

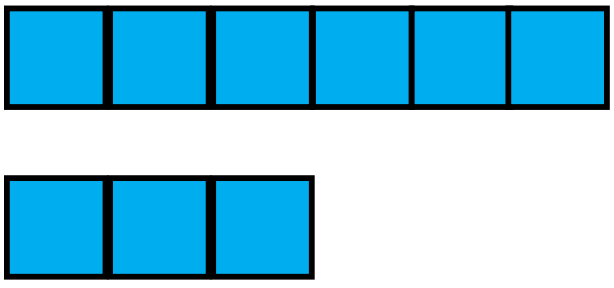
VOCABULARY CARDS

Subtraction Equation/ Number Sentence

MISSING NUMBER



COMPARE

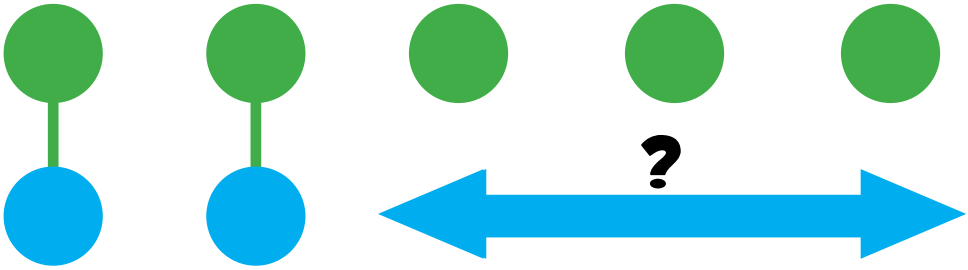


6 > 3

3 < 6

VOCABULARY CARDS

FEWER



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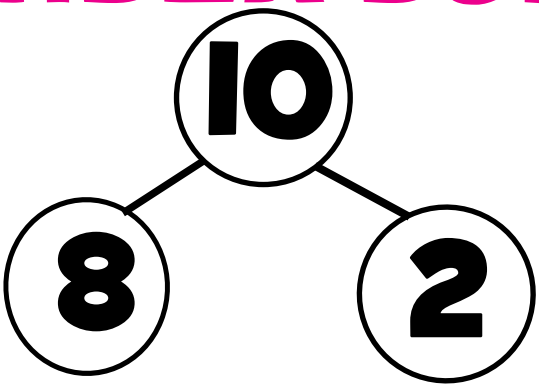


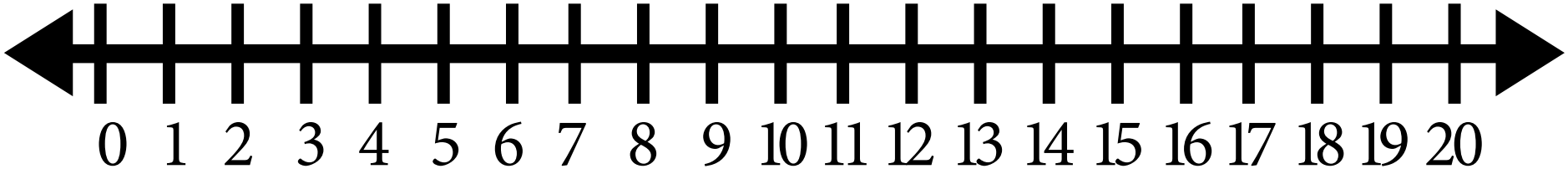
PART PART WHOLE MAT

10

8	2

THINK SPACE

WORK MAT



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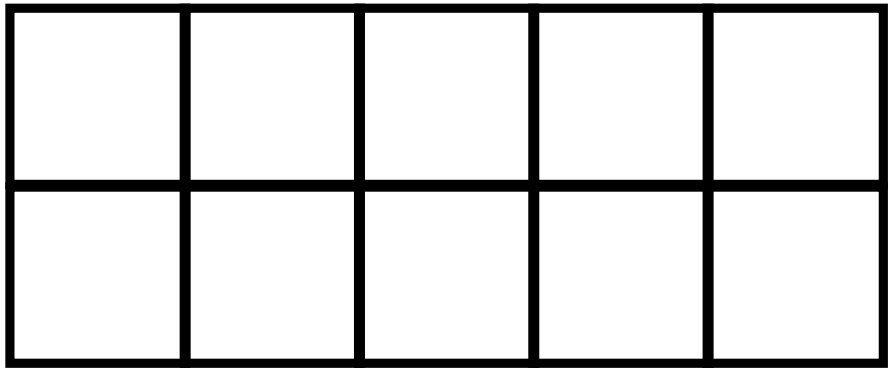

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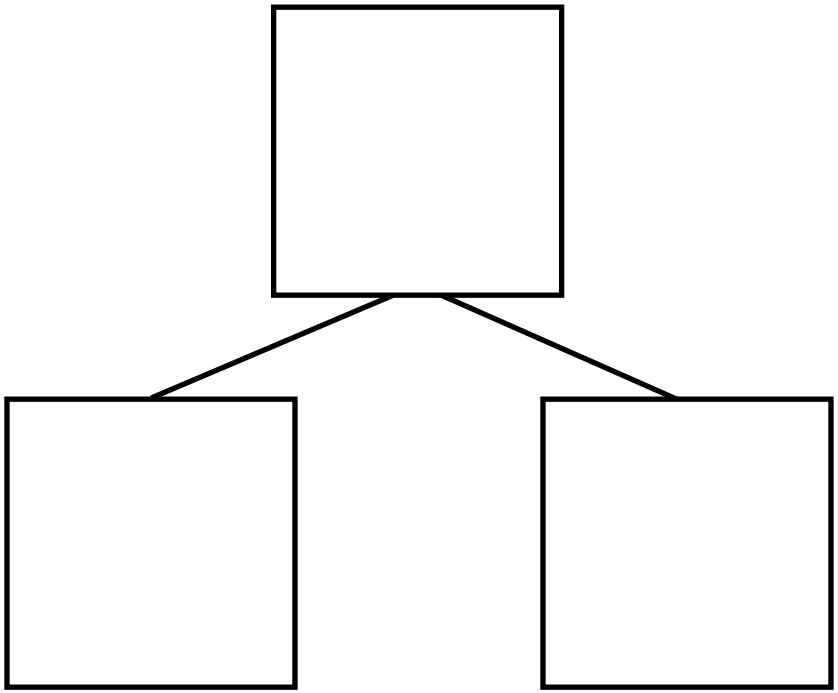
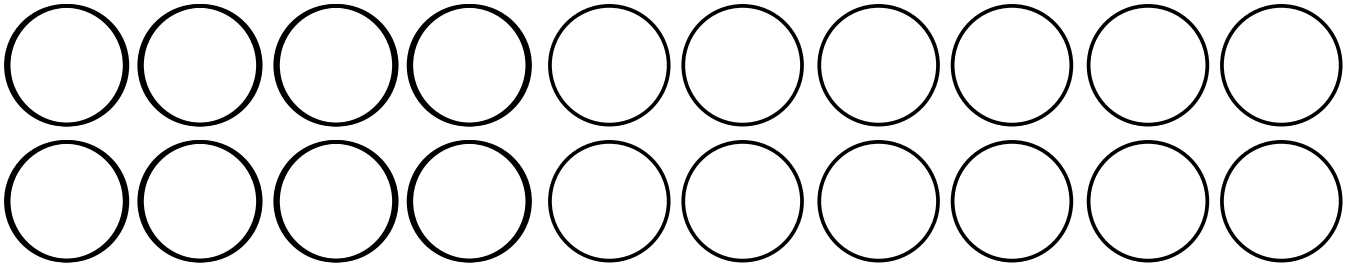


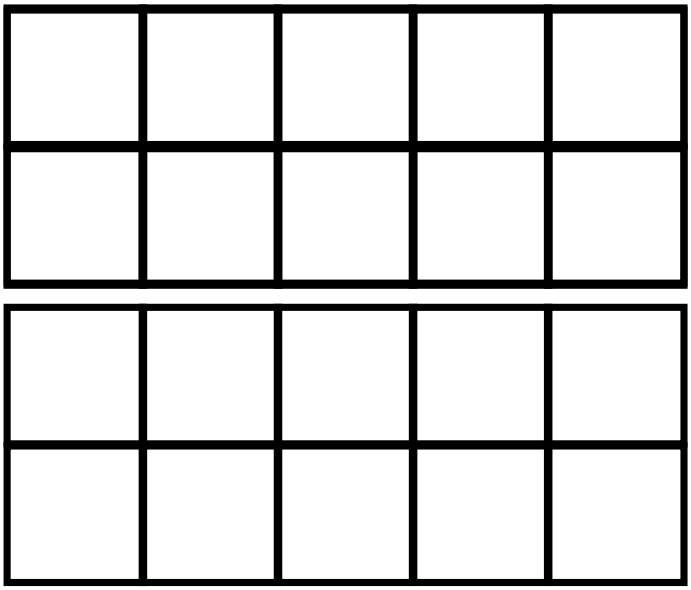
WORK MAT

COLOR IT



DRAW IT

TWENTY FRAMES



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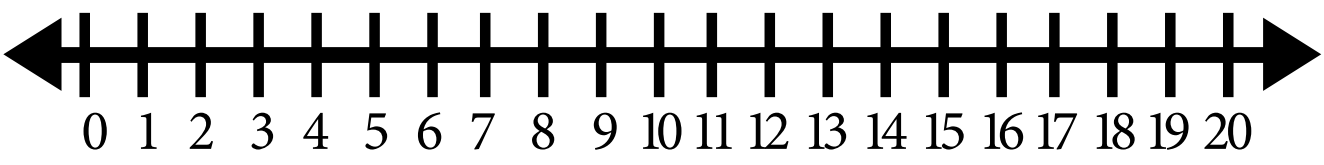

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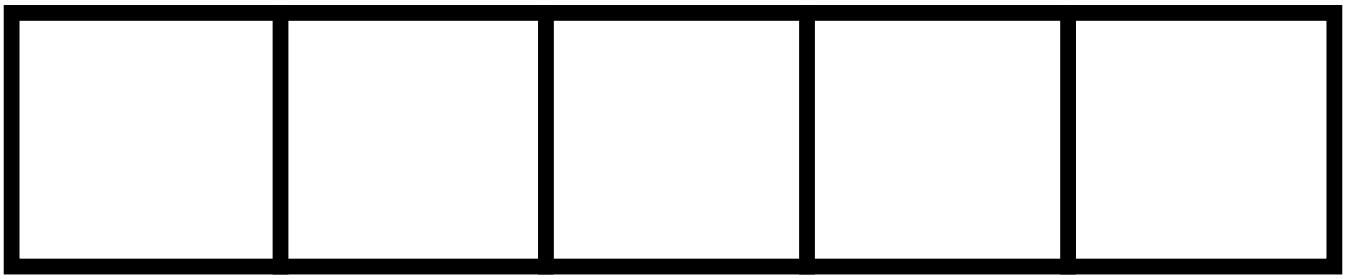

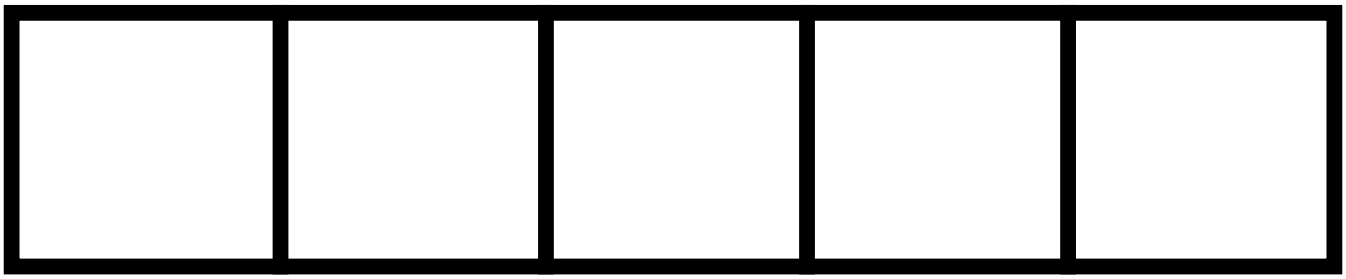

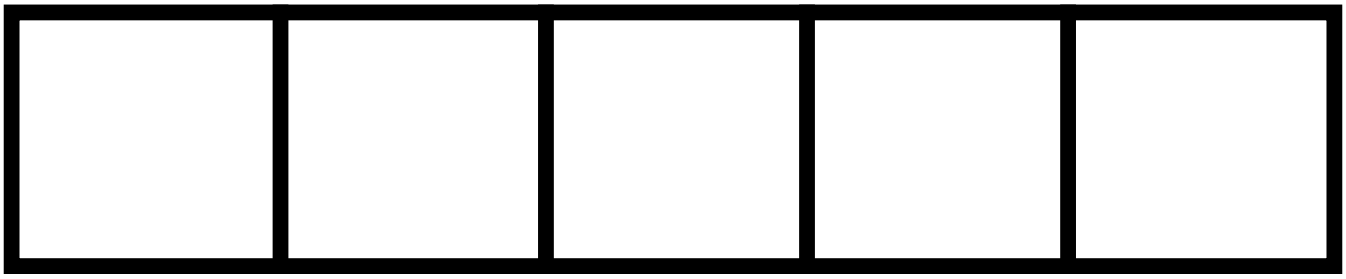

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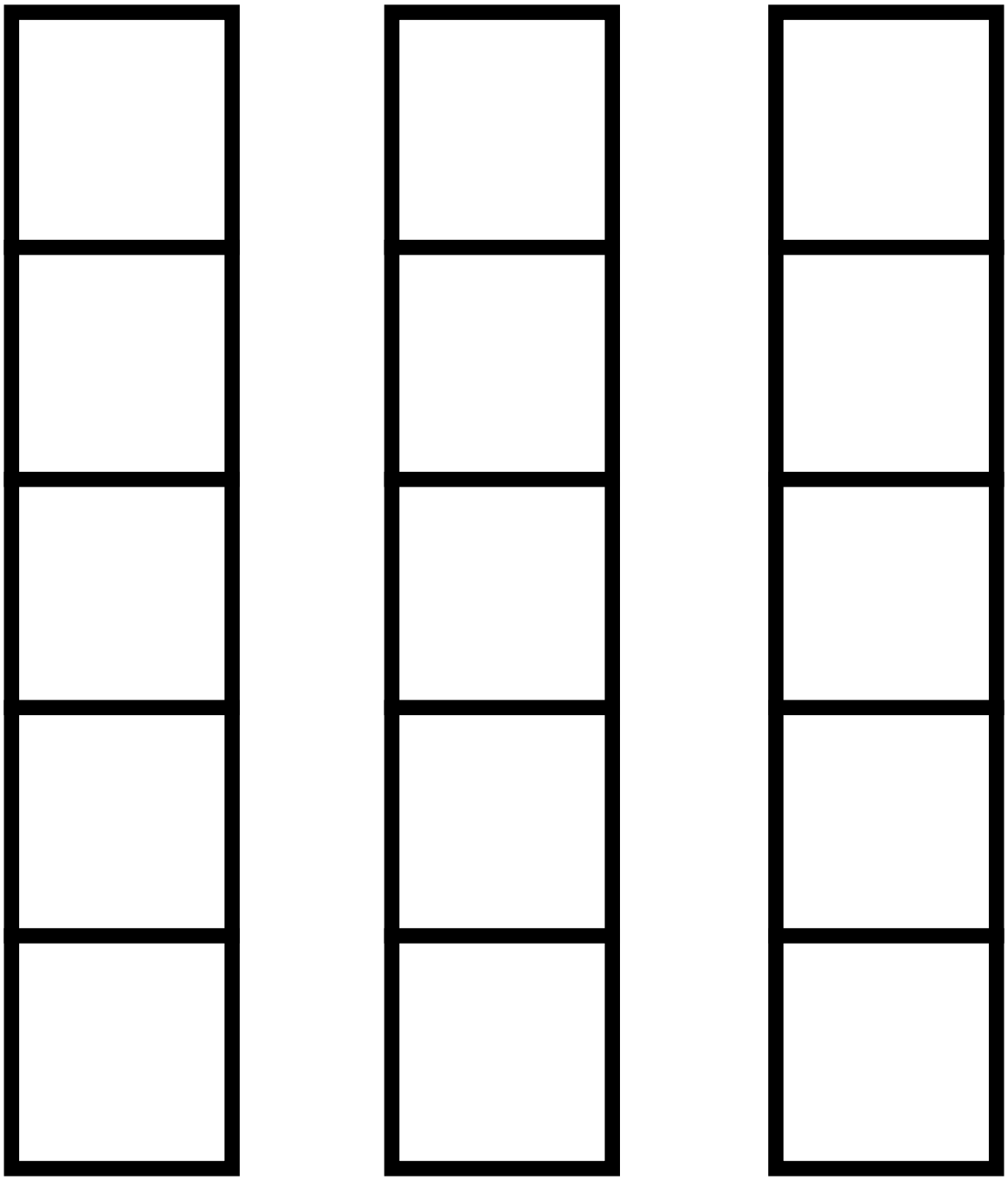

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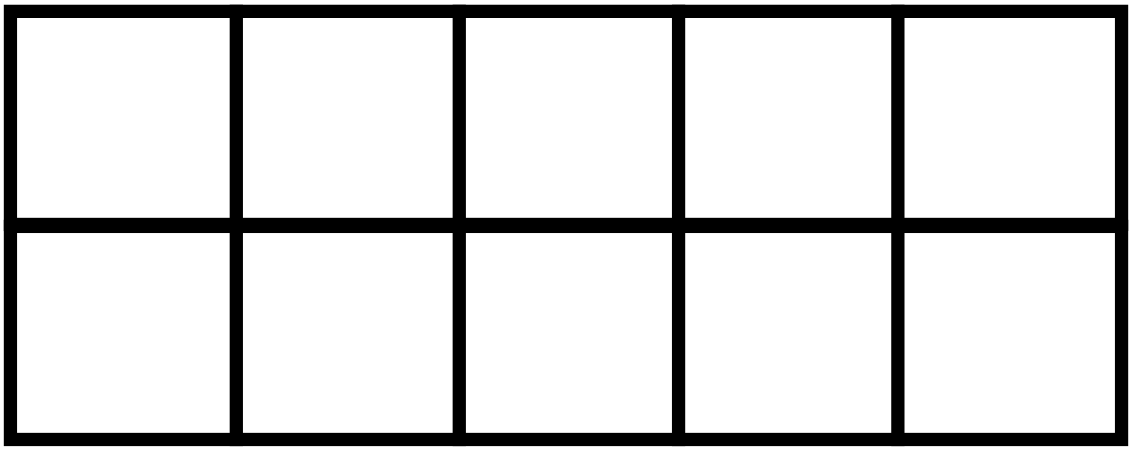

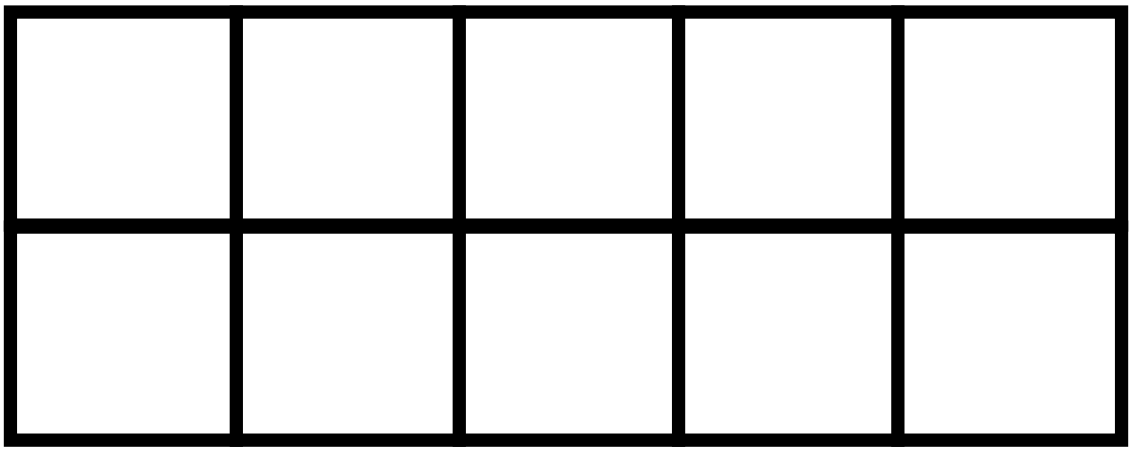

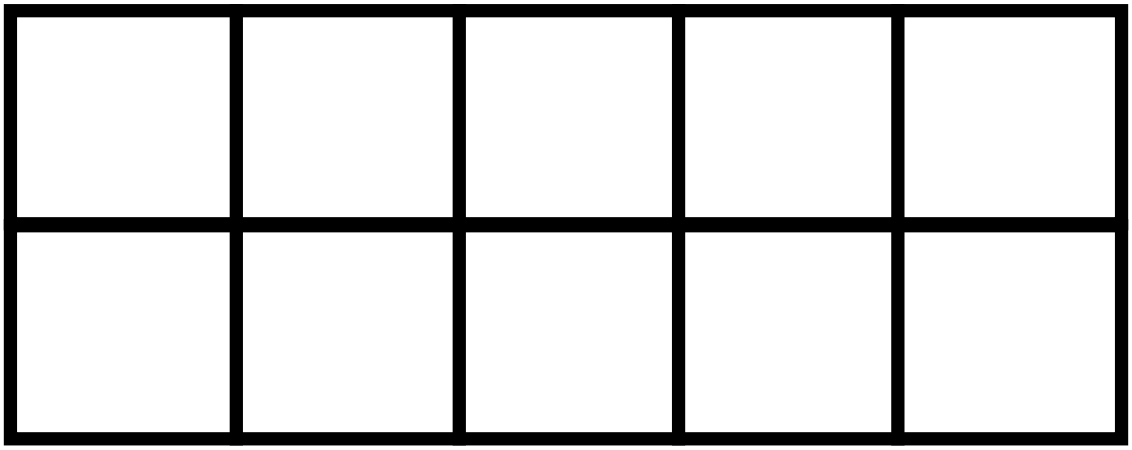

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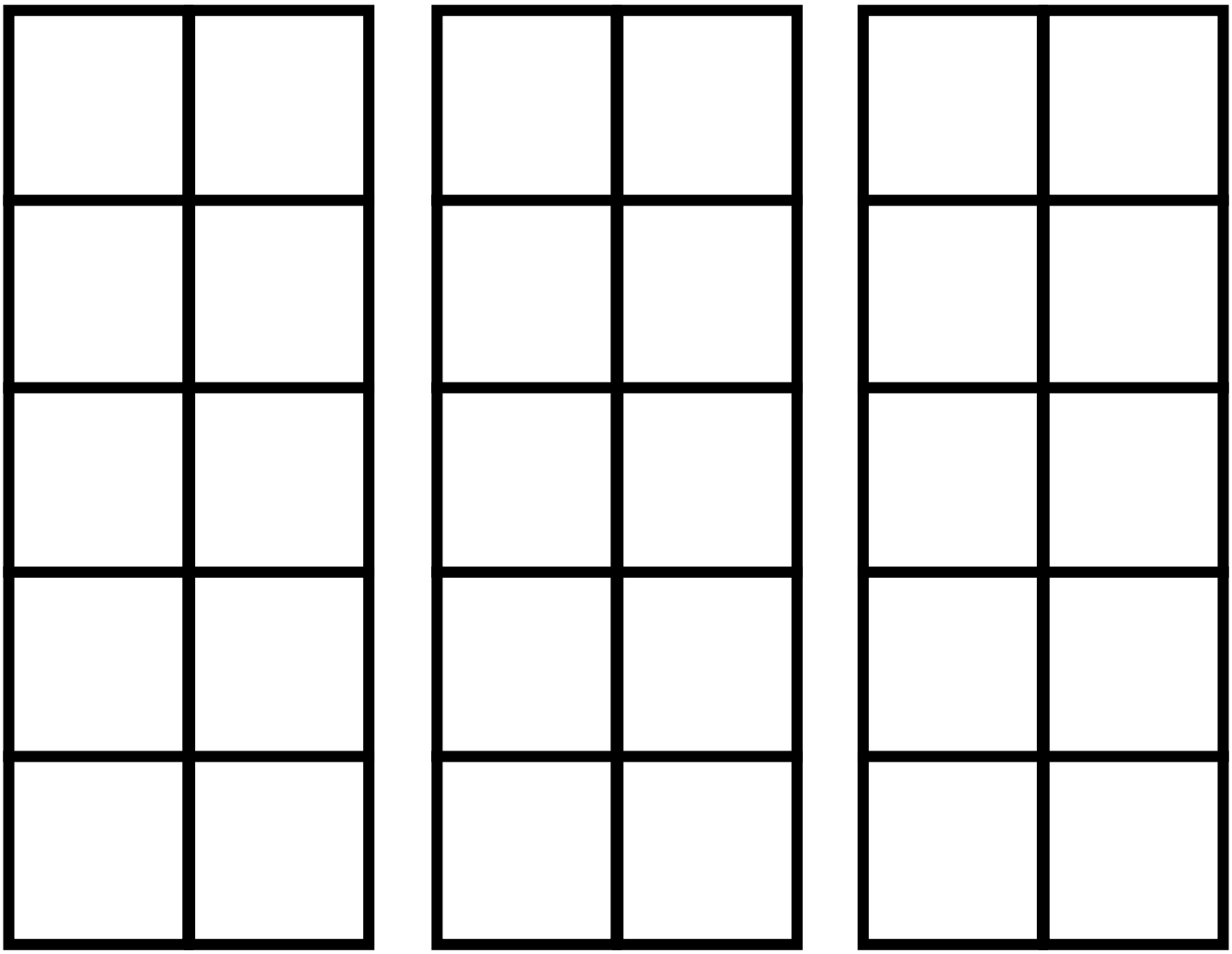

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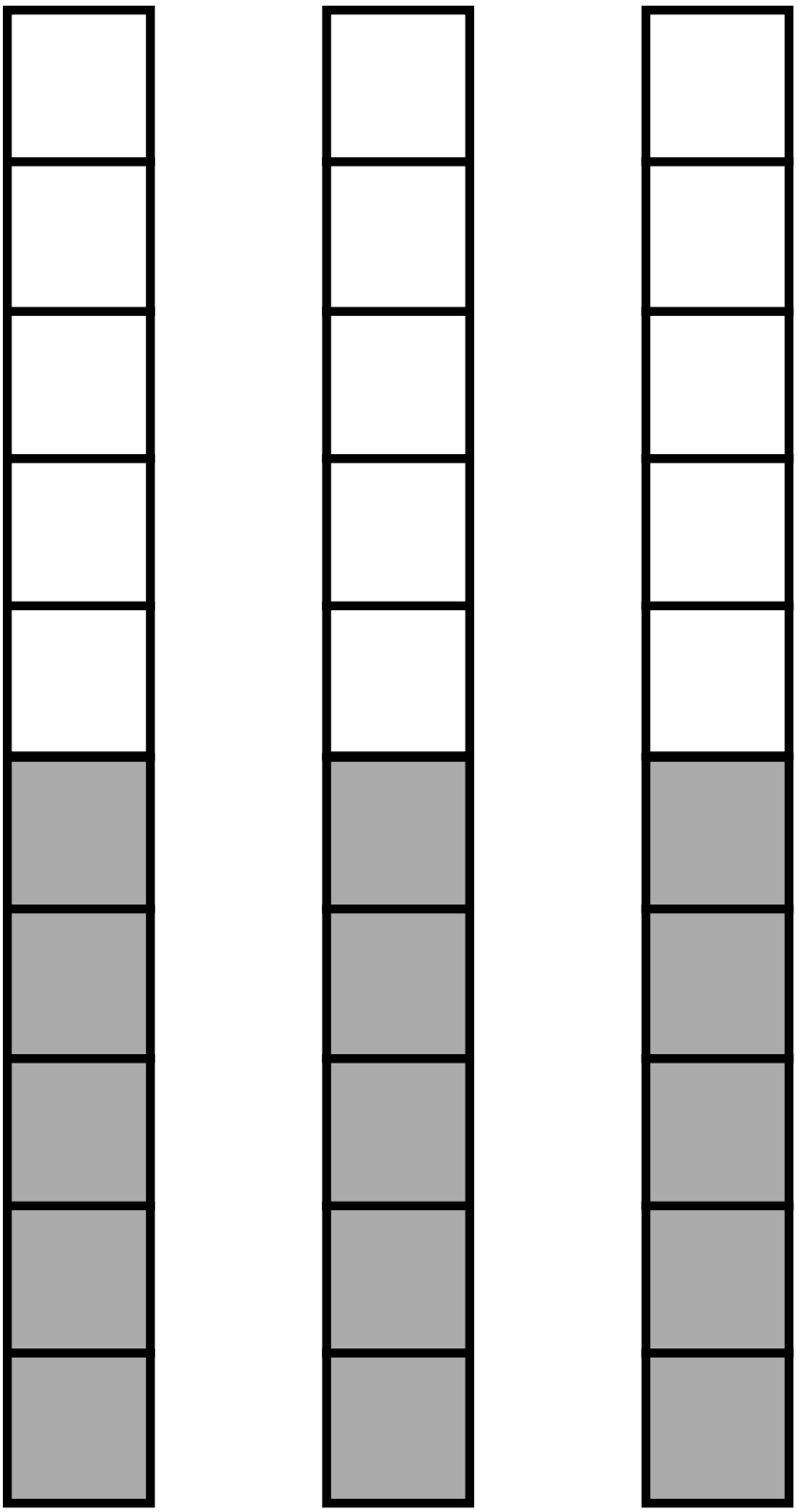

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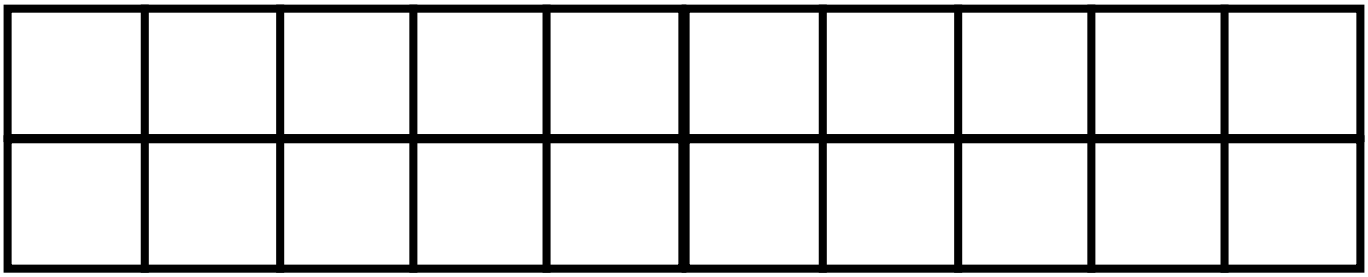
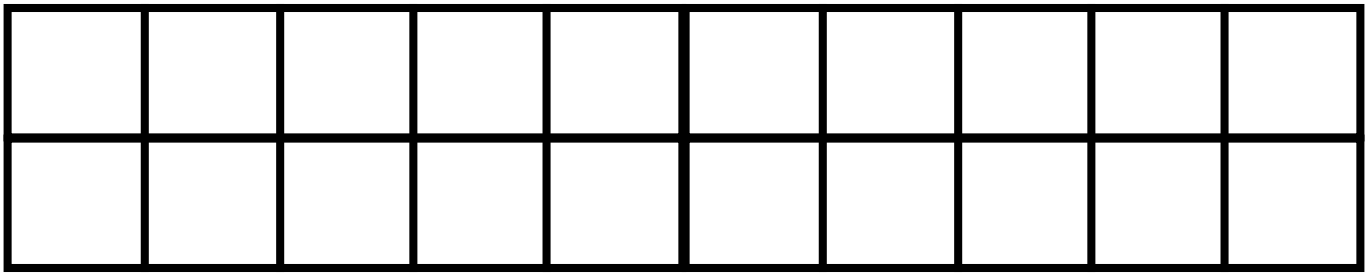
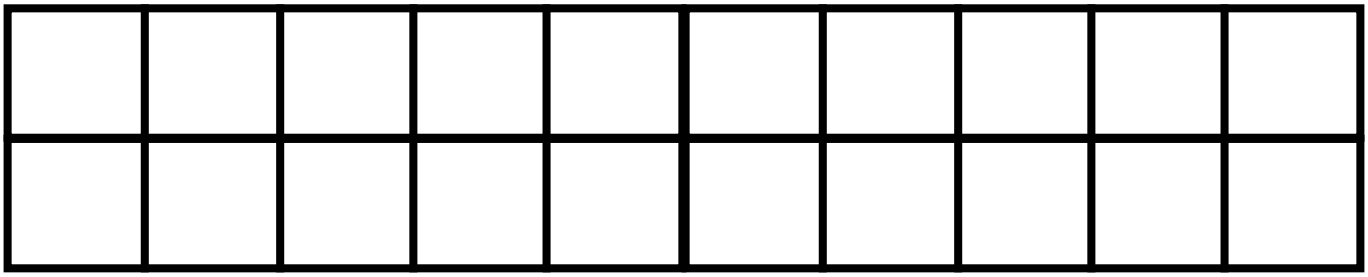
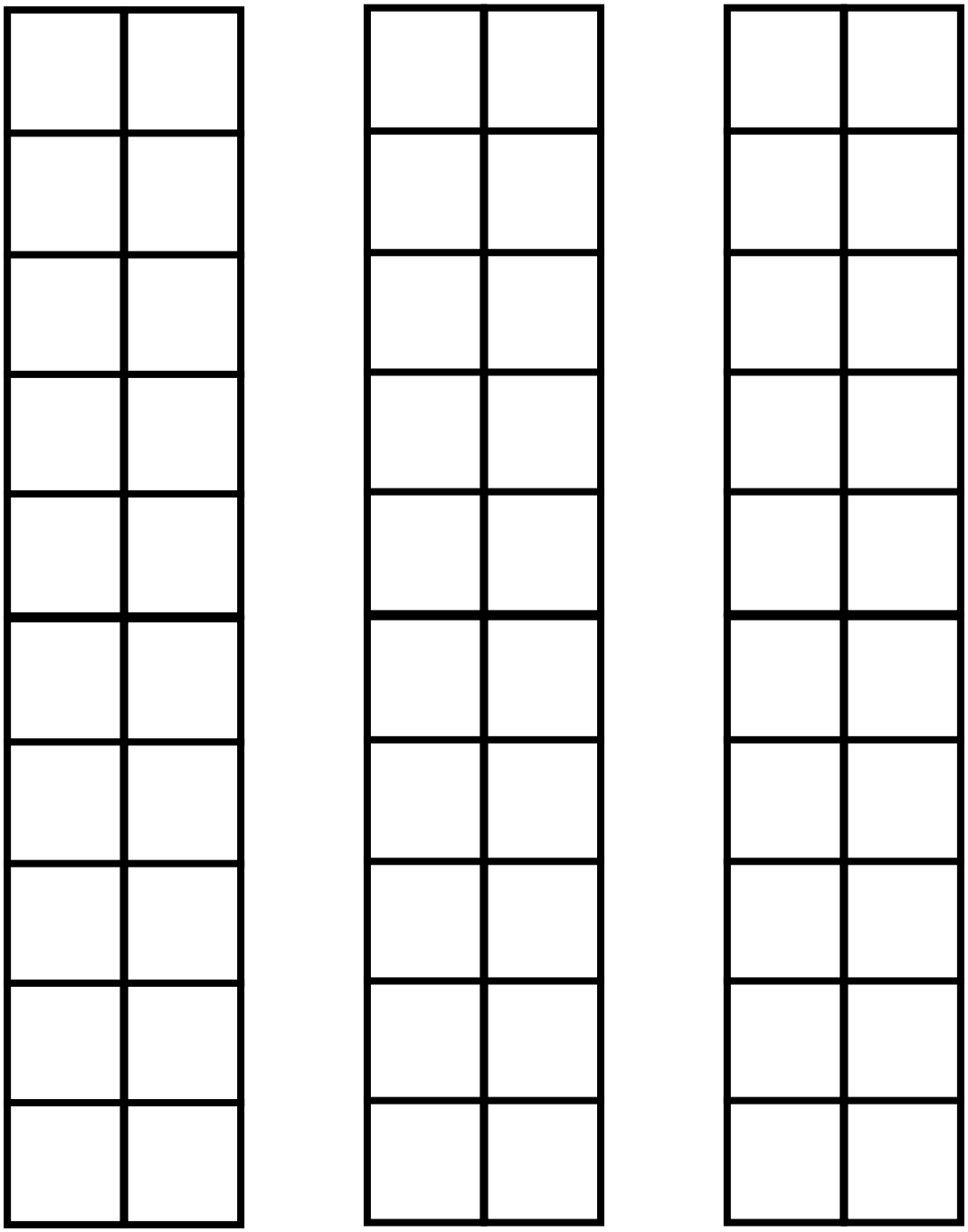


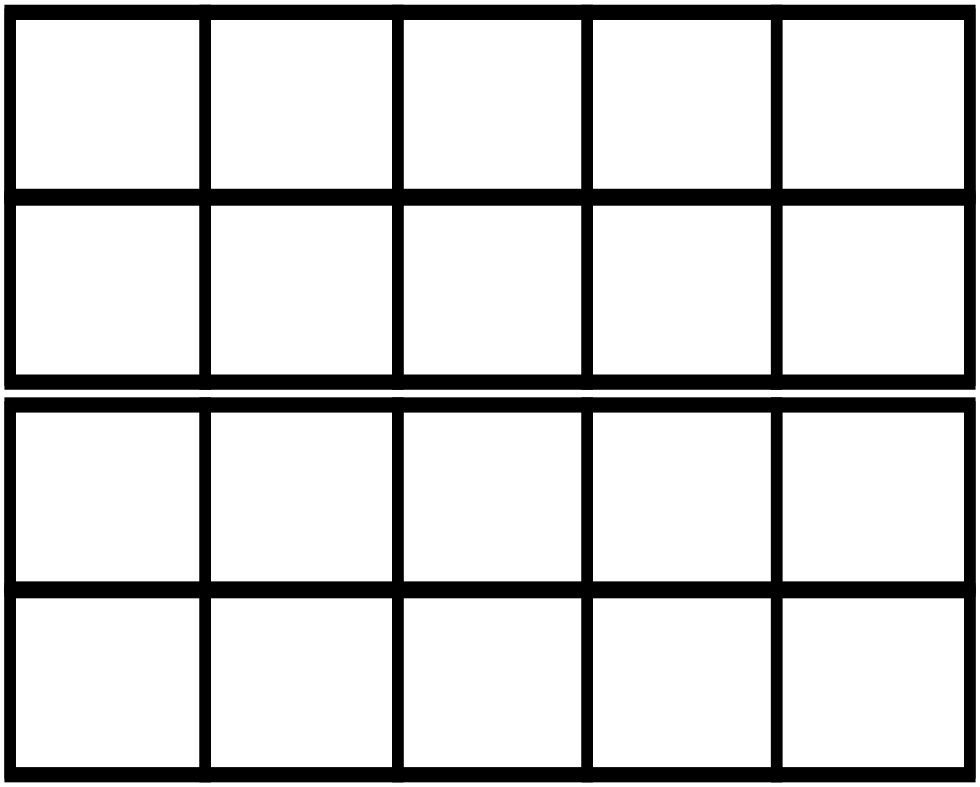


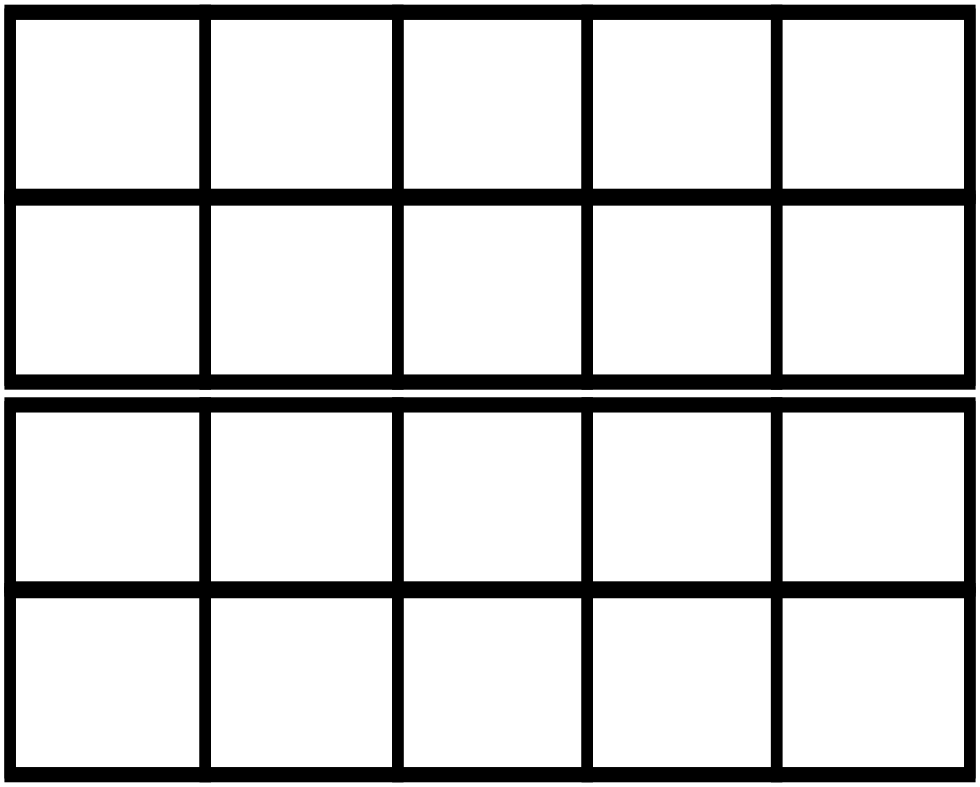


TWENTY FRAMES

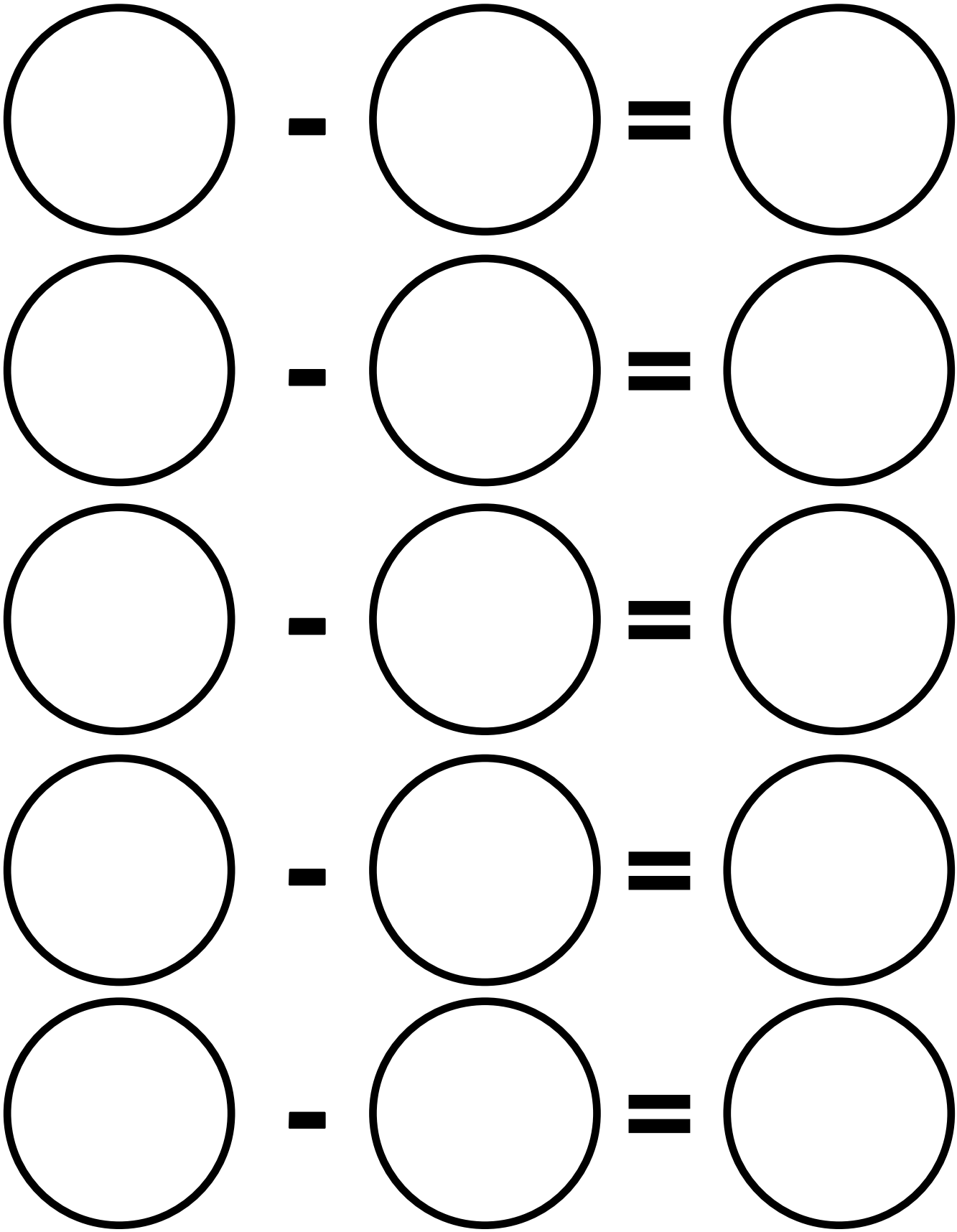


DOUBLE TEN FRAMES

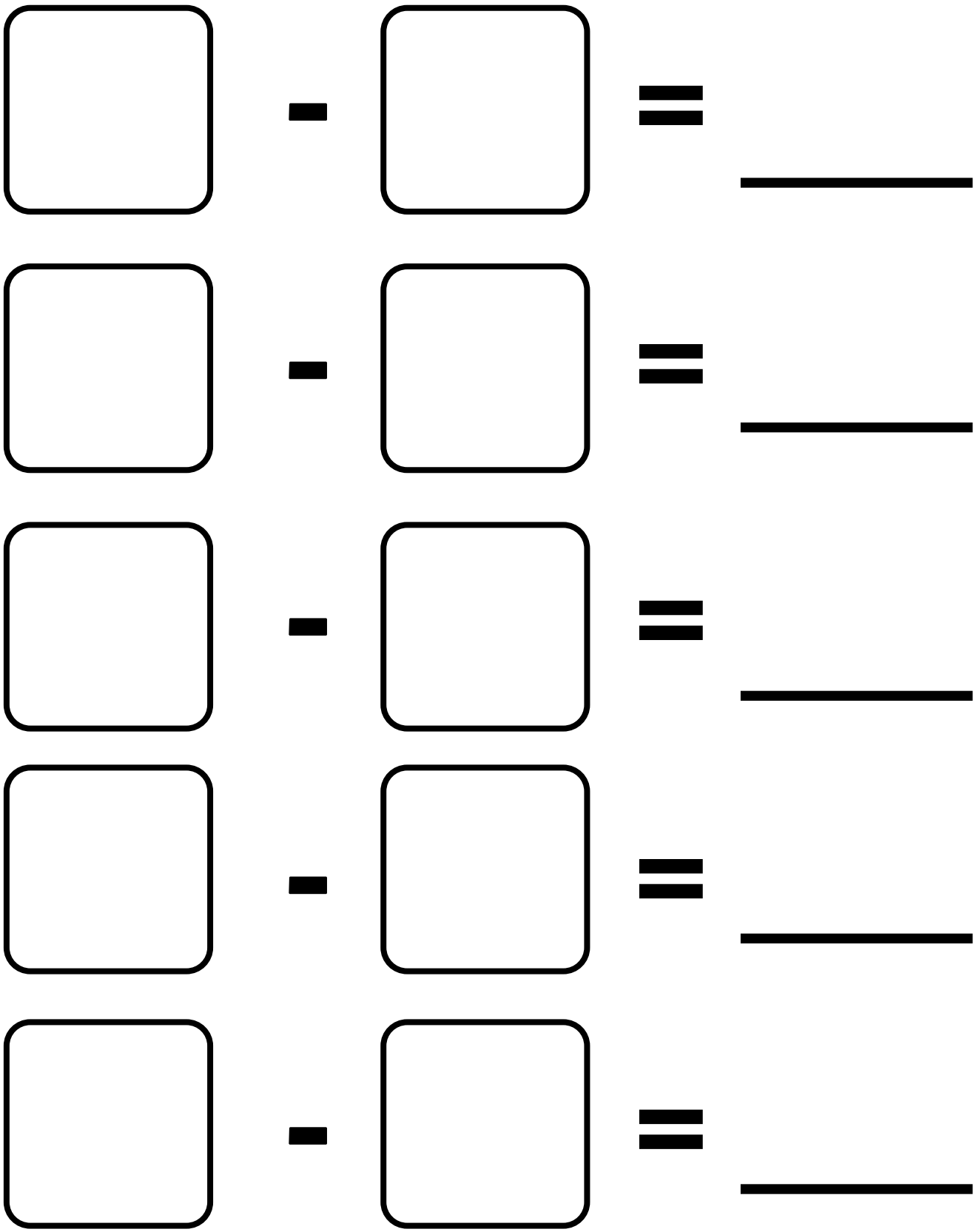




SUBTRACTION TEMPLATE



DICE TEMPLATE



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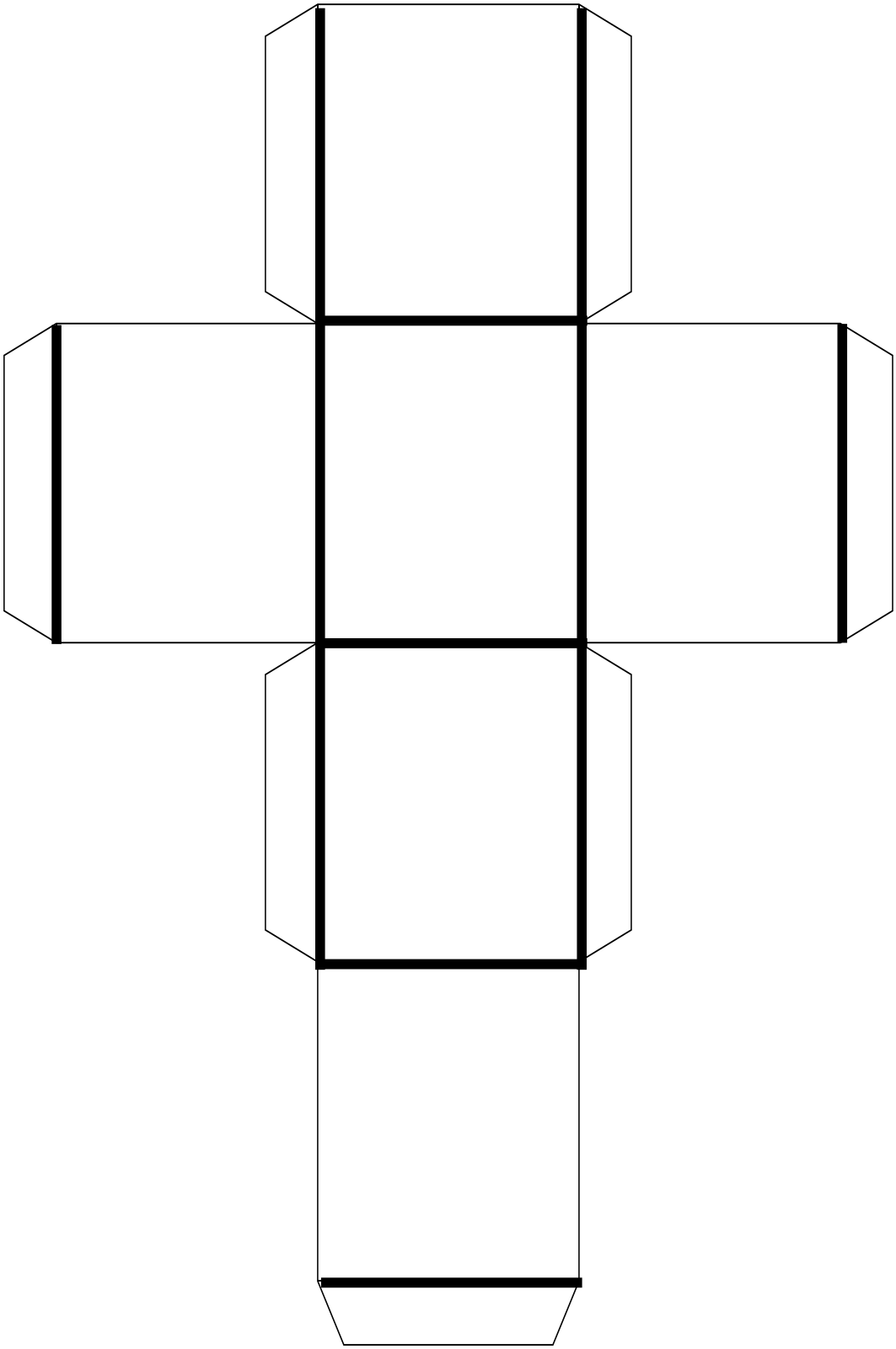

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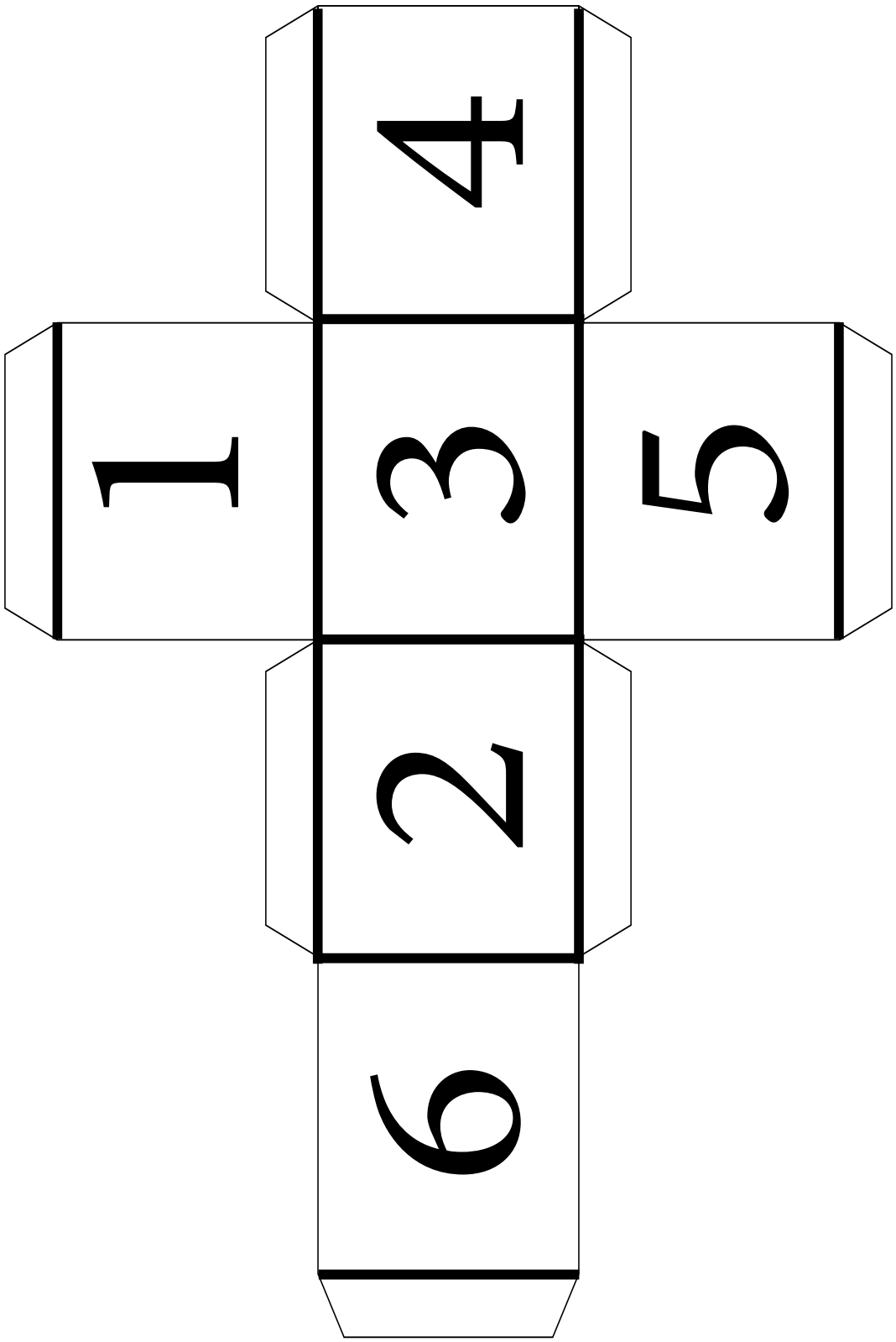

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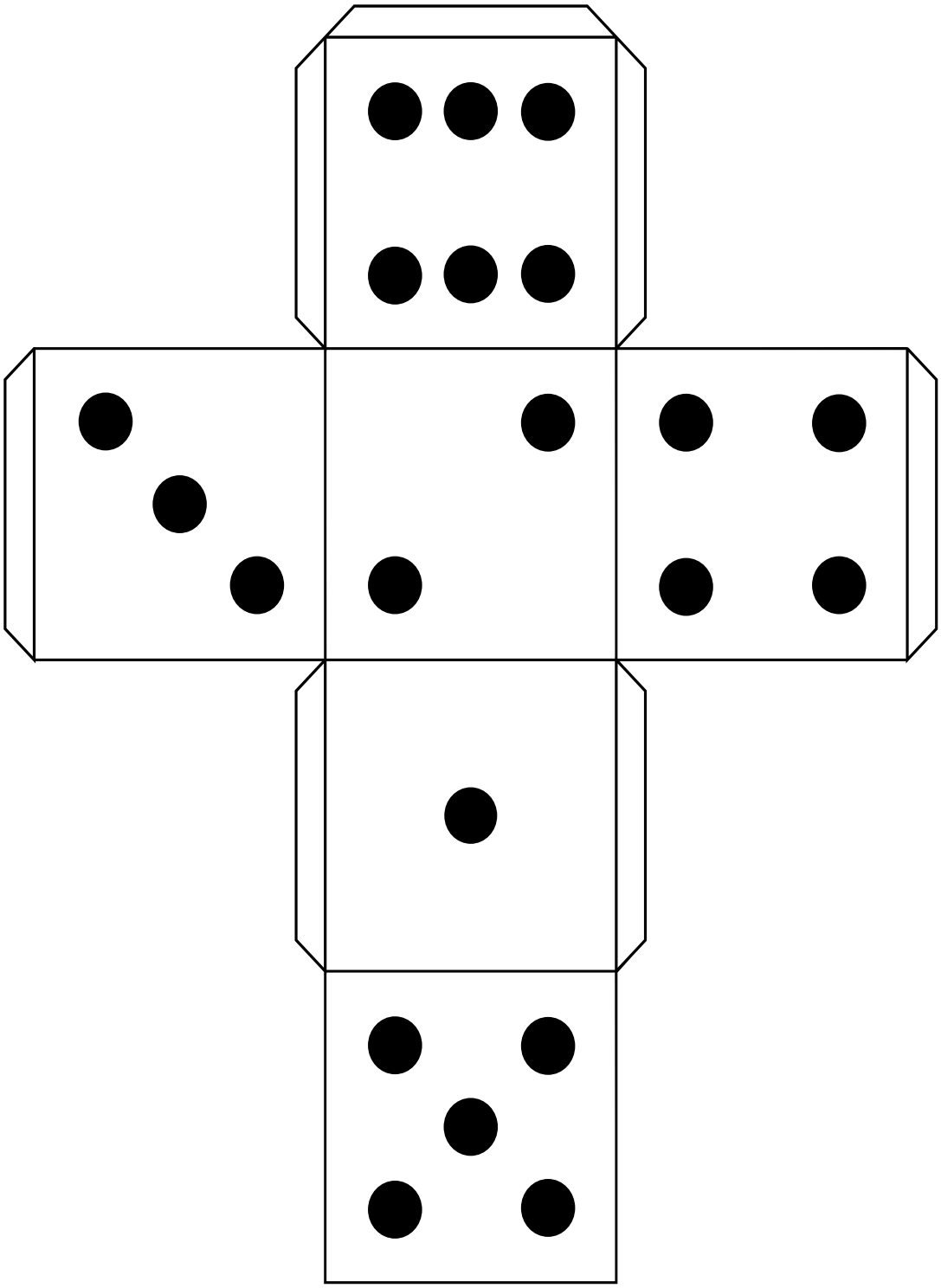
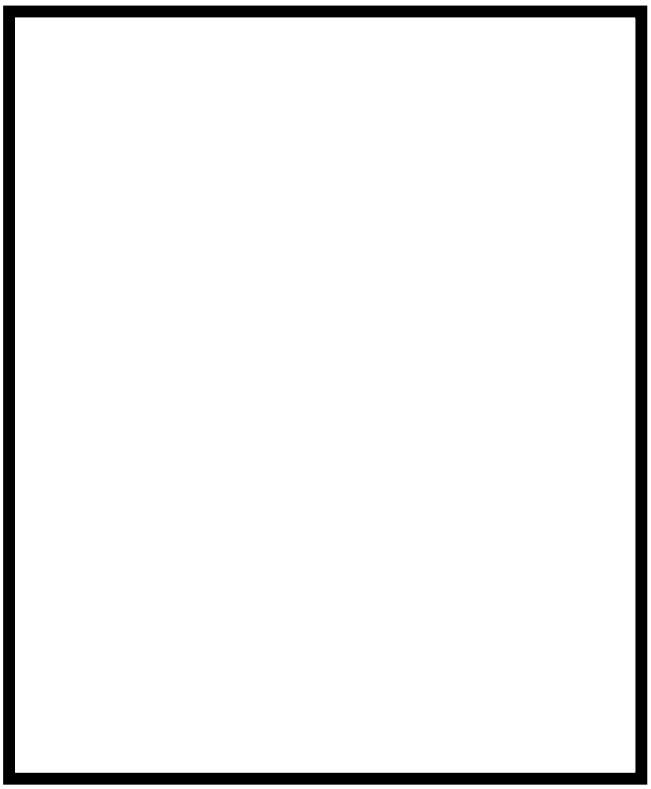
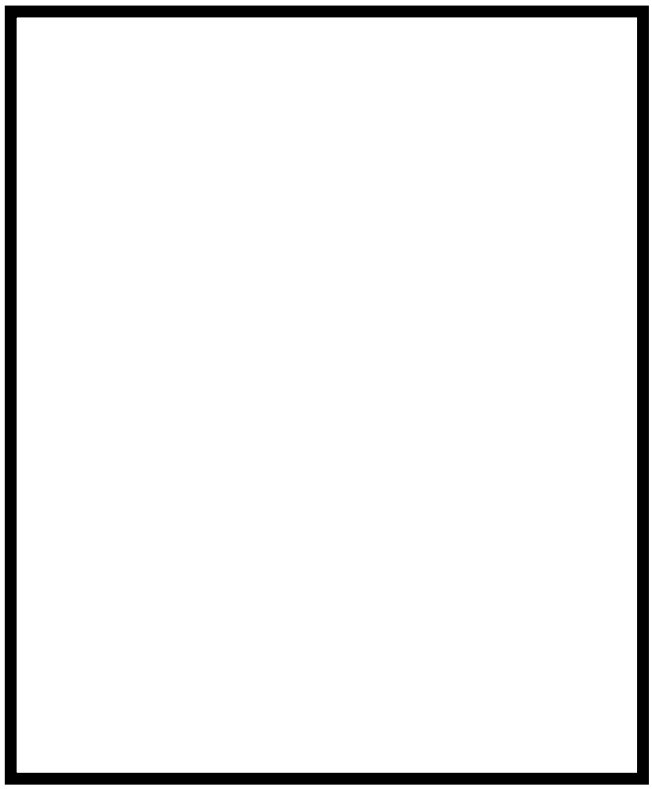


FLASHCARD TEMPLATE

FLASHCARD TEMPLATE





_____ - _____ = _____

_____ - _____ = _____

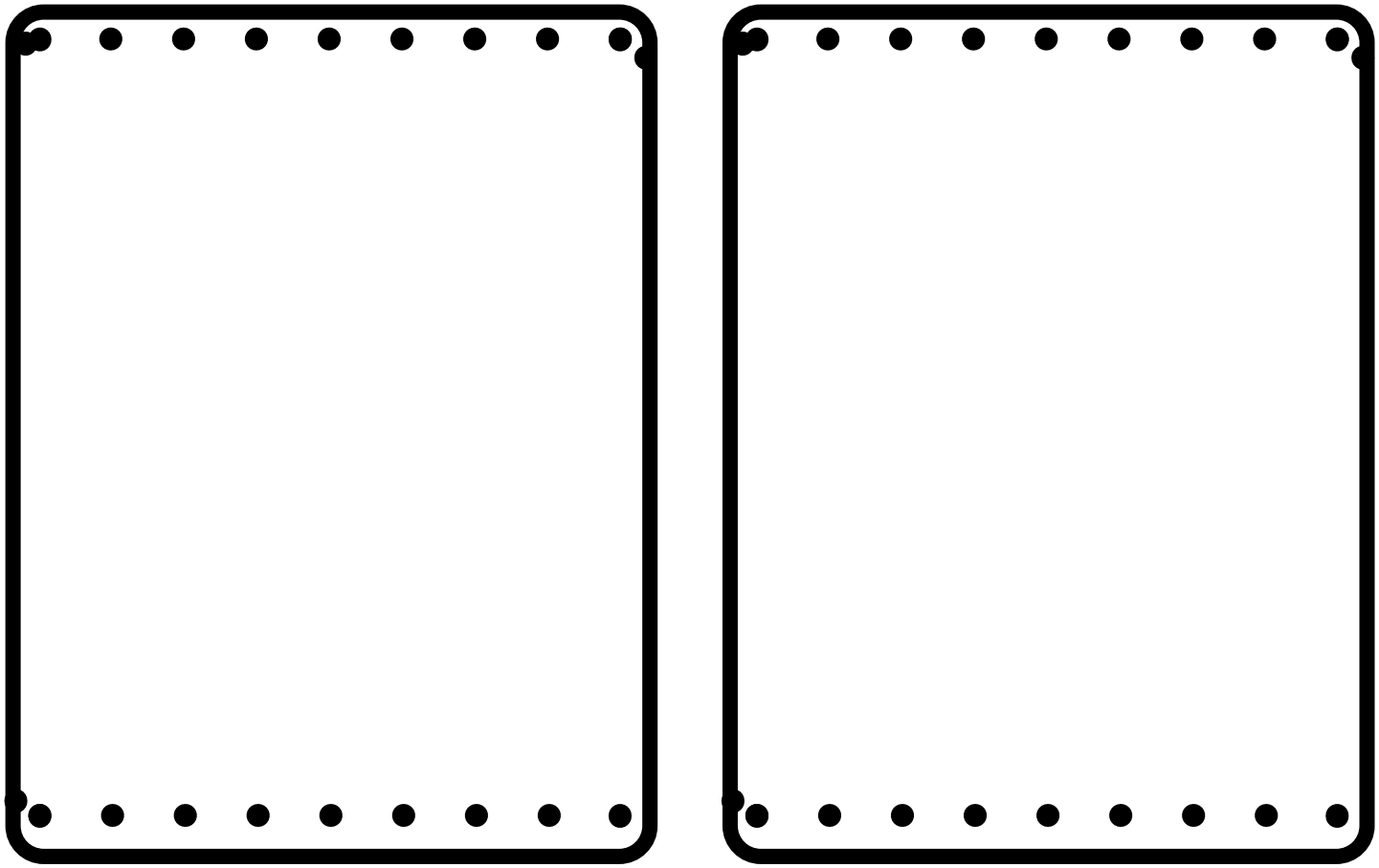
_____ - _____ = _____

_____ - _____ = _____

_____ - _____ = _____

_____ - _____ = _____

PLAYING CARDS TEMPLATE



□ - □ = □

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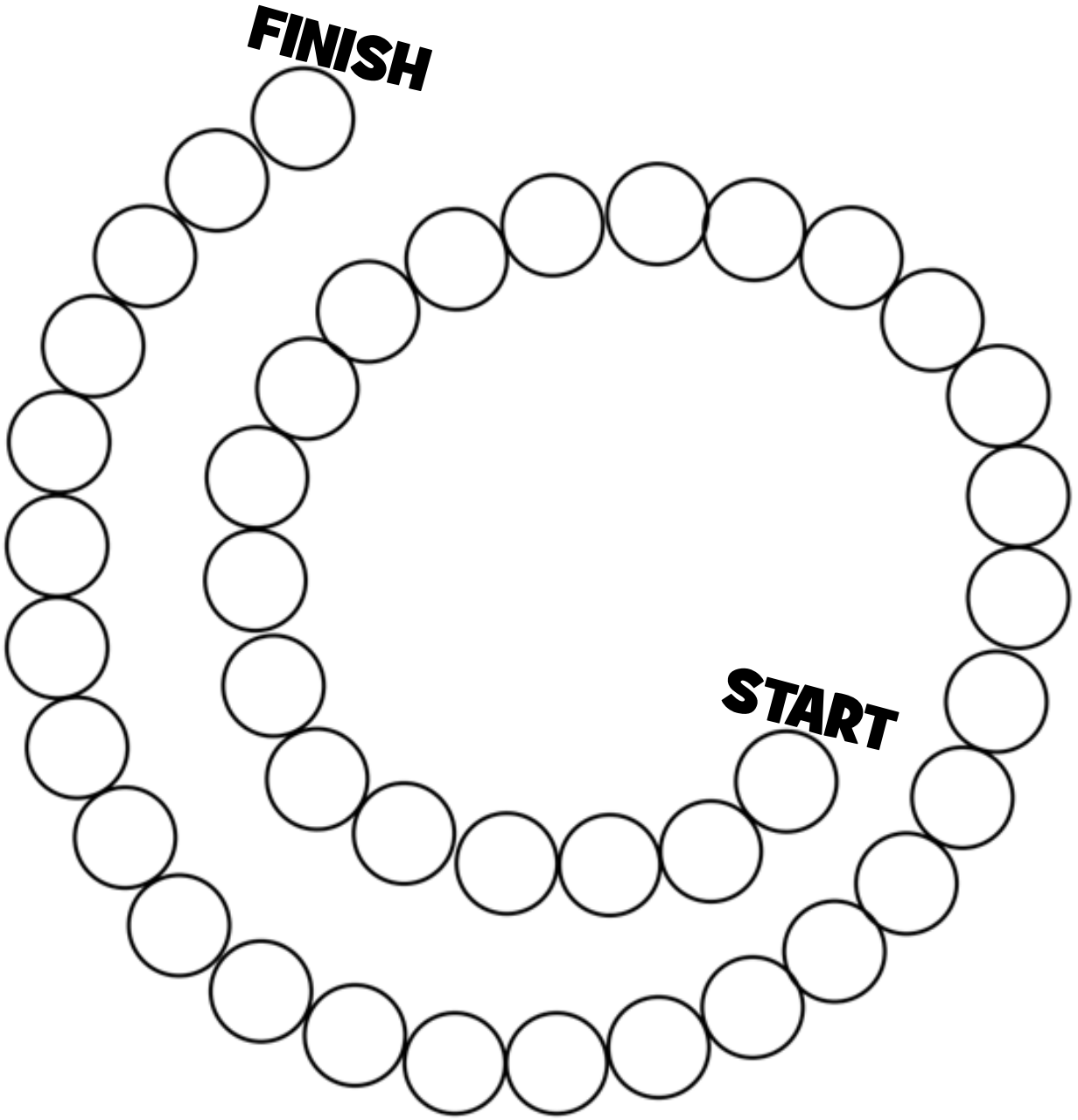
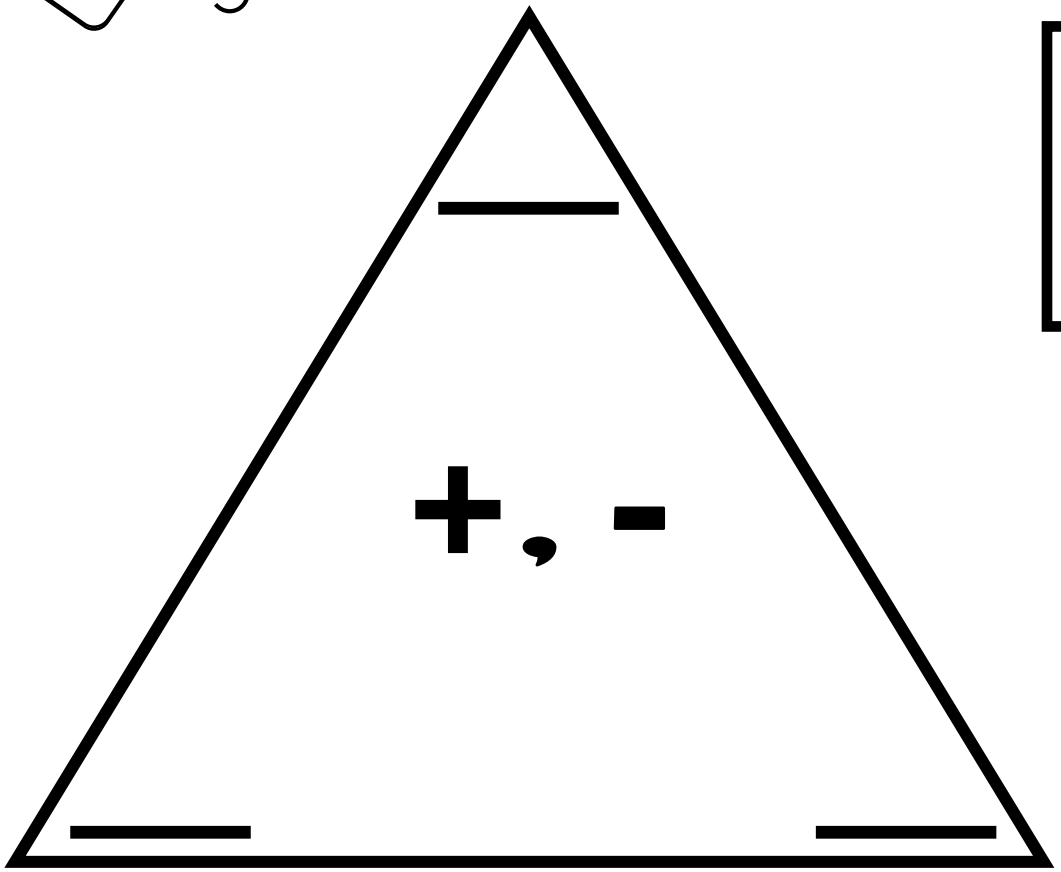
BOARD GAME TEMPLATE



FACT FAMILY TRIANGLE



____, ____, ____

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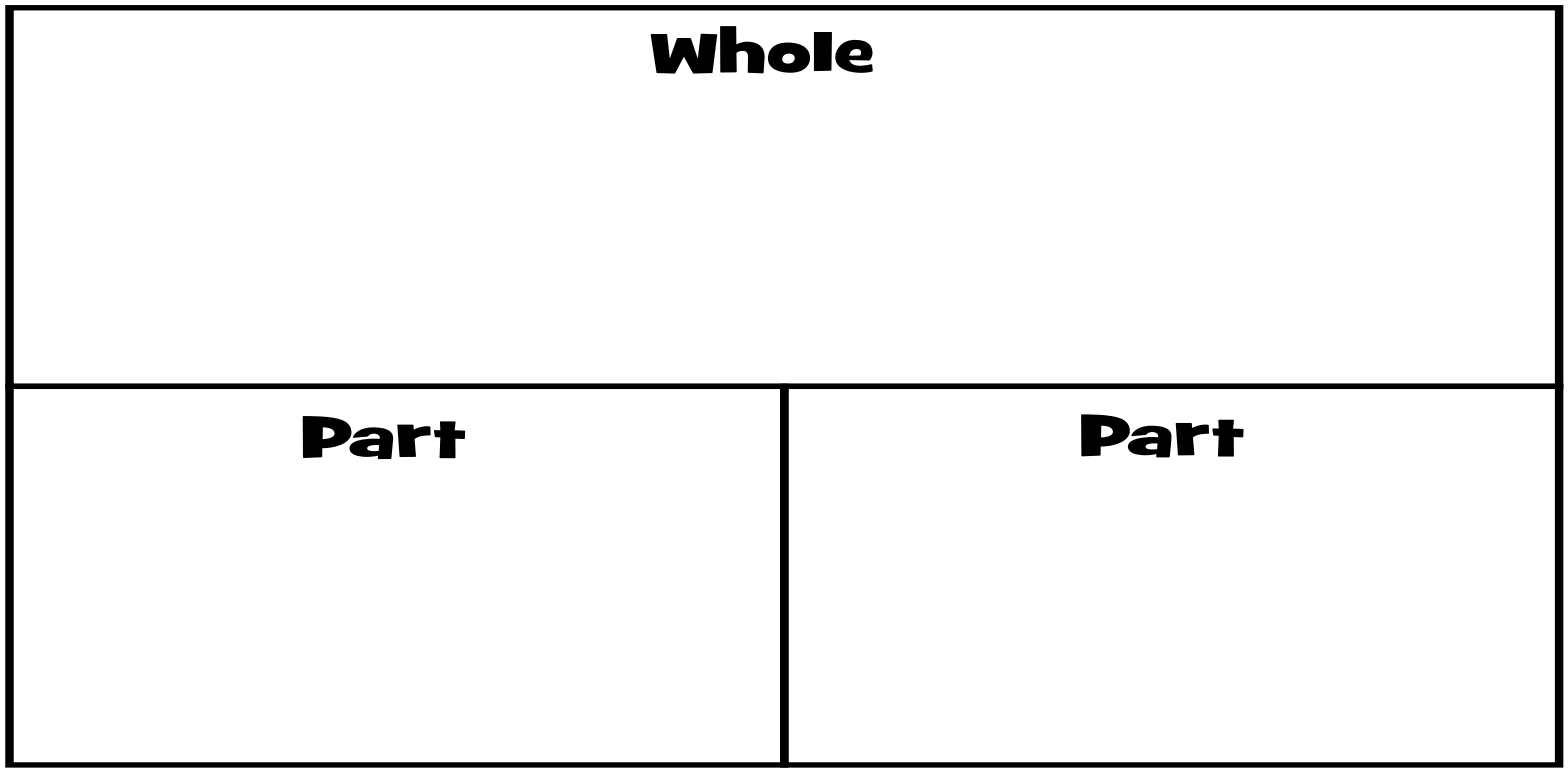
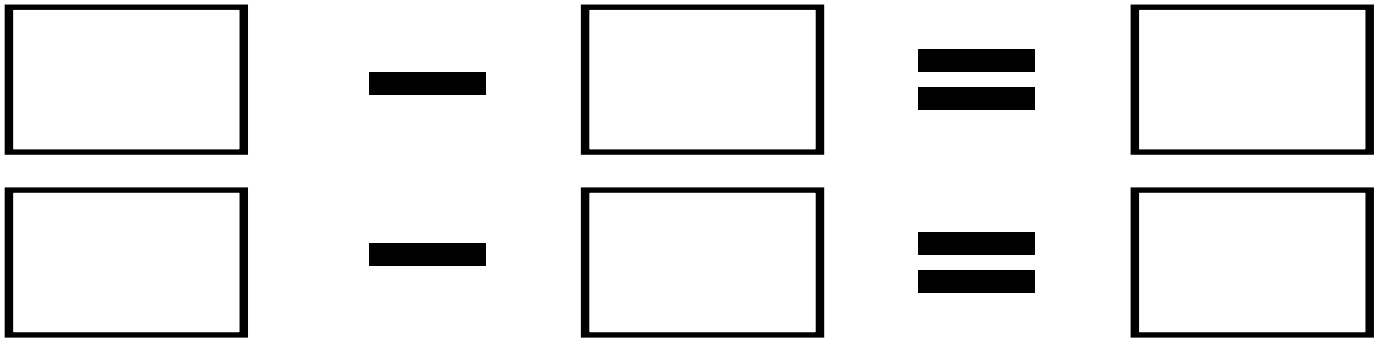
____ - ____ = ____

____ - ____ = ____

____ - ____ = ____

PART PART WHOLE MAT





Subtraction Number Paths

1	2	3	4	5	6	7	8	9	10

____ - ____ = ____

1	2	3	4	5	6	7	8	9	10

____ - ____ = ____

1	2	3	4	5	6	7	8	9	10

____ - ____ = ____

1	2	3	4	5	6	7	8	9	10

____ - ____ = ____

Subtraction Number Paths 2

____ - ____ = ____ ____ - ____ = ____

____ - ____ = ____ ____ - ____ = ____

____ - ____ = ____ ____ - ____ = ____

____ - ____ = ____ ____ - ____ = ____

Subtraction Number Paths

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

_____ - _____ = _____

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

_____ - _____ = _____

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

_____ - _____ = _____

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

_____ - _____ = _____

Subtraction Number Paths 2

____ - ____ = ____ ____ - ____ = ____

____ - ____ = ____ ____ - ____ = ____

____ - ____ = ____ ____ - ____ = ____

____ - ____ = ____ ____ - ____ = ____

HUNDRED CHART SUBTRACTION

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

___ - ___ = ___ ___ - ___ = ___

___ - ___ = ___ ___ - ___ = ___

___ - ___ = ___ ___ - ___ = ___

USING A HUNDREDS 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

41
51
61
71

A COLUMN GOES **UP** AND **DOWN**

IT GOES BY **10s**

A ROW GOES **LEFT** AND **RIGHT**

34	35	36	37

IT GOES BY **1s**

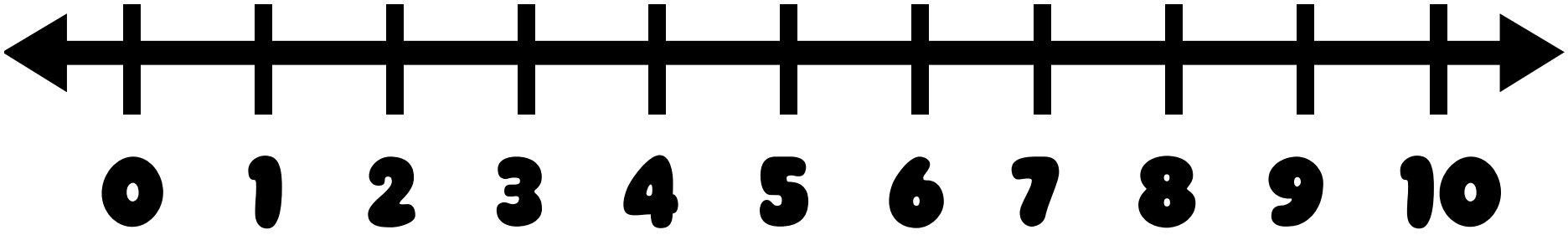
A NUMBER LINE

NUMBERS GET SMALLER WHEN YOU COUNT DOWN

NUMBERS GET LARGER WHEN YOU COUNT UP

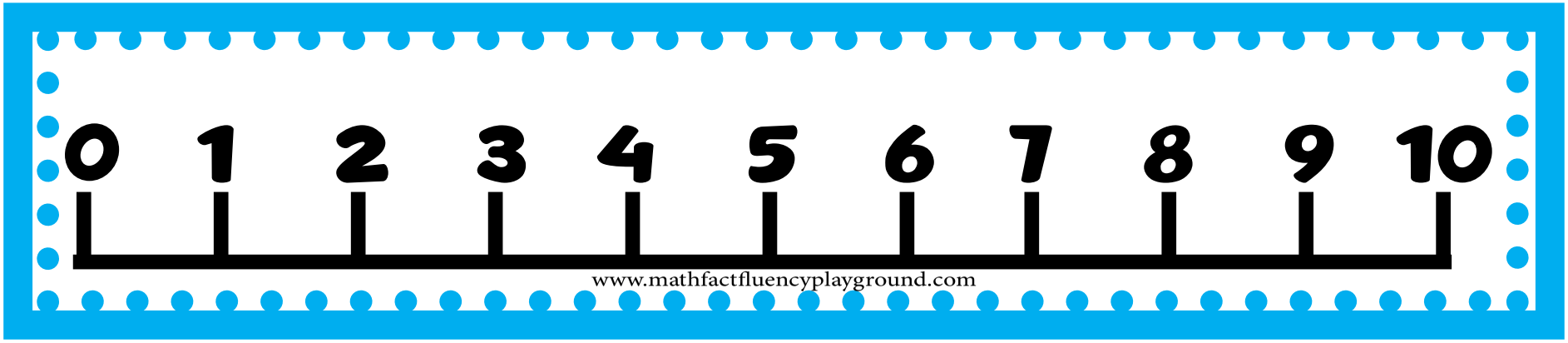
A NUMBER LINE

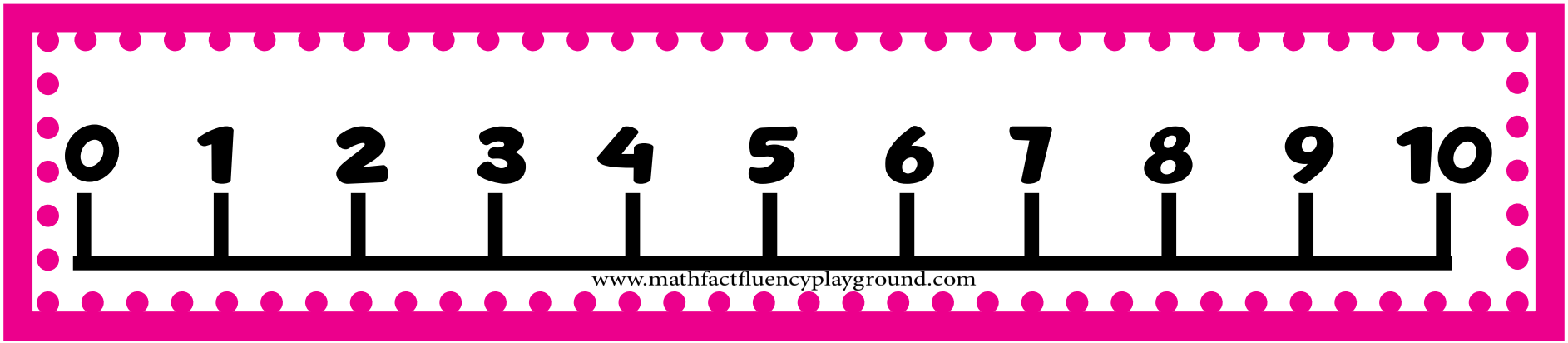
NUMBERS GET SMALLER WHEN YOU COUNT DOWN

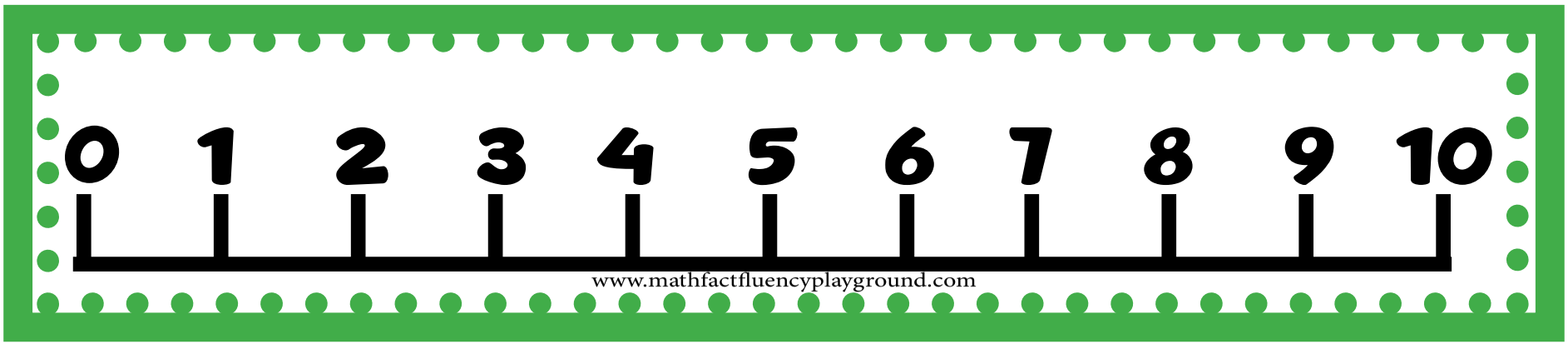


NUMBERS GET **SMALLER** WHEN YOU COUNT UP

NUMBER LINE TO 10







NUMBER LADDER TO 10

10
9
8
7
6
5
4
3
2
1
0

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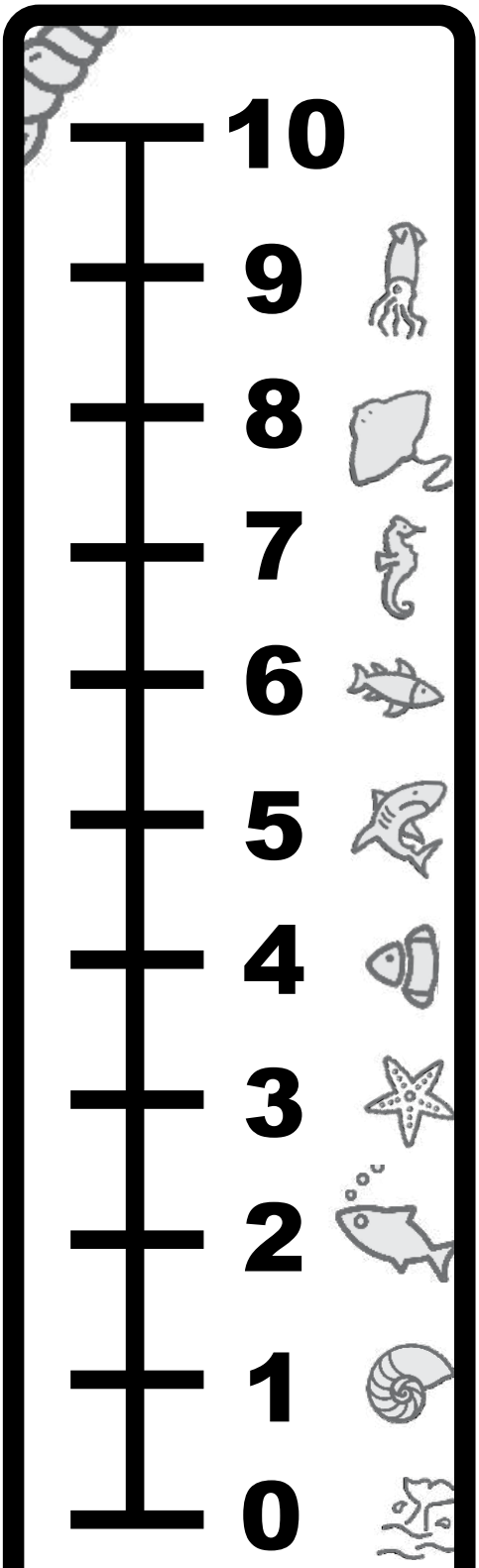

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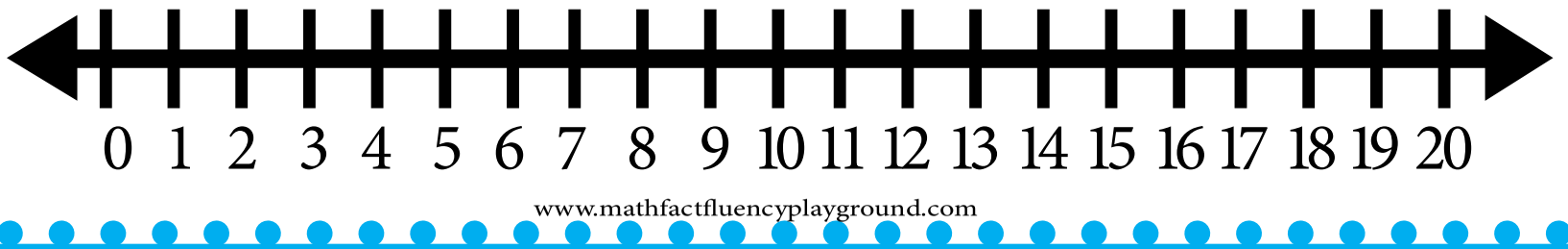
NUMBER LINE TO 20



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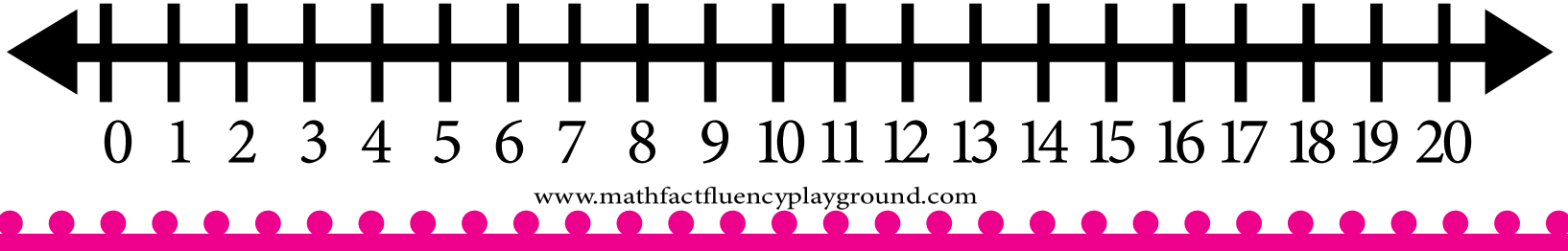

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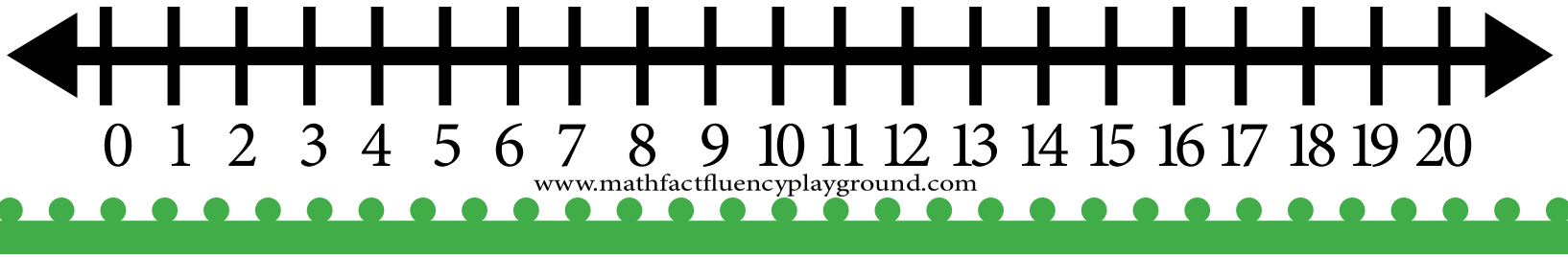

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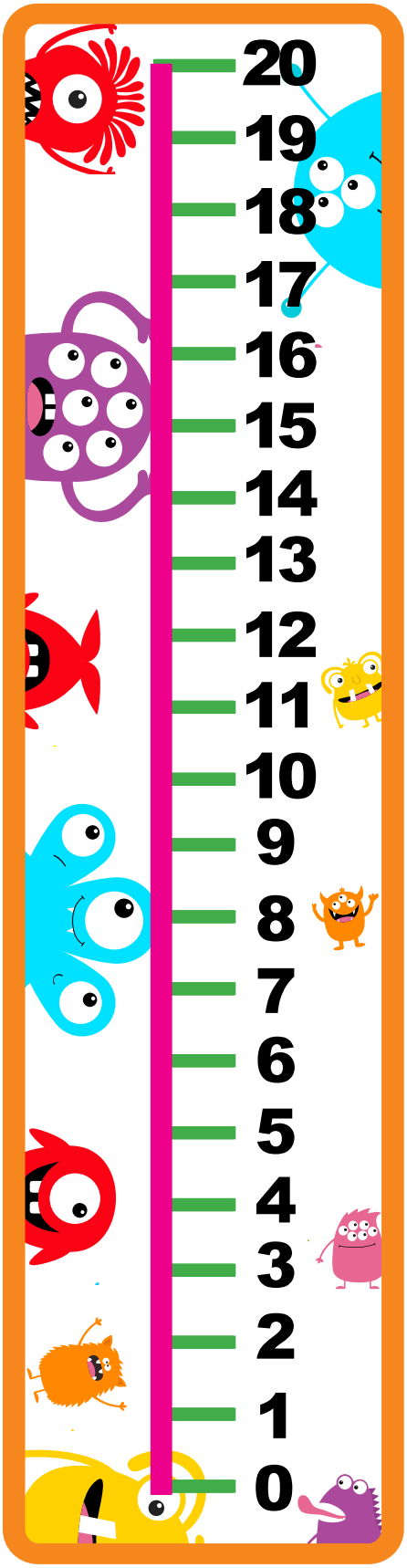
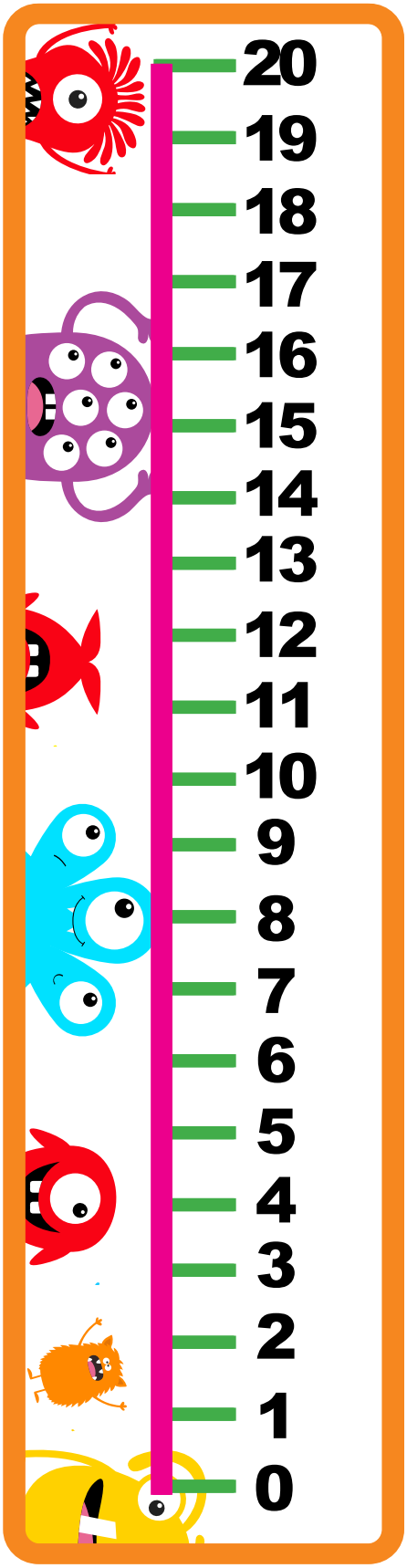
NUMBER LADDER TO 20





SUBTRACTION TABLE

-	10	9	8	7	6	5	4	3	2	1
1	9	8	7	6	5	4	3	2	1	0
2	8	7	6	5	4	3	2	1	0	
3	7	6	5	4	3	2	1	0		
4	6	5	4	3	2	1	0			
5	5	4	3	2	1	0				
6	4	3	2	1	0					
7	3	2	1	0						
8	2	1	0							
9	1	0								
10	0									

SUBTRACTION TABLES

ones
1-1=0
2-1=1
3-1=2
4-1=3
5-1=4
6-1=5
7-1=6
8-1=7
9-1=8
10-1=9
11-1=10
12-1=11

twos
2-2=0
3-2=1
4-2=2
5-2=3
6-2=4
7-2=5
8-2=6
9-2=7
10-2=8
11-2=9
12-2=10
19-2=11

threes
3-3=0
4-3=1
5-3=2
6-3=3
7-3=4
8-3=5
9-3=6
10-3=7
11-3=8
12-3=9
13-3=10
14-3=11

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

fives
5-5=0
6-5=1
7-5=2
8-5=3
9-5=4
10-5=5
11-5=6
12-5=7
13-5=8
14-5=9
15-5=10
16-5=11

sixes
6-6=0
7-6=1
8-6=2
9-6=3
10-6=4
11-6=5
12-6=6
13-6=7
14-6=8
15-6=9
16-6=10
17-6=11

sevens
7-7=0
8-7=1
9-7=2
10-7=3
11-7=4
12-7=5
13-7=6
14-7=7
15-7=8
16-7=9
17-7=10
18-7=11

eights
8-8=0
9-8=1
10-8=2
11-8=3
12-8=4
13-8=5
14-8=6
15-8=7
16-8=8
17-8=9
18-8=10
19-8=11

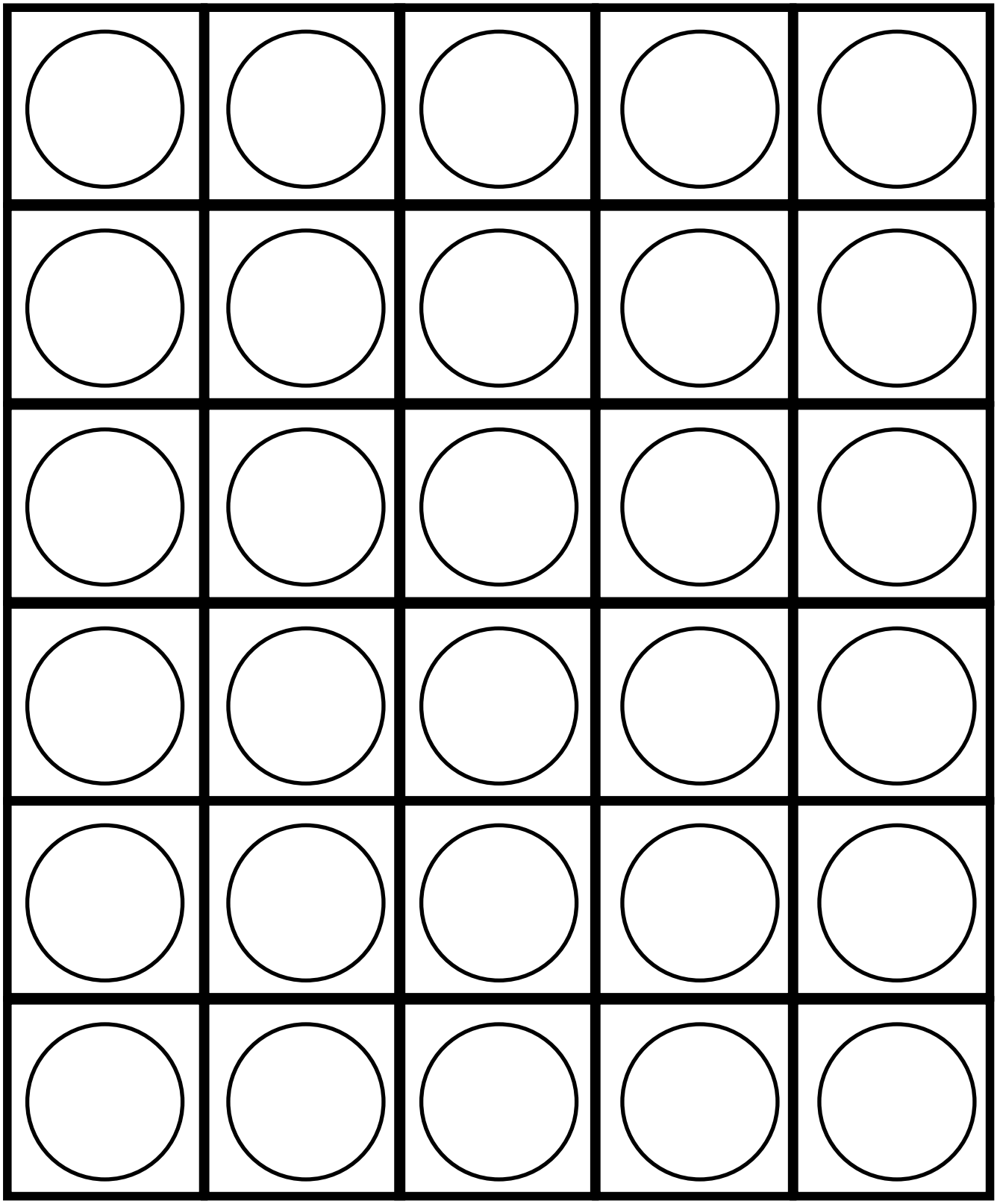
nines
9-9=0
10-9=1
11-9=2
12-9=3
13-9=4
14-9=5
15-9=6
16-9=7
17-9=8
18-9=9
19-9=10
20-9=11

tens
10-10=0
11-10=1
12-10=2
13-10=3
14-10=4
15-10=5
16-10=6
17-10=7
18-10=8
19-10=9
20-10=10
21-11=11

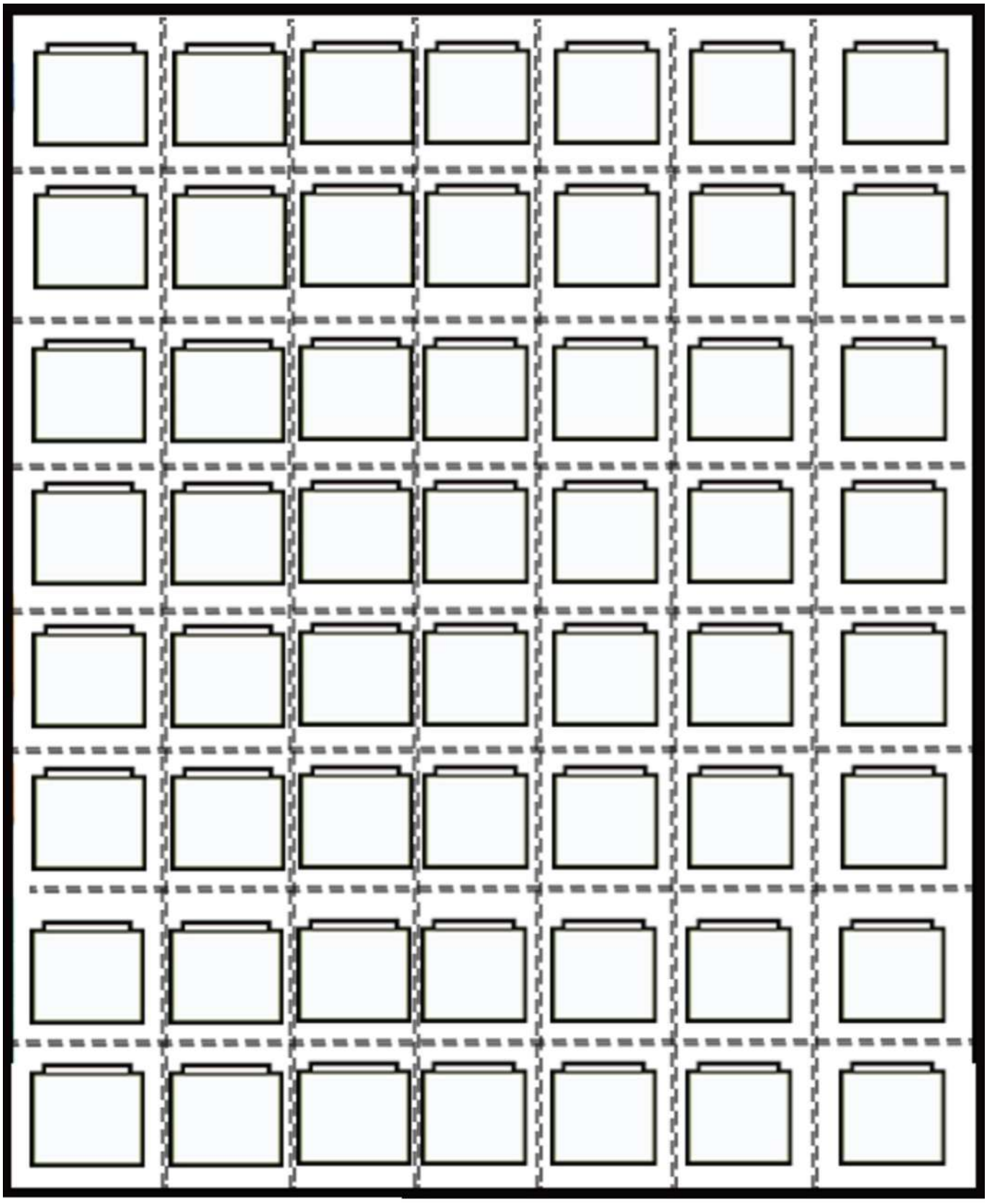
elevens
11-11=0
12-11=1
13-11=2
14-11=3
15-11=4
16-11=5
17-11=6
18-11=7
19-11=8
20-11=9
21-11=10
22-11=11

twelves
12-12=0
13-12=1
14-12=2
15-12=3
16-12=4
17-12=5
18-12=6
19-12=7
20-12=8
21-12=9
22-12=10
23-12=11

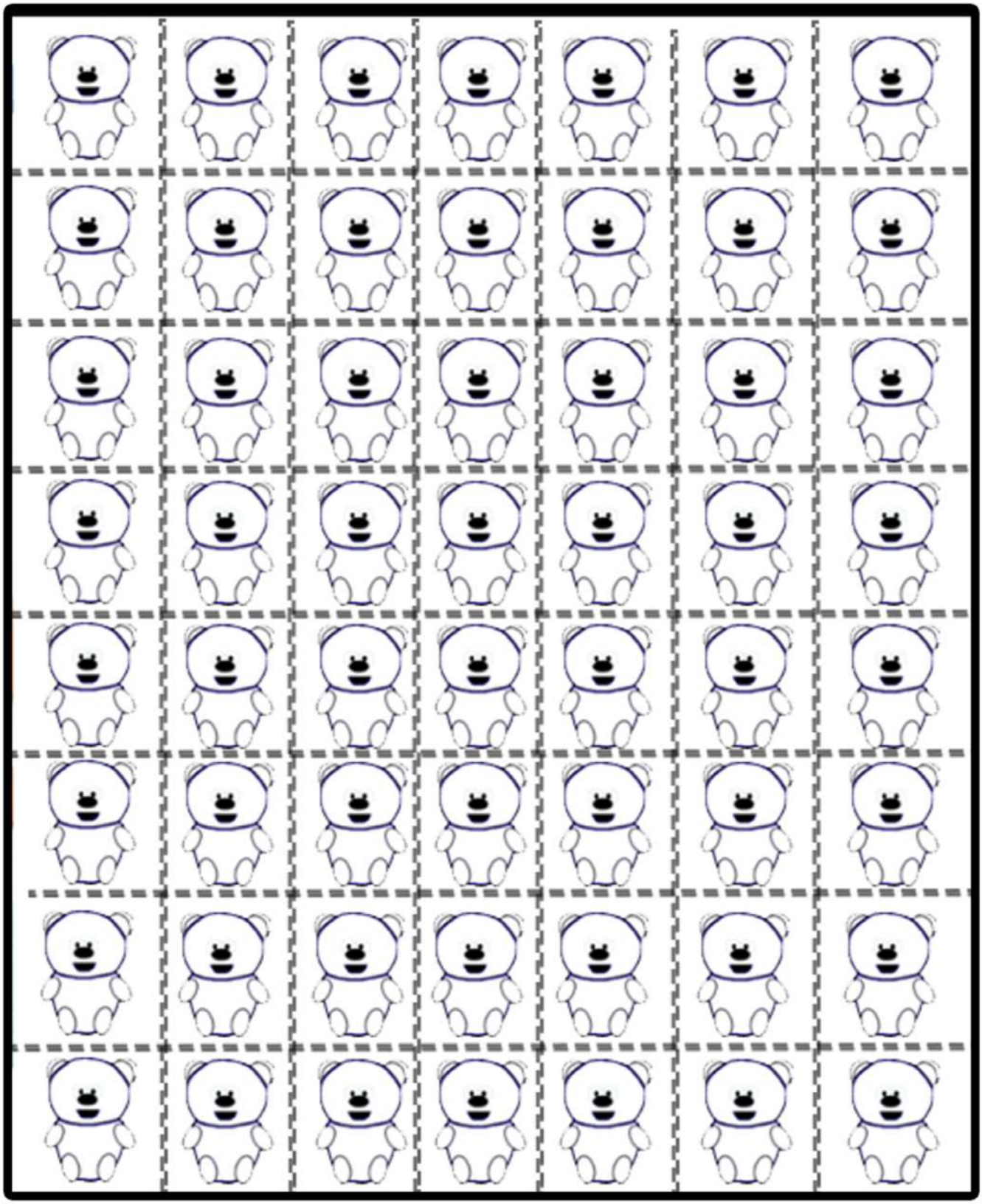
Circle Counters



Cube Counters

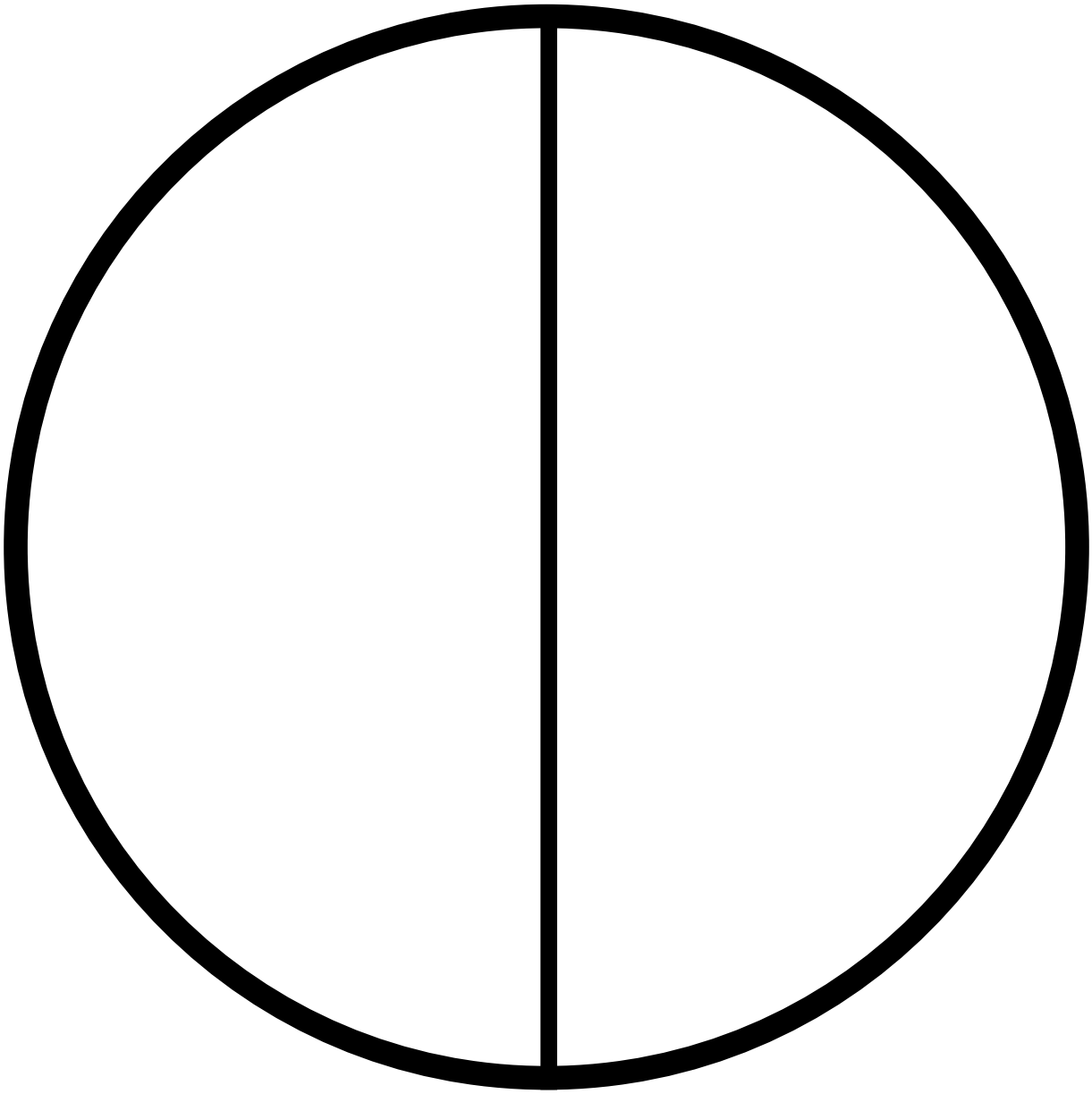


Bear Counters

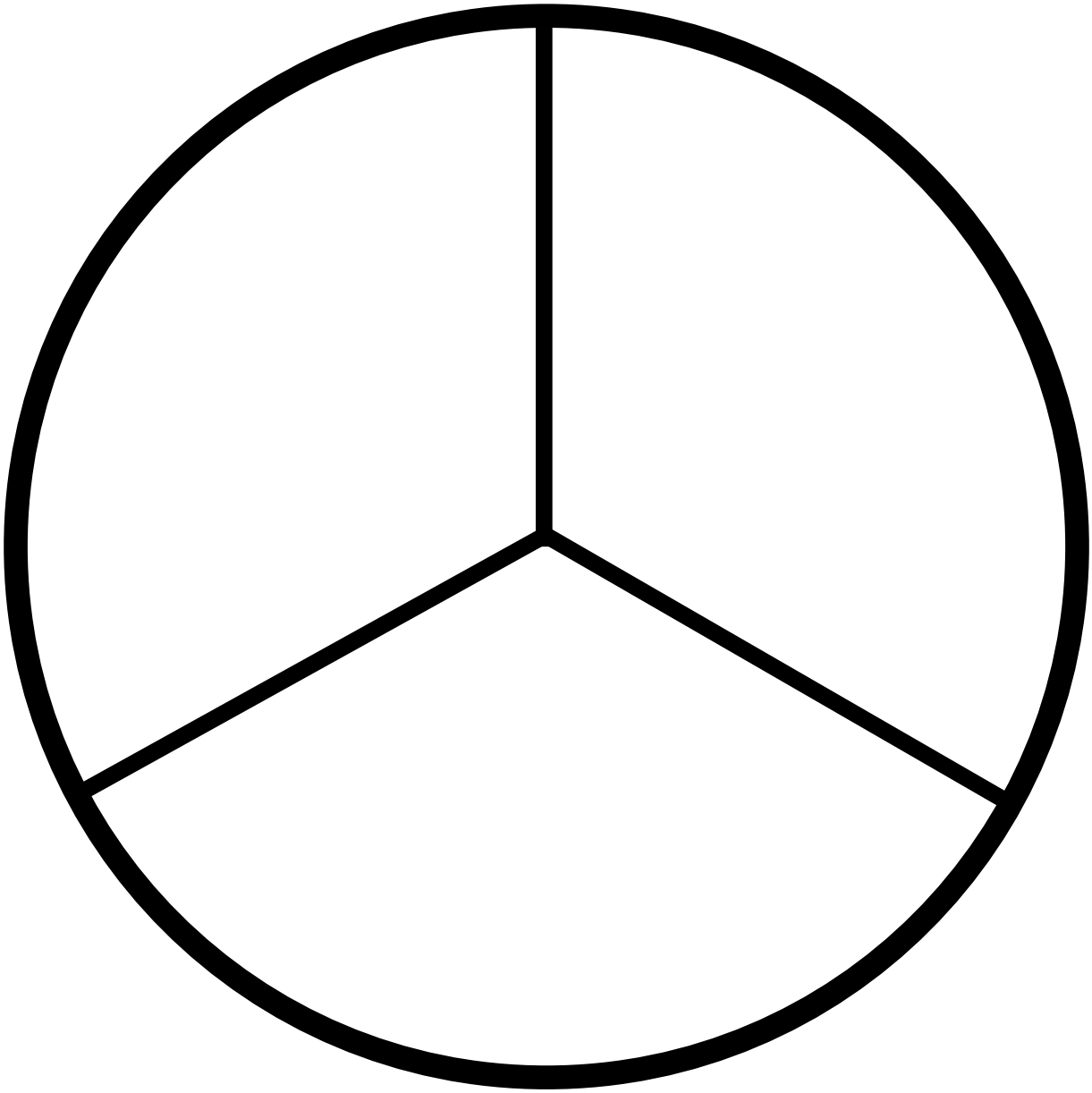


Penny Counters

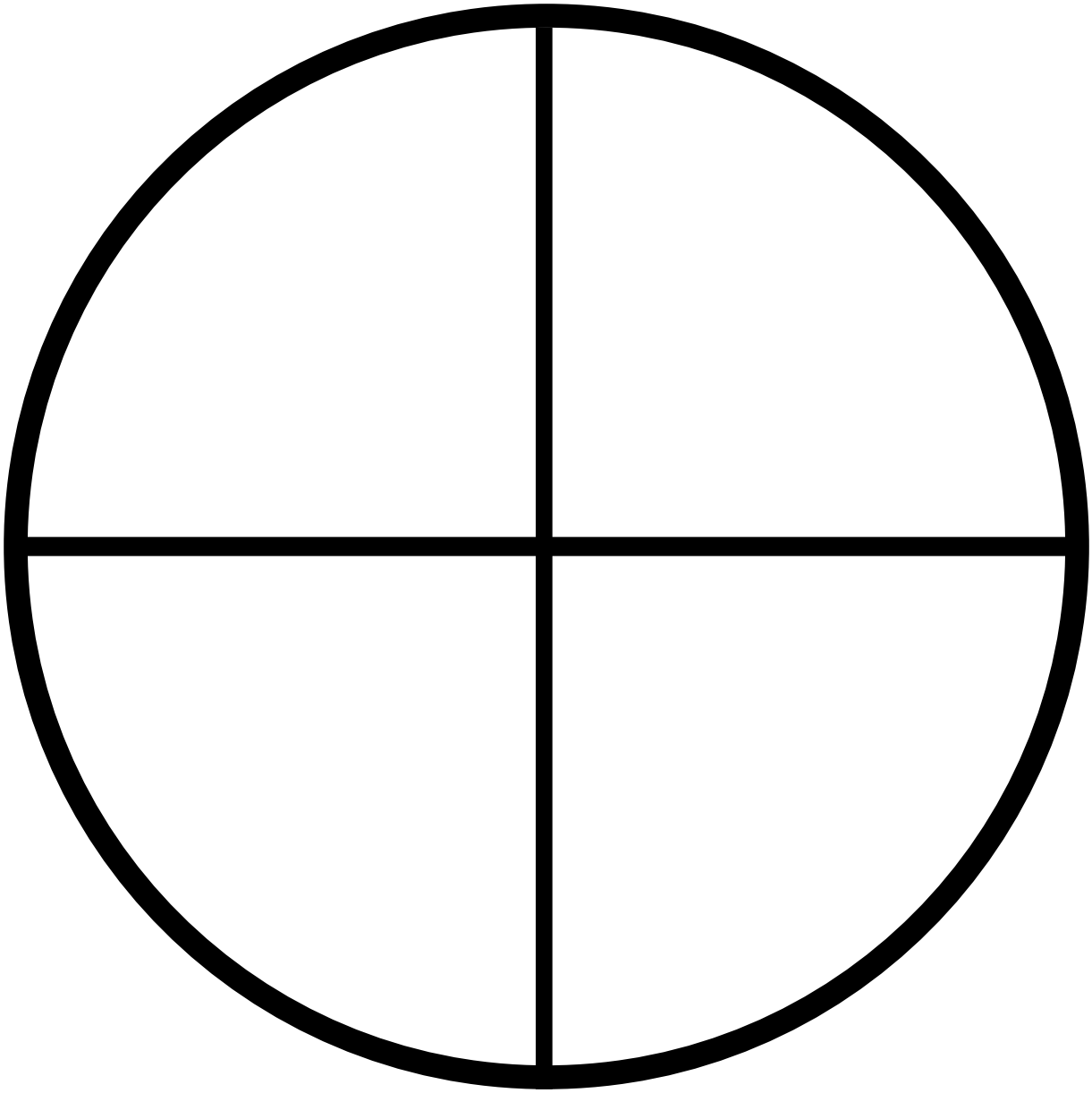
SPINNER



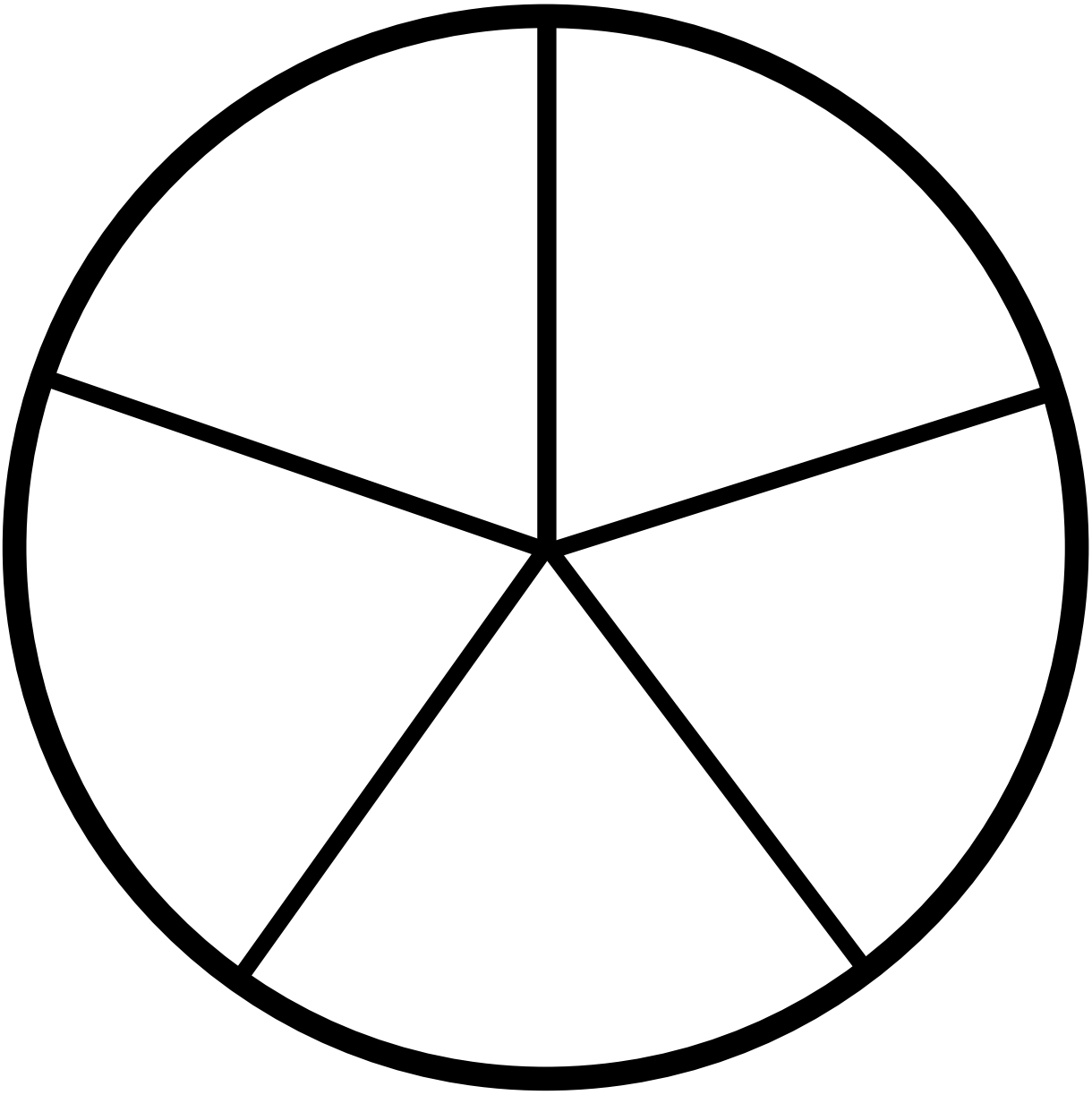
SPINNER



SPINNER



SPINNER



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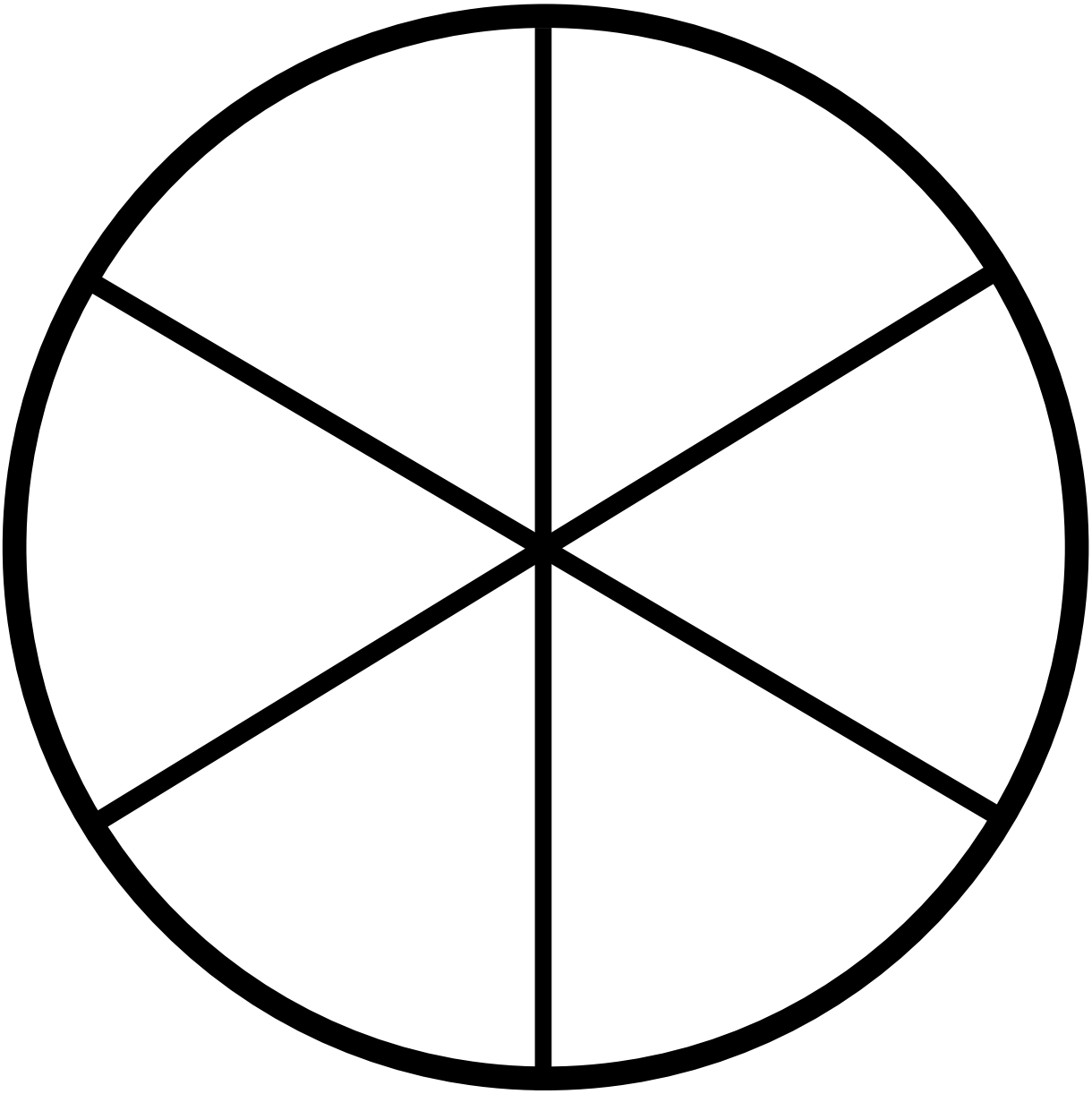
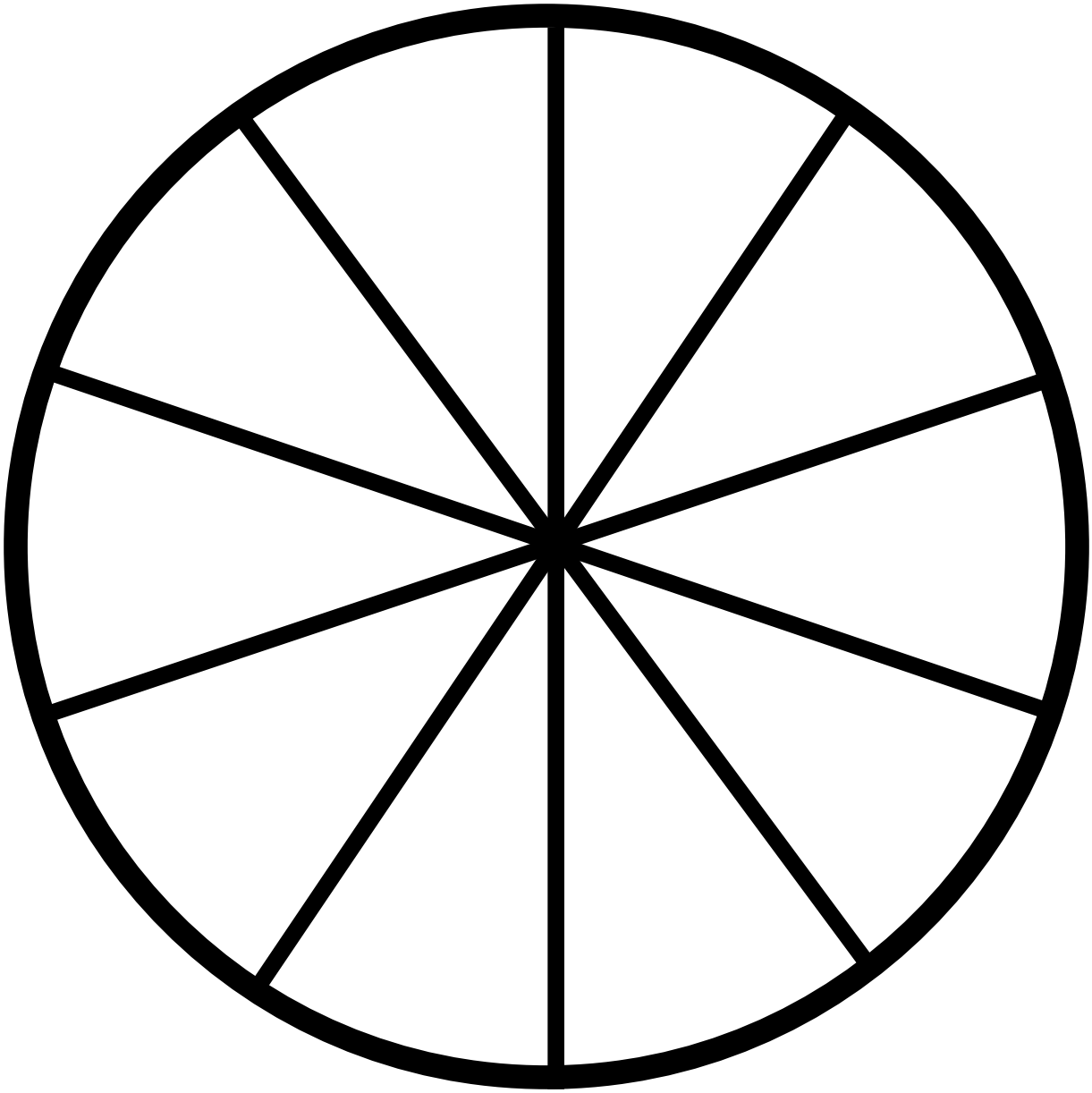
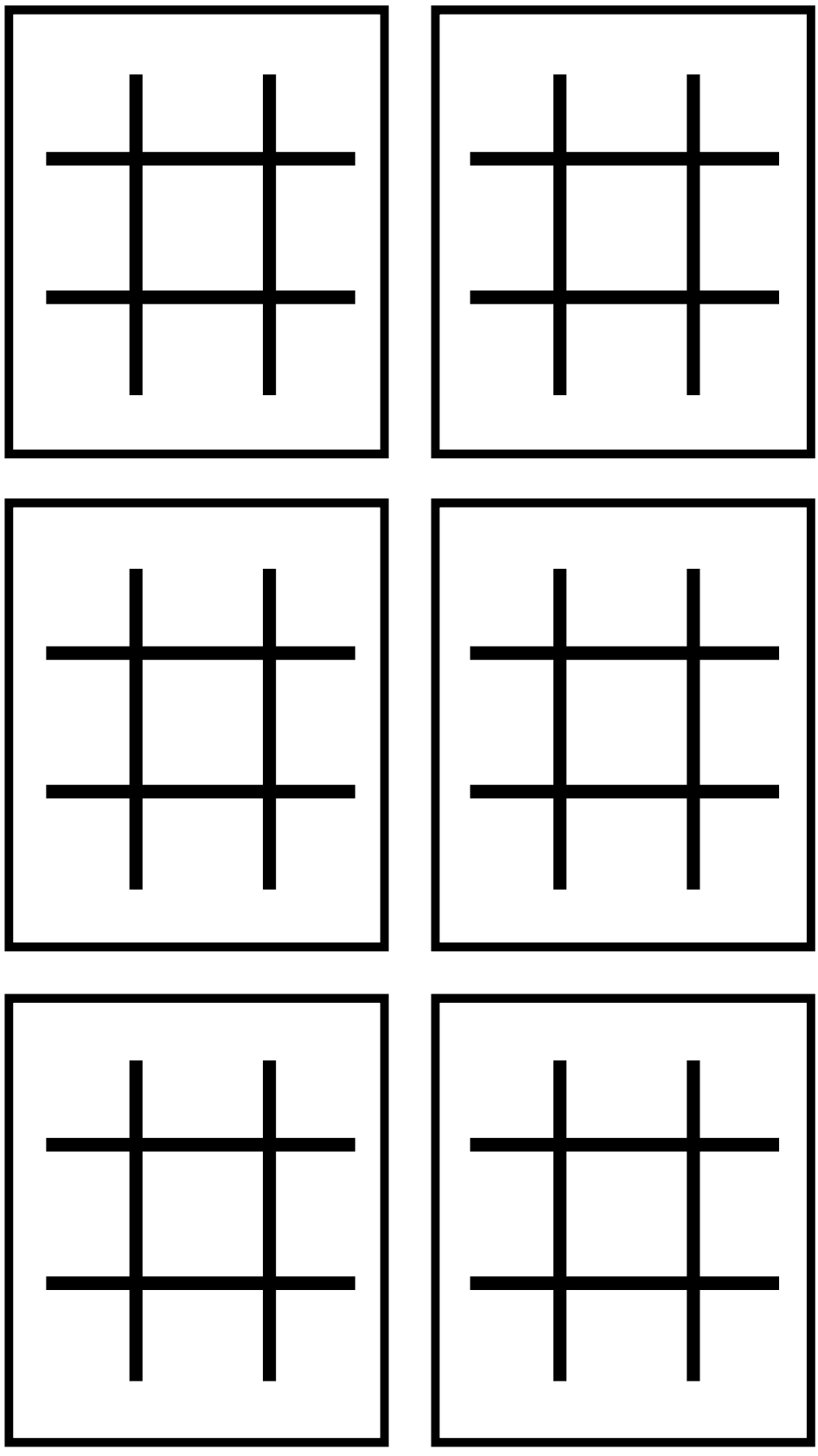


SPINNER



Tic Tac Toe

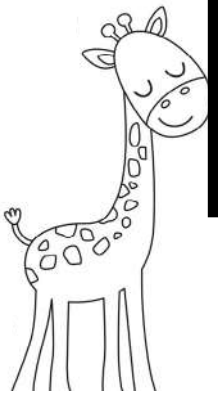


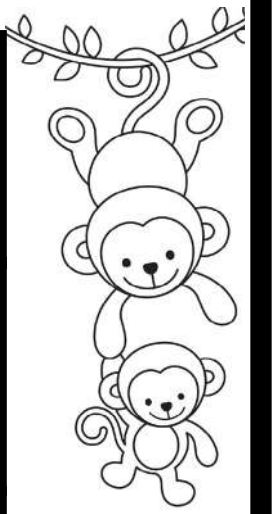
SUBTRACTING WITHIN 10

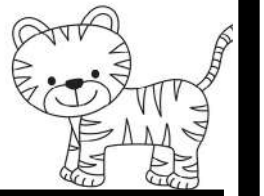
SUBTRACTION BOARD GAME

Instructions: Roll the dice. Move and solve the problem. Whoever reaches the end first wins!

5 - 3	8 - 2	10 - 6	7 - 3	5 - 2	6 - 3				
8 - 5		10 - 8	10 - 7		7 - 6				
9 - 4		7 - 4	10 - 9		8 - 4				
10 - 3		6 - 1	5 - 1		9 - 6			9 - 3	
START			10 - 4					FINISH	







SUBTRACTING WITHIN 10

SUBTRACTION BOARD GAME

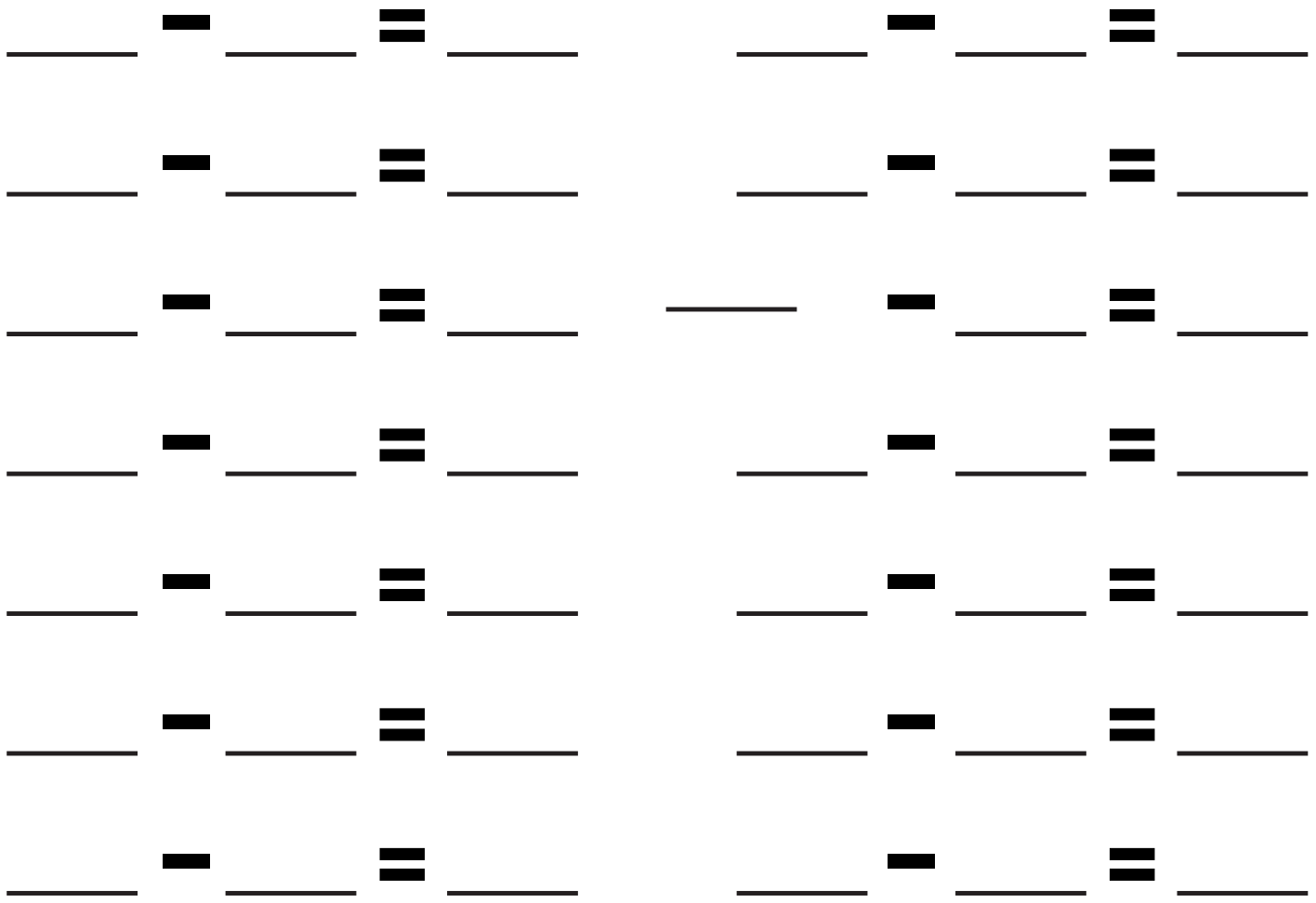
Instructions: Roll the dice. Move and solve the problem. Whoever reaches the end first wins!

START

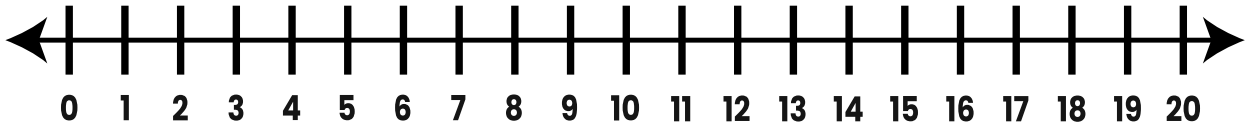
FINISH

Subtraction Action

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



Subtraction Action



Subtraction Action

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

____ − ____ = ____ ____ − ____ = ____

____ − ____ = ____ ____ − ____ = ____

____ − ____ = ____ ____ − ____ = ____

Subtraction Action

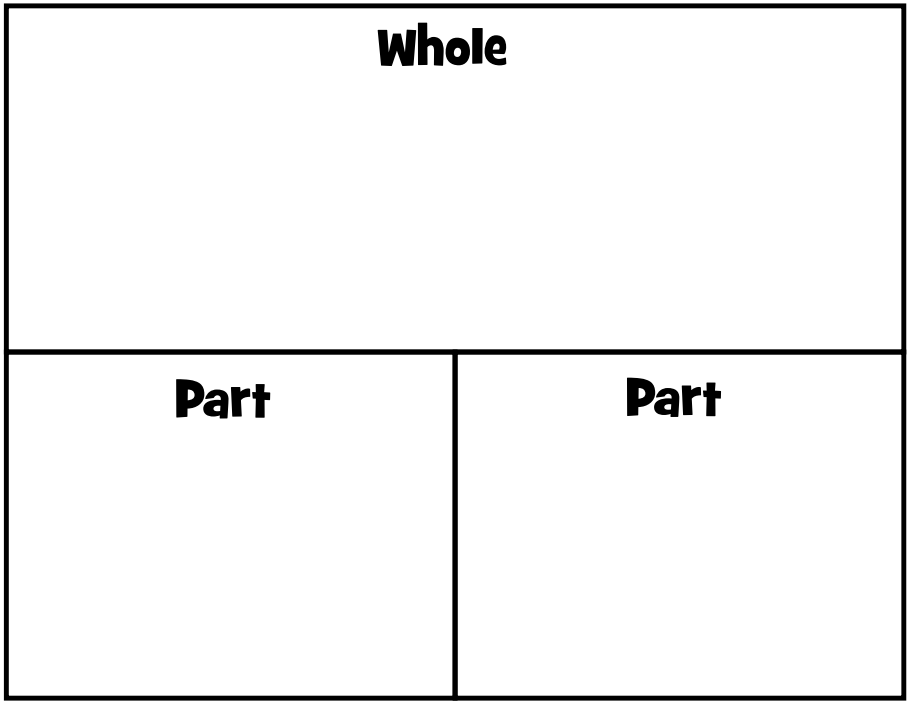
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

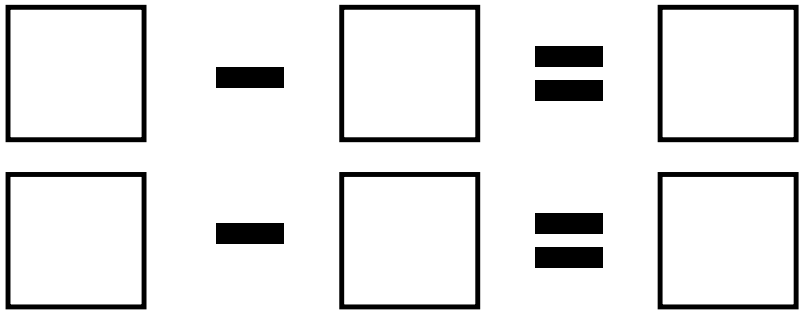
____ - ____ = ____ ____ - ____ = ____

____ - ____ = ____ ____ - ____ = ____

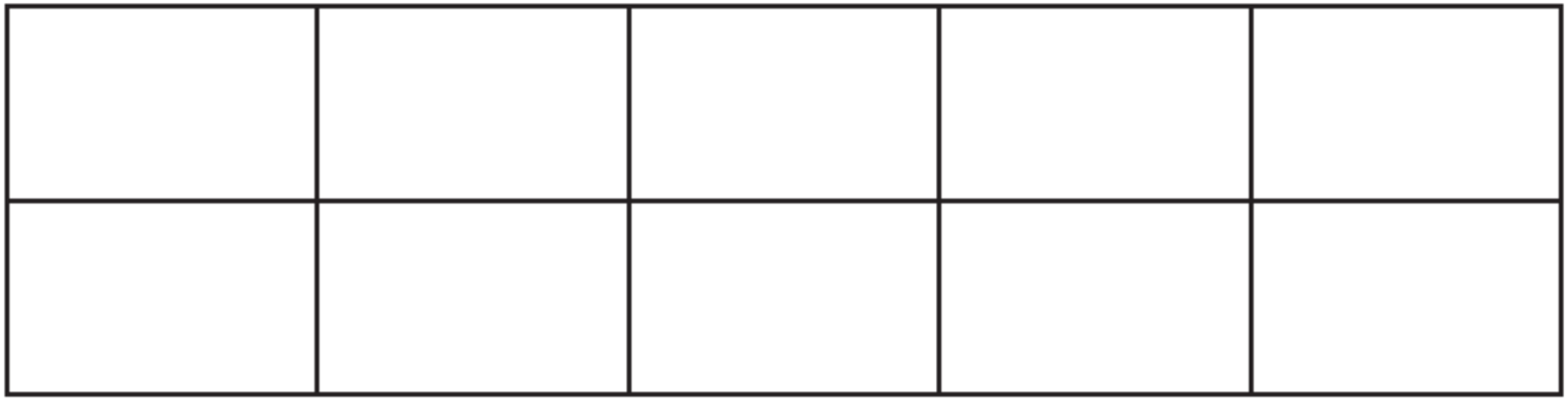
____ - ____ = ____ ____ - ____ = ____

Number Bond Subtraction



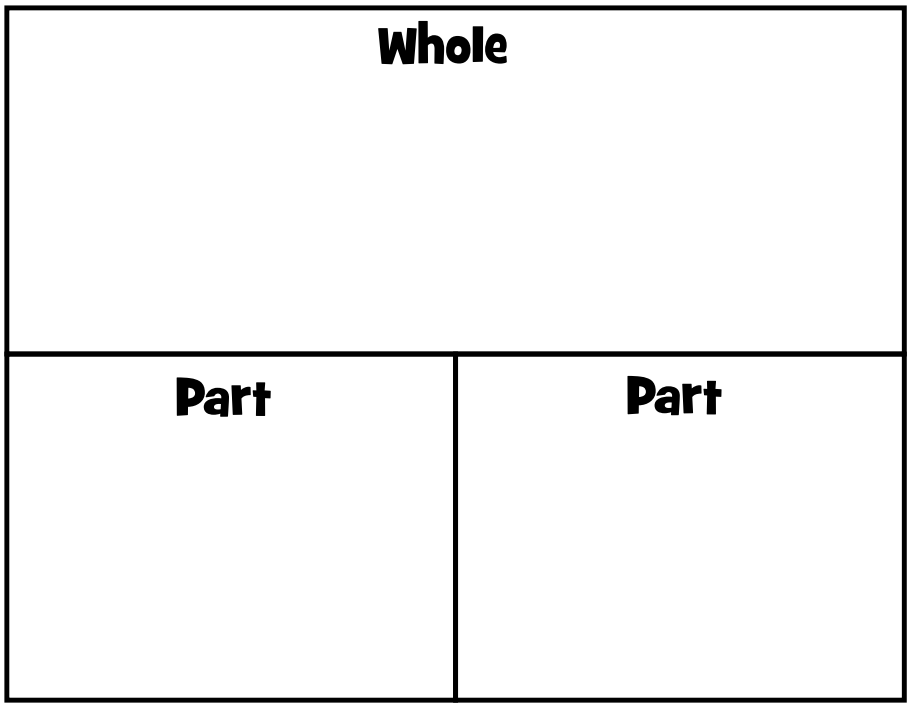


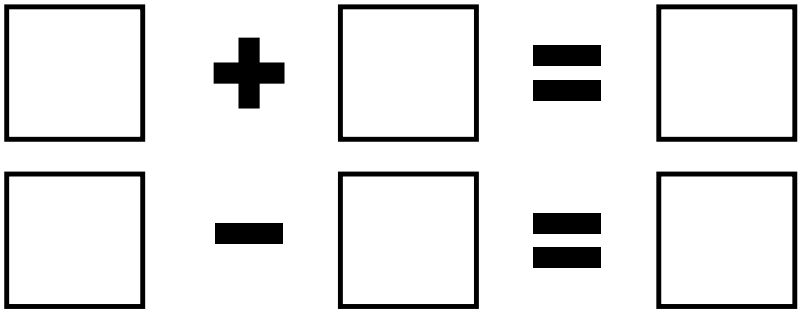
Subtraction Mat

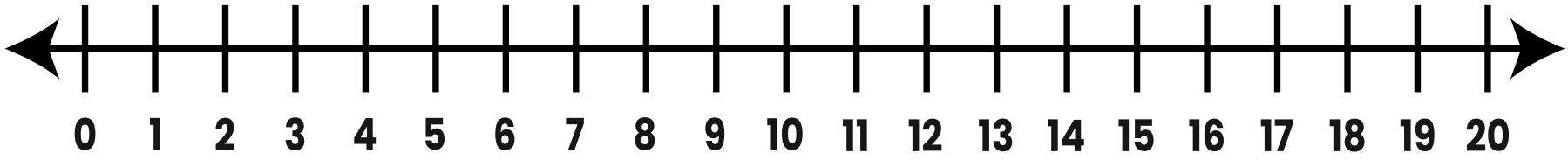


Subtraction Mat

Number Bond Subtraction







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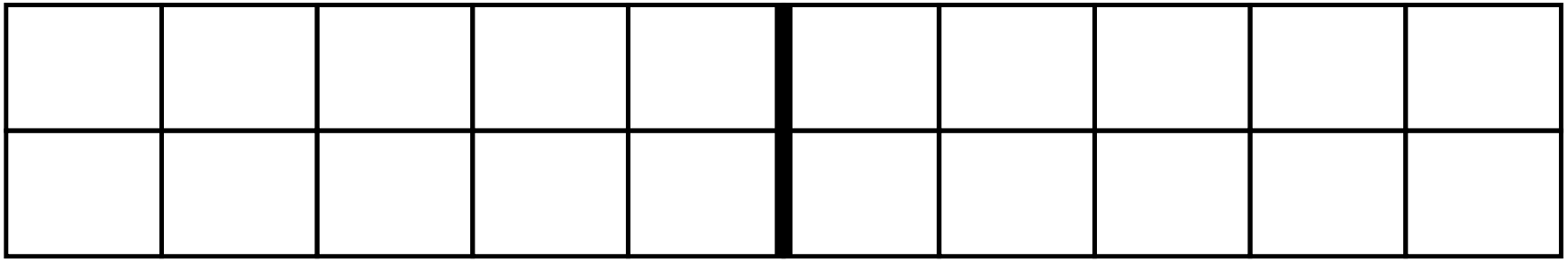

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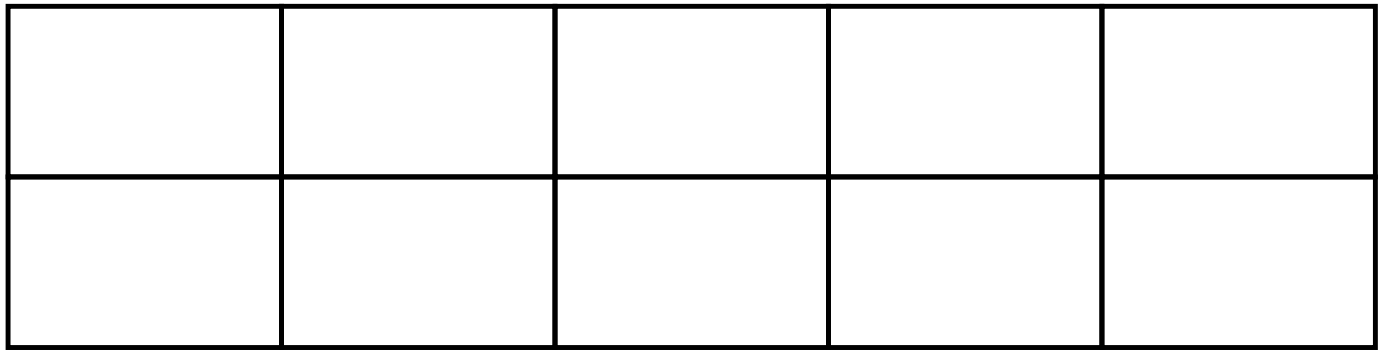
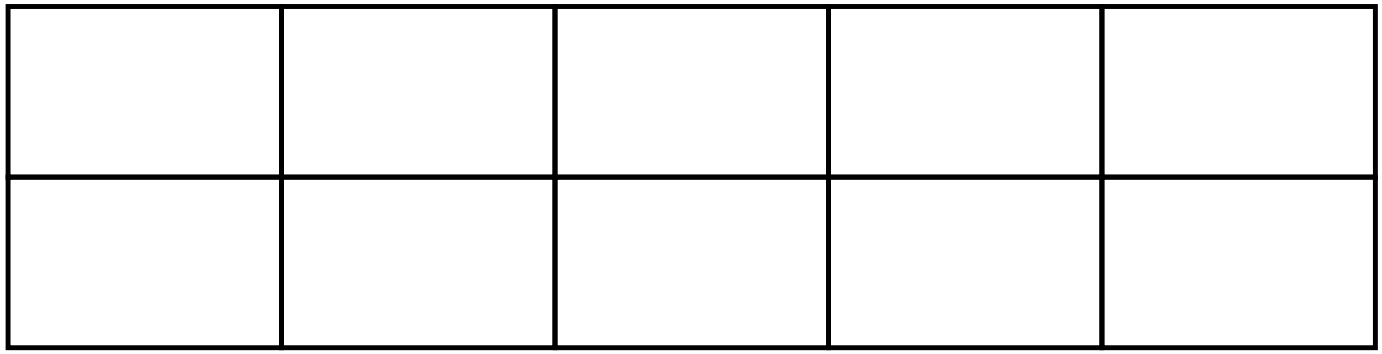
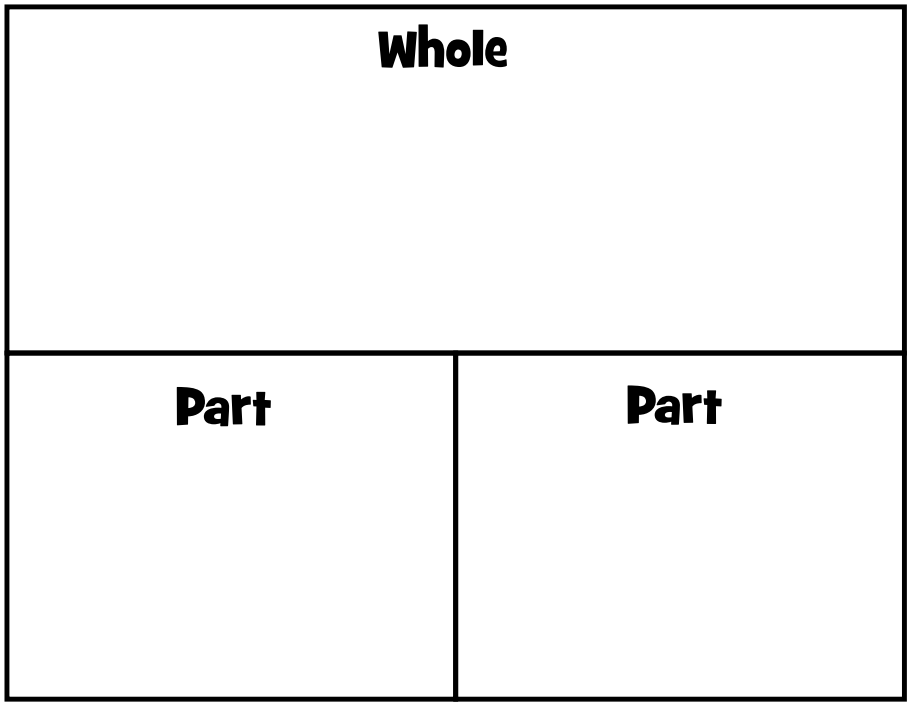




Number Bond Subtraction

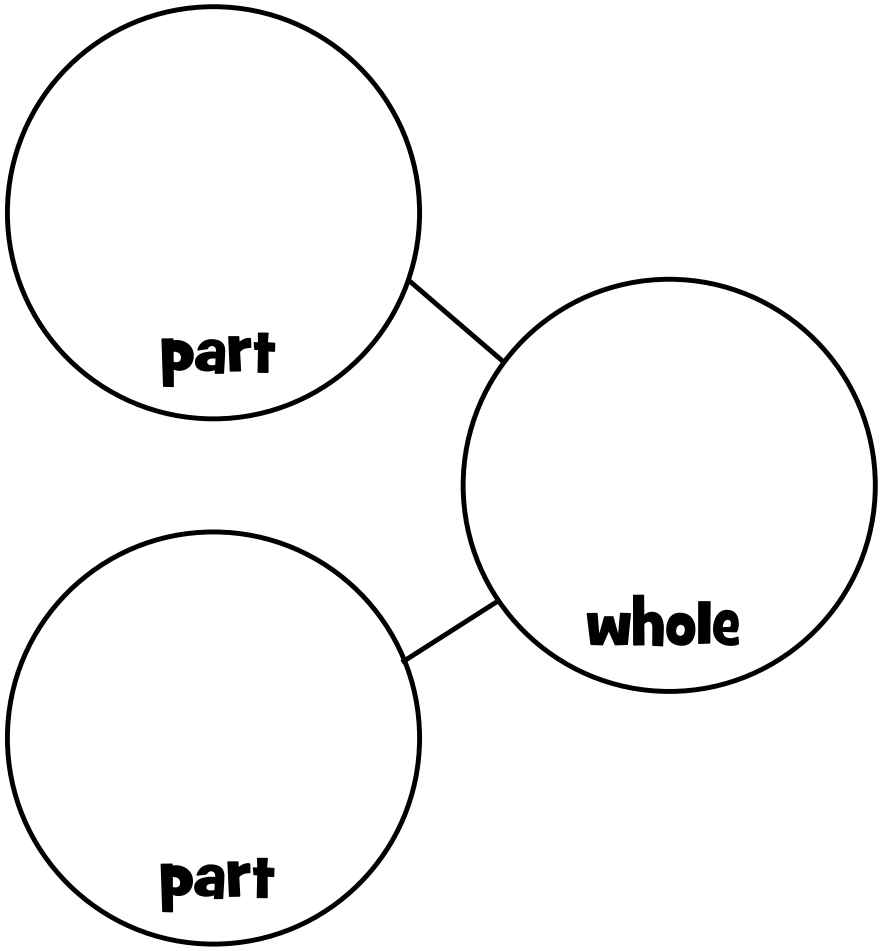


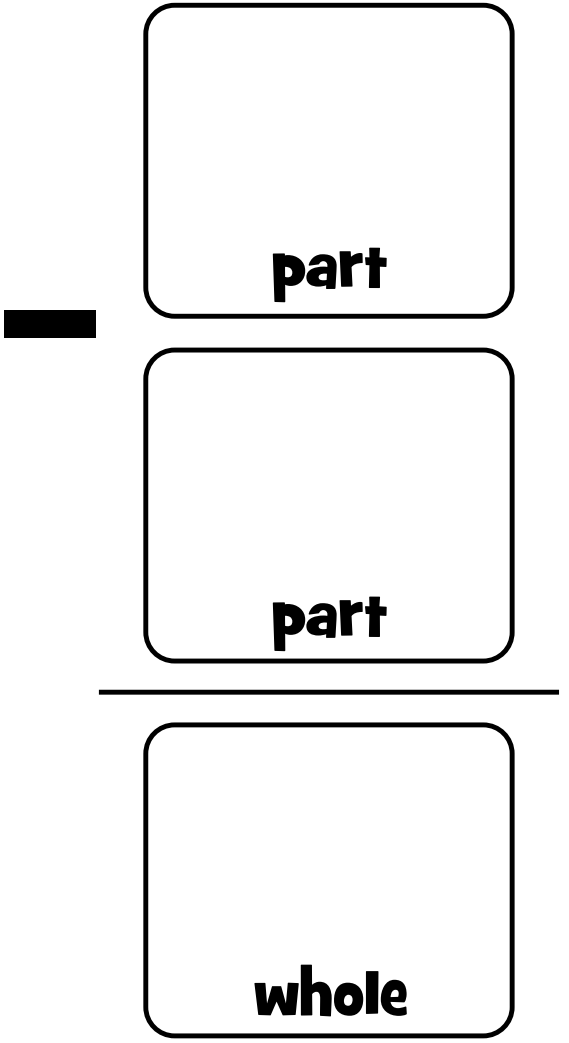
□ + □ = □

□ − □ = □

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

Number Bond Subtraction





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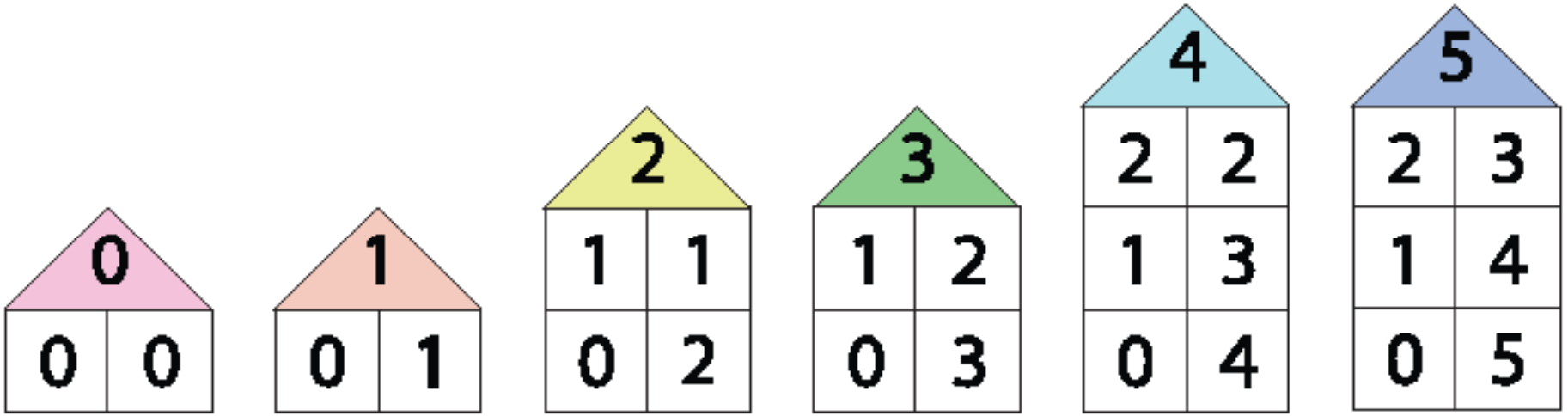
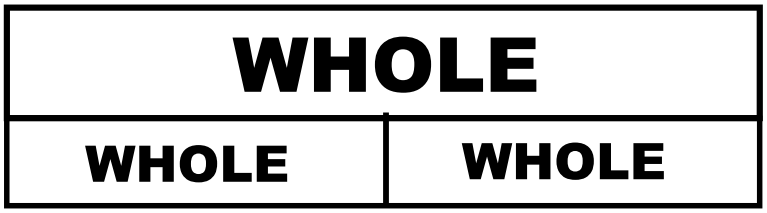
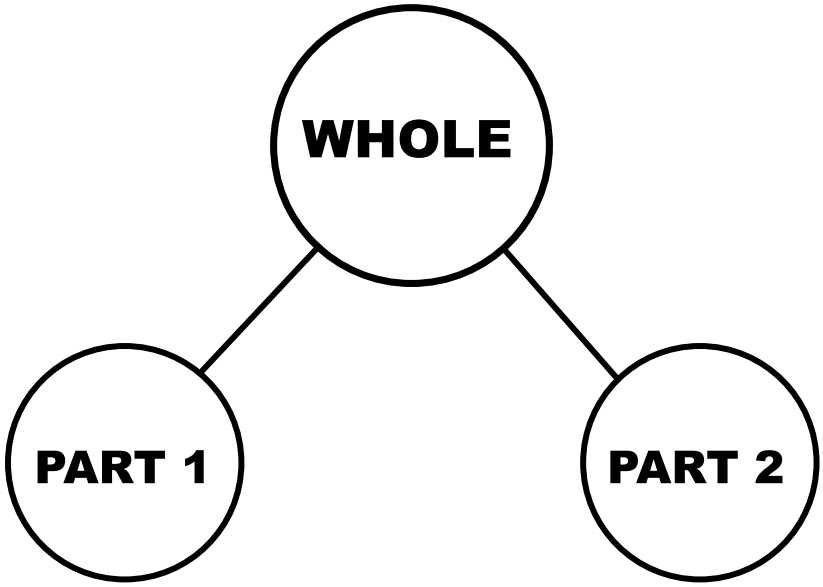
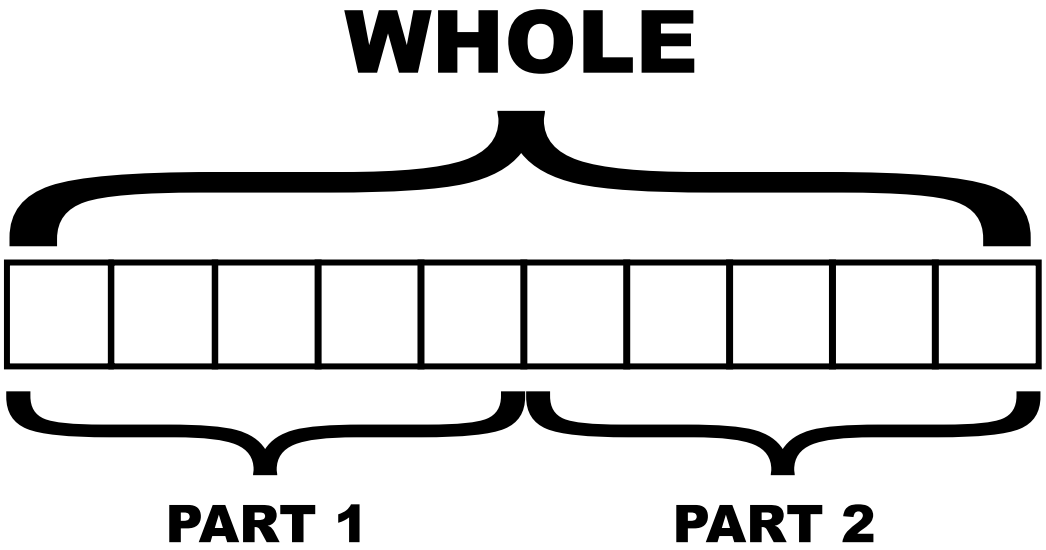


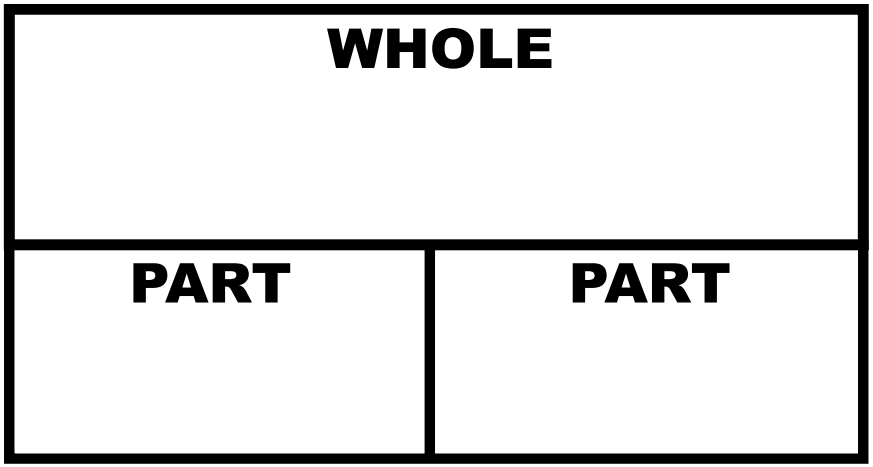
PART PART WHOLE

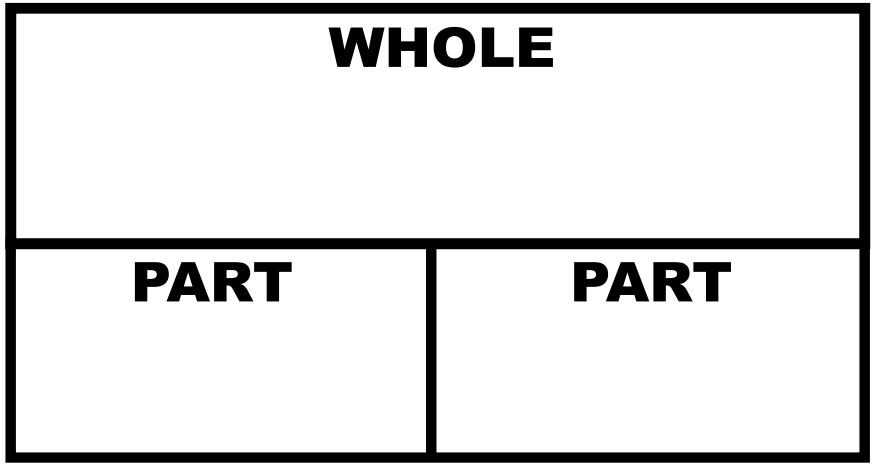




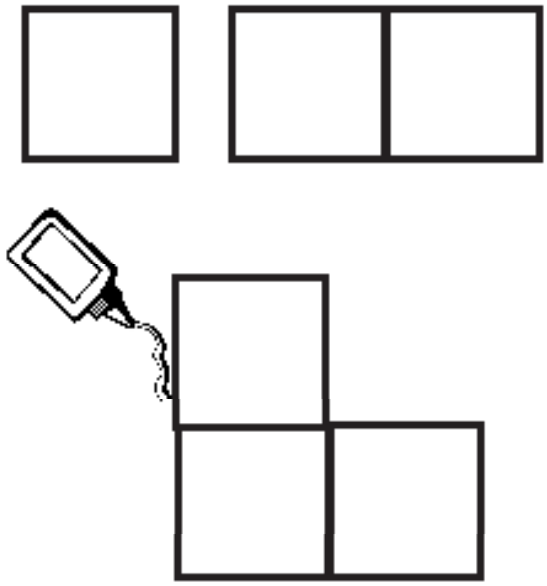
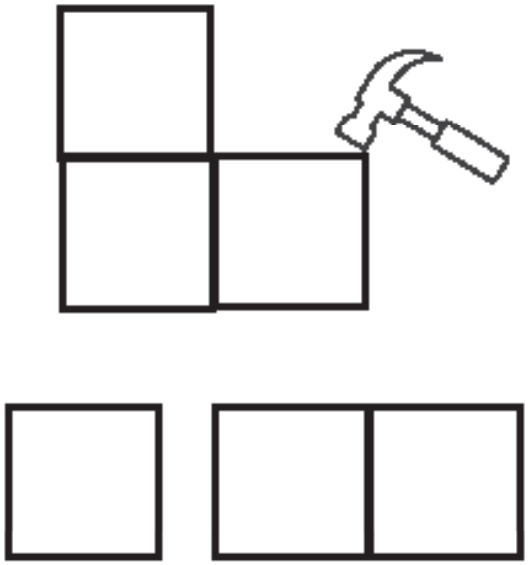


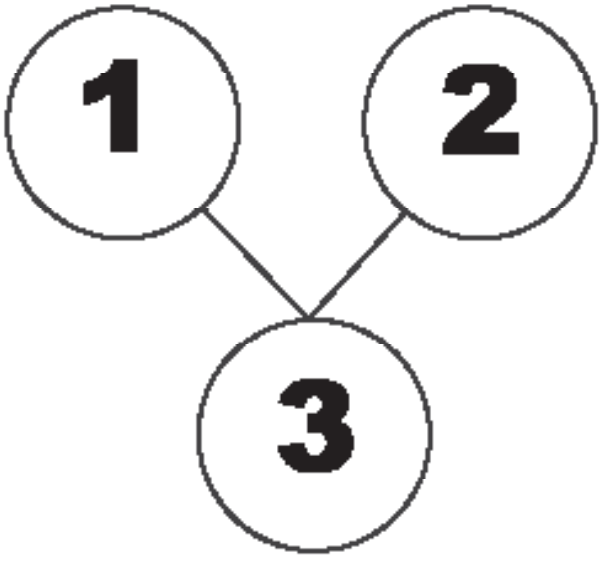
PART PART WHOLE MATS

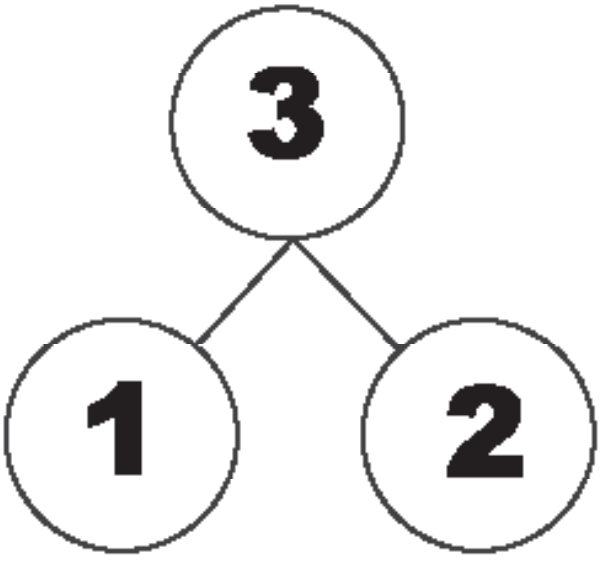




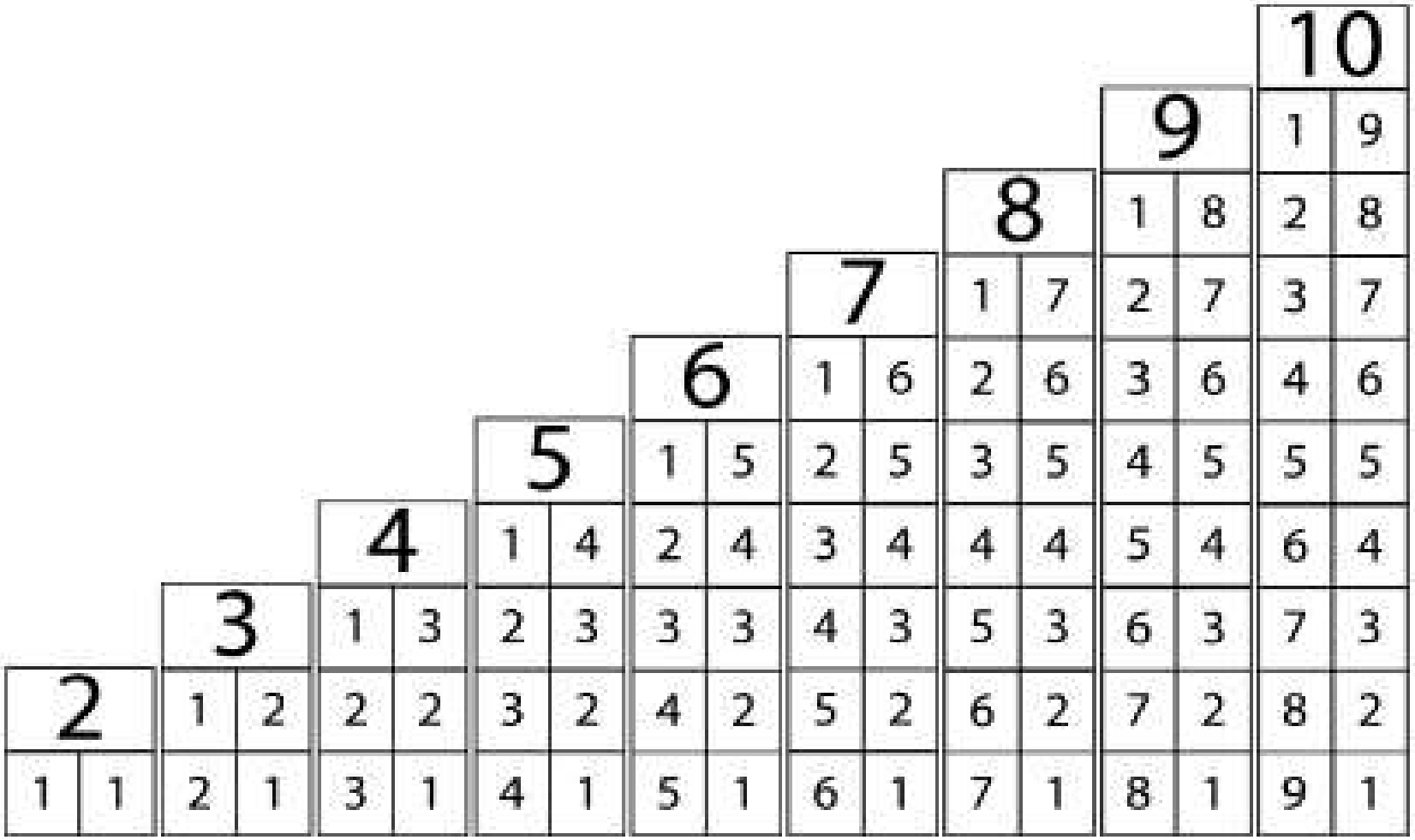
Composing and Decomposing

COMPOSE	DECOMPOSE
	





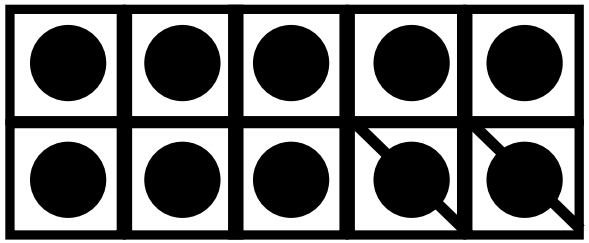
NUMBER STAIRCASE



SUBTRACTING WITHIN 10

In many states, the first grade fluency is addition and subtraction within 10. Students need many concrete, pictorial and abstract activities that help them to build a conceptual understanding of subtraction so that they will gain procedural fluency.

10 - 2



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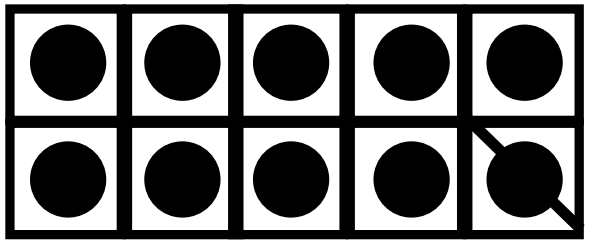
SUBTRACTING WITHIN 10

10 - 1



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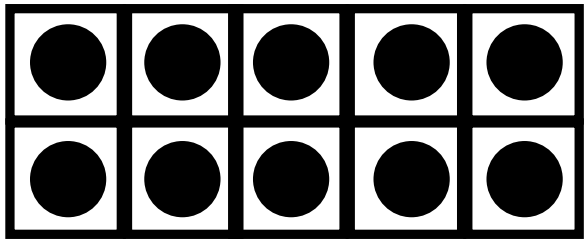
10 - 0



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10

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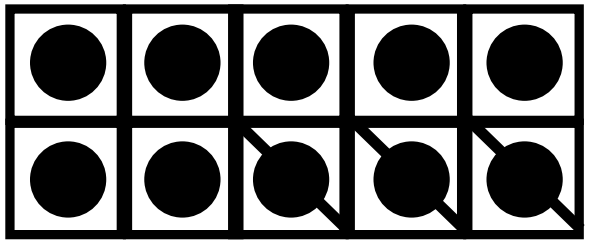
SUBTRACTING WITHIN 10

10 - 3



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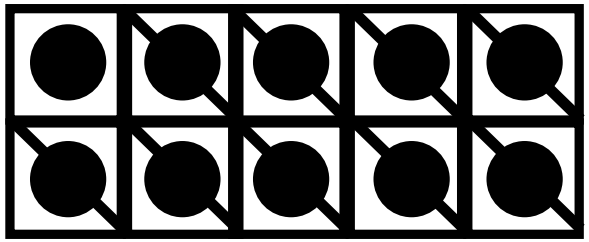
10 - 9



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1

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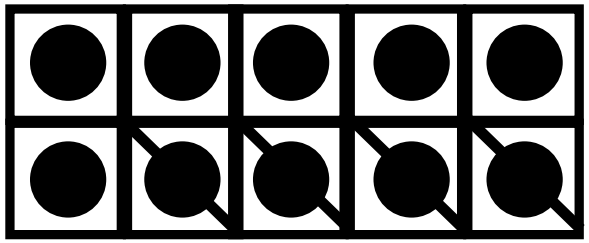
SUBTRACTING WITHIN 10

10 - 4



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6

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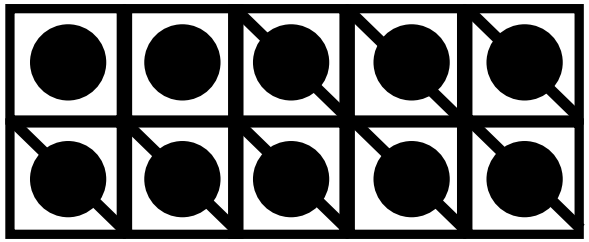
10 - 8



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2

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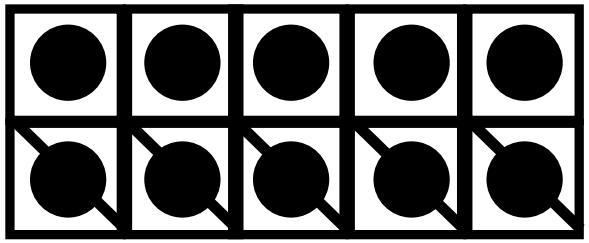
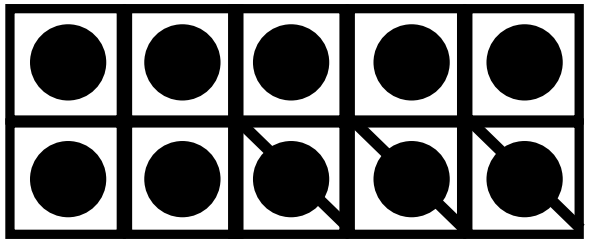
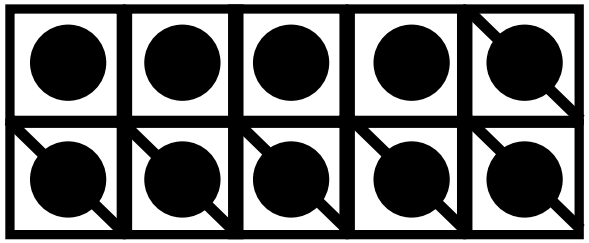
SUBTRACTING WITHIN 10

10 - 5  www.mathfactfluencyplayground.com	5 www.mathfactfluencyplayground.com
10 - 7  www.mathfactfluencyplayground.com	3 www.mathfactfluencyplayground.com

SUBTRACTING WITHIN 10

10 - 6



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MISSING NUMBERS TO 10

$5 - ? = 3$

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2

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*Look for doubles and make ten facts first

$8 - ? = 5$

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3

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MISSING NUMBERS TO 10

$3 - ? = 3$

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0

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*Look for doubles and make ten facts first

$7 - ? = 6$

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1

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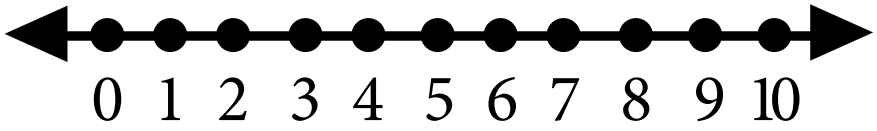
MISSING NUMBERS TO 10

$9 - ? = 5$



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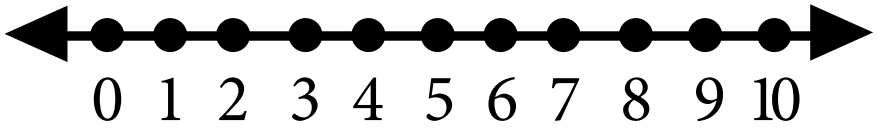
*Look for doubles and make ten facts first

$8 - ? = 5$



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3

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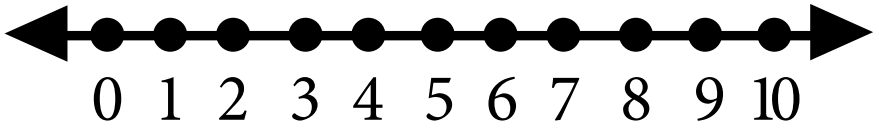
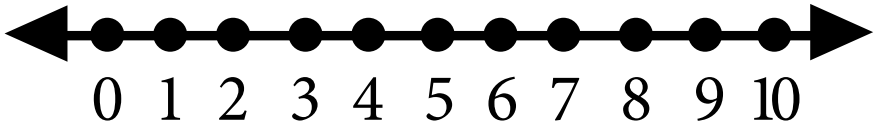
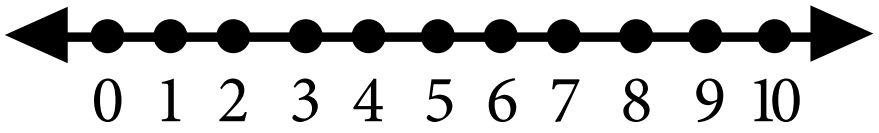
MISSING NUMBERS TO 10

10 - ? = 5  www.mathfactfluencyplayground.com	5 www.mathfactfluencyplayground.com
*Look for doubles and make ten facts first 8 - ? = 1  www.mathfactfluencyplayground.com	7 www.mathfactfluencyplayground.com

MISSING NUMBERS TO 10

$9 - ? = 0$



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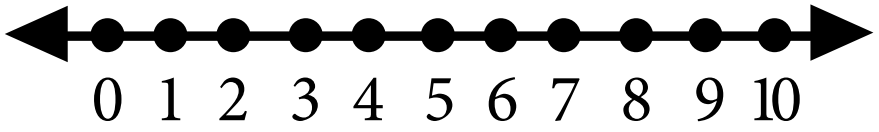
*Look for doubles and make ten facts first

$9 - ? = 1$



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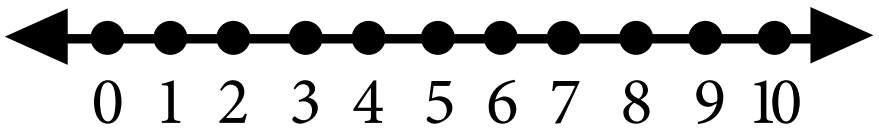
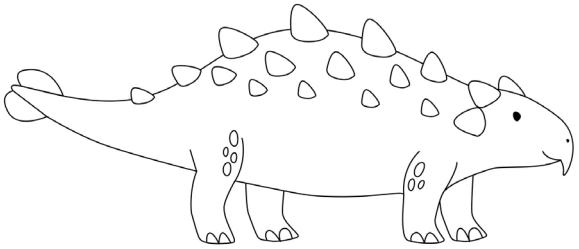
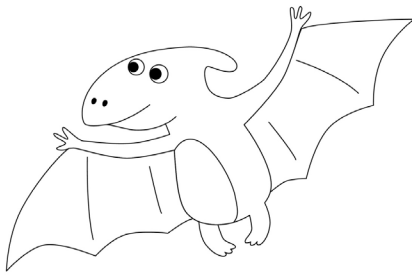
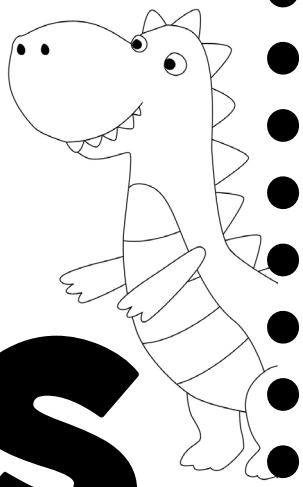
MISSING NUMBERS TO 10

10 - ? = 10  www.mathfactfluencyplayground.com	0 www.mathfactfluencyplayground.com

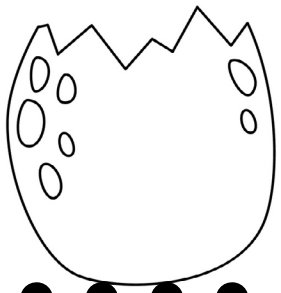


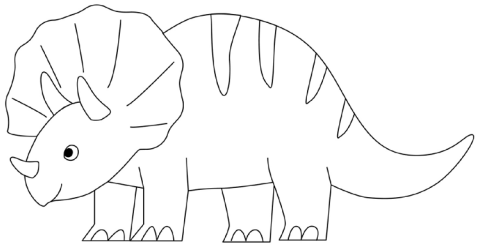




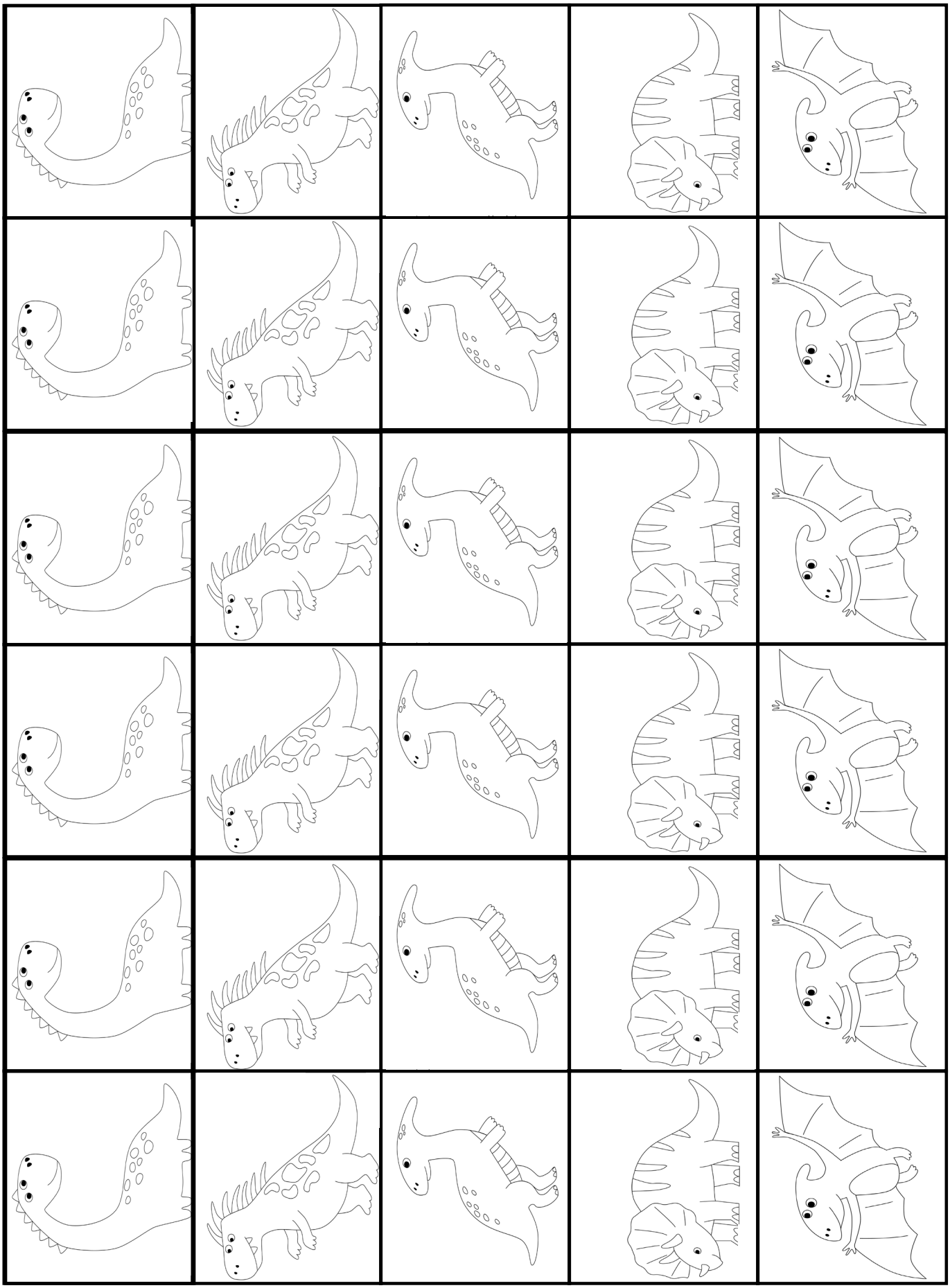
DINOSAURS
STORY MAT

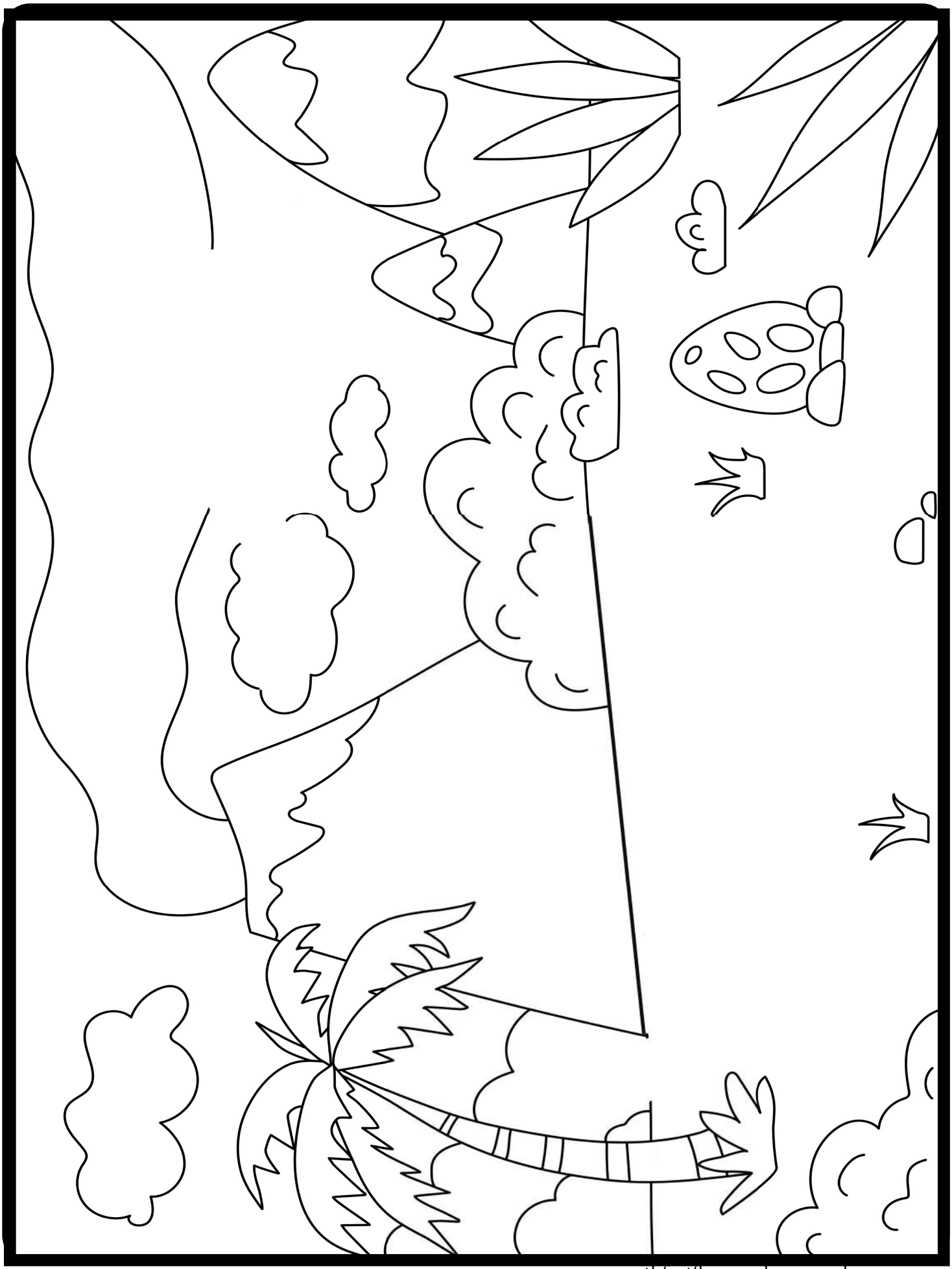
Use these story mats to make up and tell different stories.



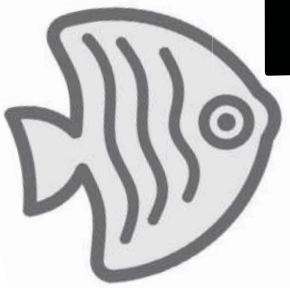


BY: DR NICKI NEWTON



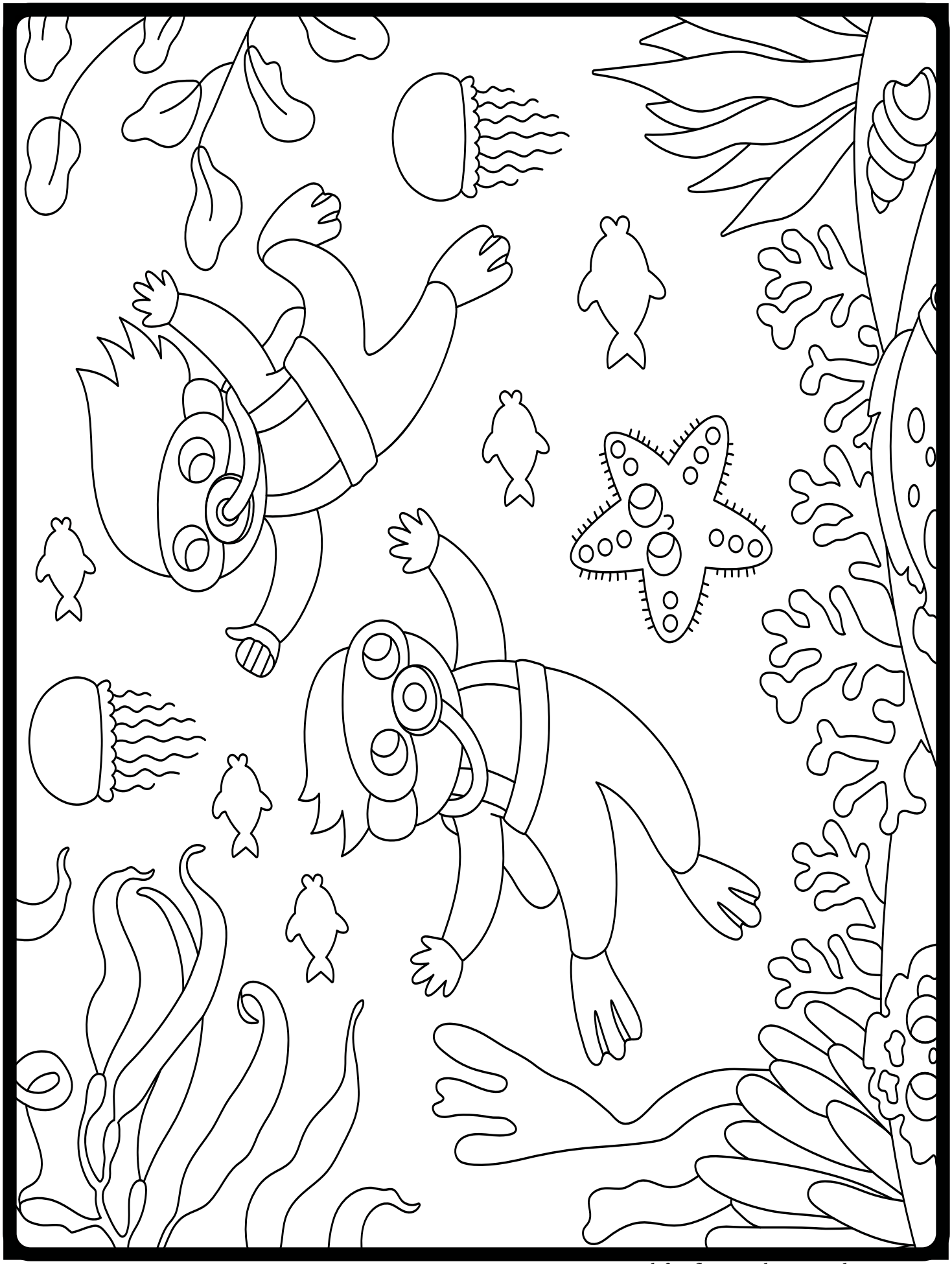


UNDER THE SEA STORY MAT



Use these story mats to make up and tell different stories.

BY: DR NICKI NEWTON



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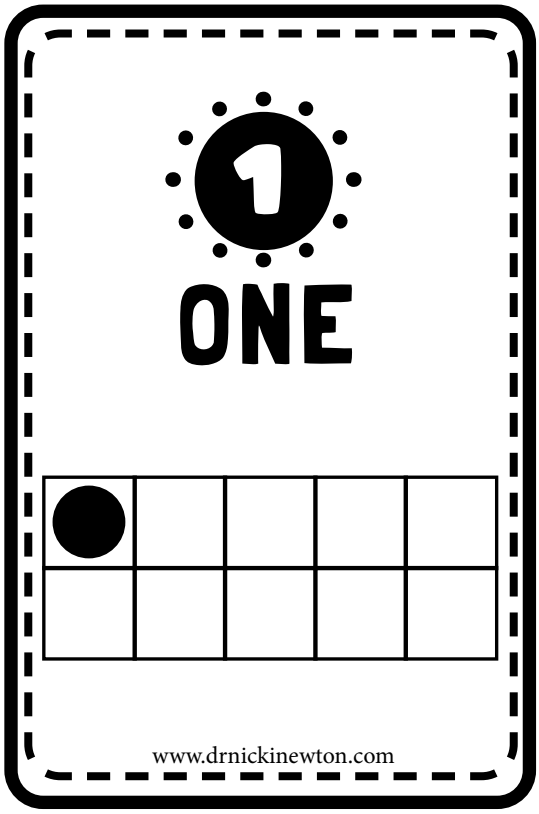

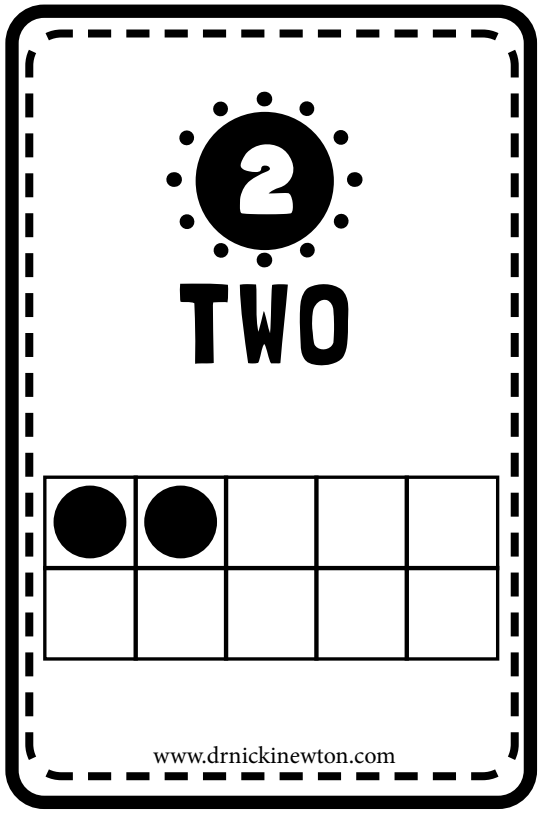

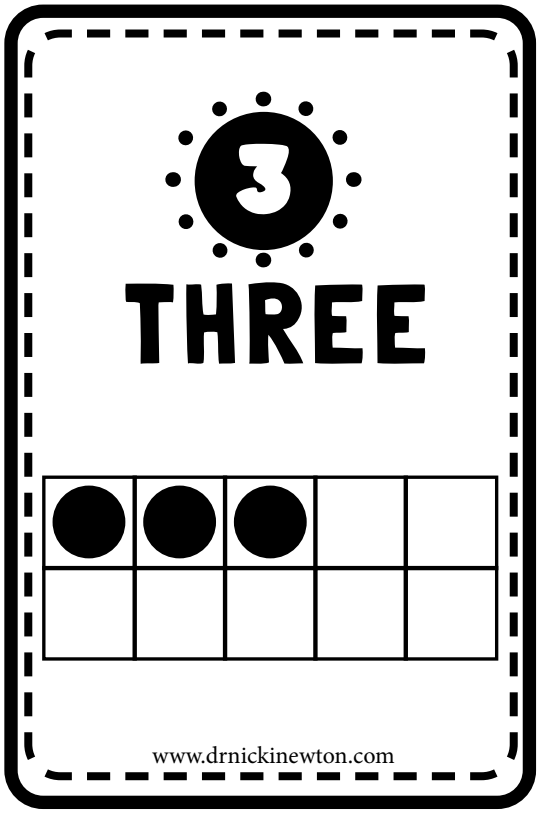

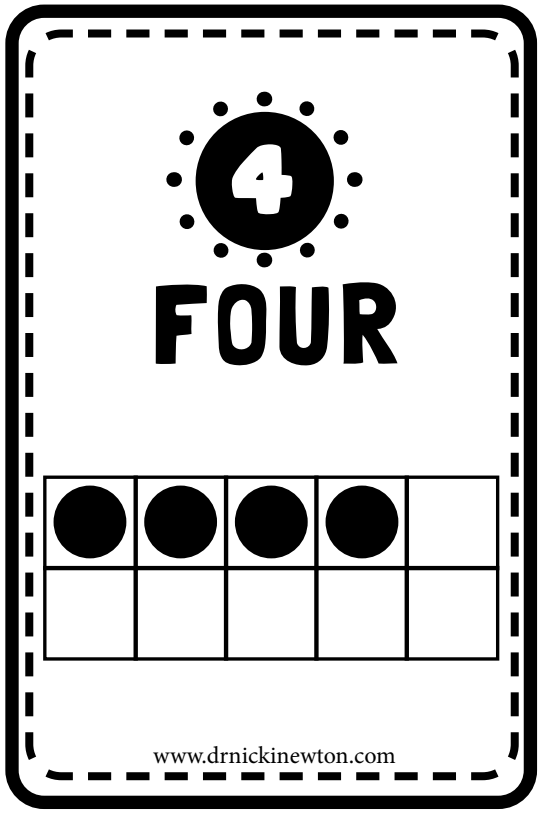

TEN FRAME CARDS

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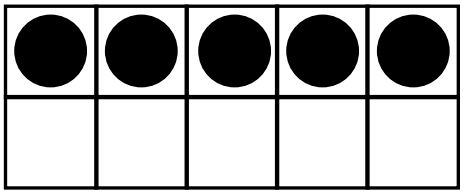
FIVE



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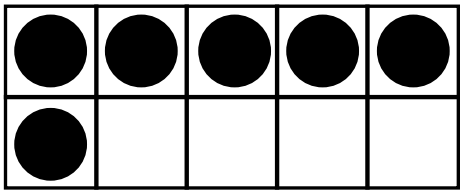
6

SIX



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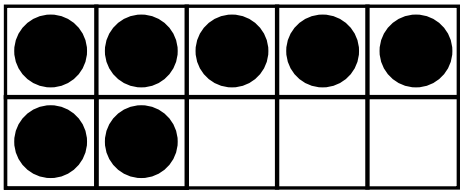
7

SEVEN



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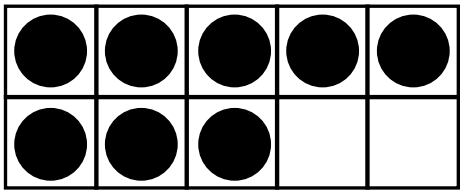
8

EIGHT



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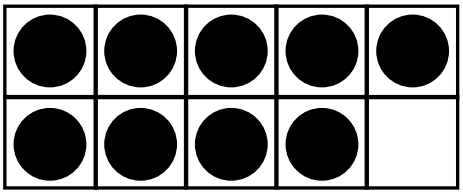
TEN FRAME CARDS

9

NINE



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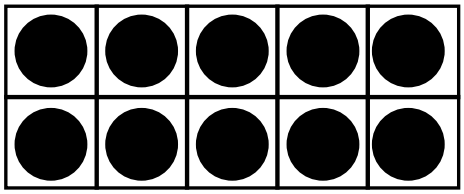
10

TEN



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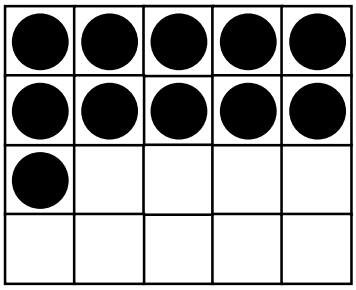
TWENTY FRAME CARDS

11

ELEVEN



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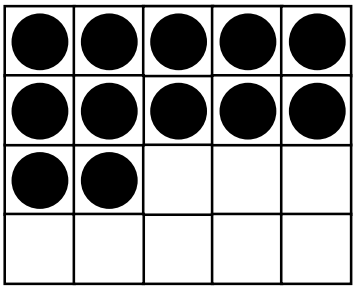
12

TWELVE



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TWENTY FRAME CARDS

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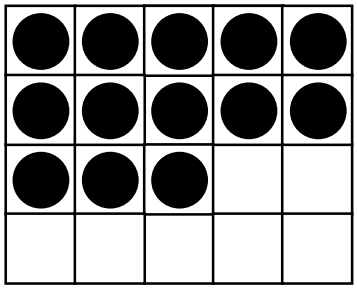
THIRTEEN



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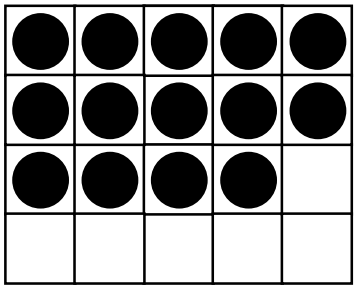
14

FOURTEEN



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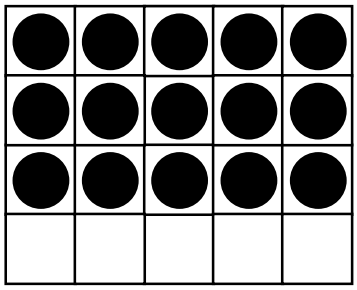
15

FIFTEEN



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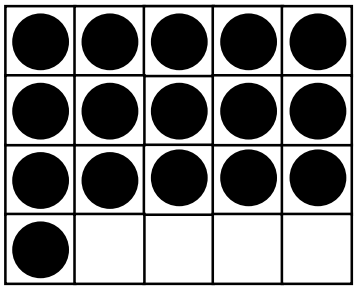
16

SIXTEEN



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TEN FRAME CARDS

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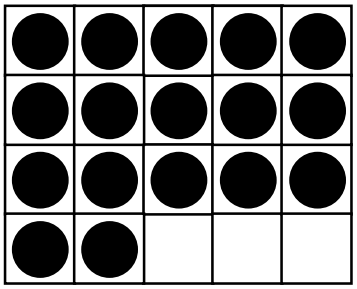
SEVENTEEN



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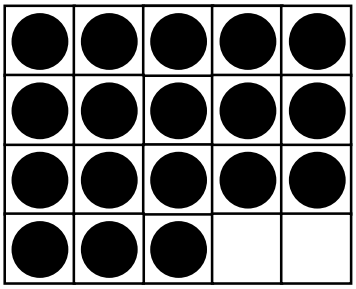
EIGHTEEN



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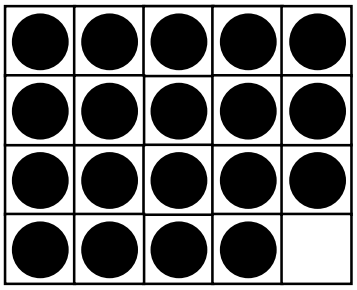
19

NINETEEN



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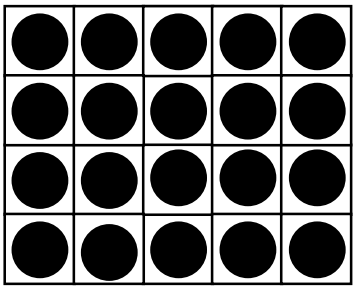
20

TWENTY



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BOOKMARKS

0

SUBTRACTION

0 - 0 = 0
1 - 0 = 1
2 - 0 = 2
3 - 0 = 3
4 - 0 = 4
5 - 0 = 5
6 - 0 = 6
7 - 0 = 7
8 - 0 = 8
9 - 0 = 9
10 - 0 = 10

0

SUBTRACTION

0 - 0 = 0
1 - 0 = 1
2 - 0 = 2
3 - 0 = 3
4 - 0 = 4
5 - 0 = 5
6 - 0 = 6
7 - 0 = 7
8 - 0 = 8
9 - 0 = 9
10 - 0 = 10

0

SUBTRACTION

0 - 0 = 0
1 - 0 = 1
2 - 0 = 2
3 - 0 = 3
4 - 0 = 4
5 - 0 = 5
6 - 0 = 6
7 - 0 = 7
8 - 0 = 8
9 - 0 = 9
10 - 0 = 10

BOOKMARKS

1

SUBTRACTION

1 - 0 = 1
1 - 1 = 0
2 - 1 = 1
3 - 1 = 2
4 - 1 = 3
5 - 1 = 4
6 - 1 = 5
7 - 1 = 6
8 - 1 = 7
9 - 1 = 8
10 - 1 = 9

1

SUBTRACTION

1 - 0 = 1
1 - 1 = 0
2 - 1 = 1
3 - 1 = 2
4 - 1 = 3
5 - 1 = 4
6 - 1 = 5
7 - 1 = 6
8 - 1 = 7
9 - 1 = 8
10 - 1 = 9

1

SUBTRACTION

1 - 0 = 1
1 - 1 = 0
2 - 1 = 1
3 - 1 = 2
4 - 1 = 3
5 - 1 = 4
6 - 1 = 5
7 - 1 = 6
8 - 1 = 7
9 - 1 = 8
10 - 1 = 9

BOOKMARKS

2

SUBTRACTION

2 - 0 = 2
2 - 1 = 1
2 - 2 = 0
3 - 2 = 1
4 - 2 = 2
5 - 2 = 3
6 - 2 = 4
7 - 2 = 5
8 - 2 = 6
9 - 2 = 7
10 - 2 = 8

2

SUBTRACTION

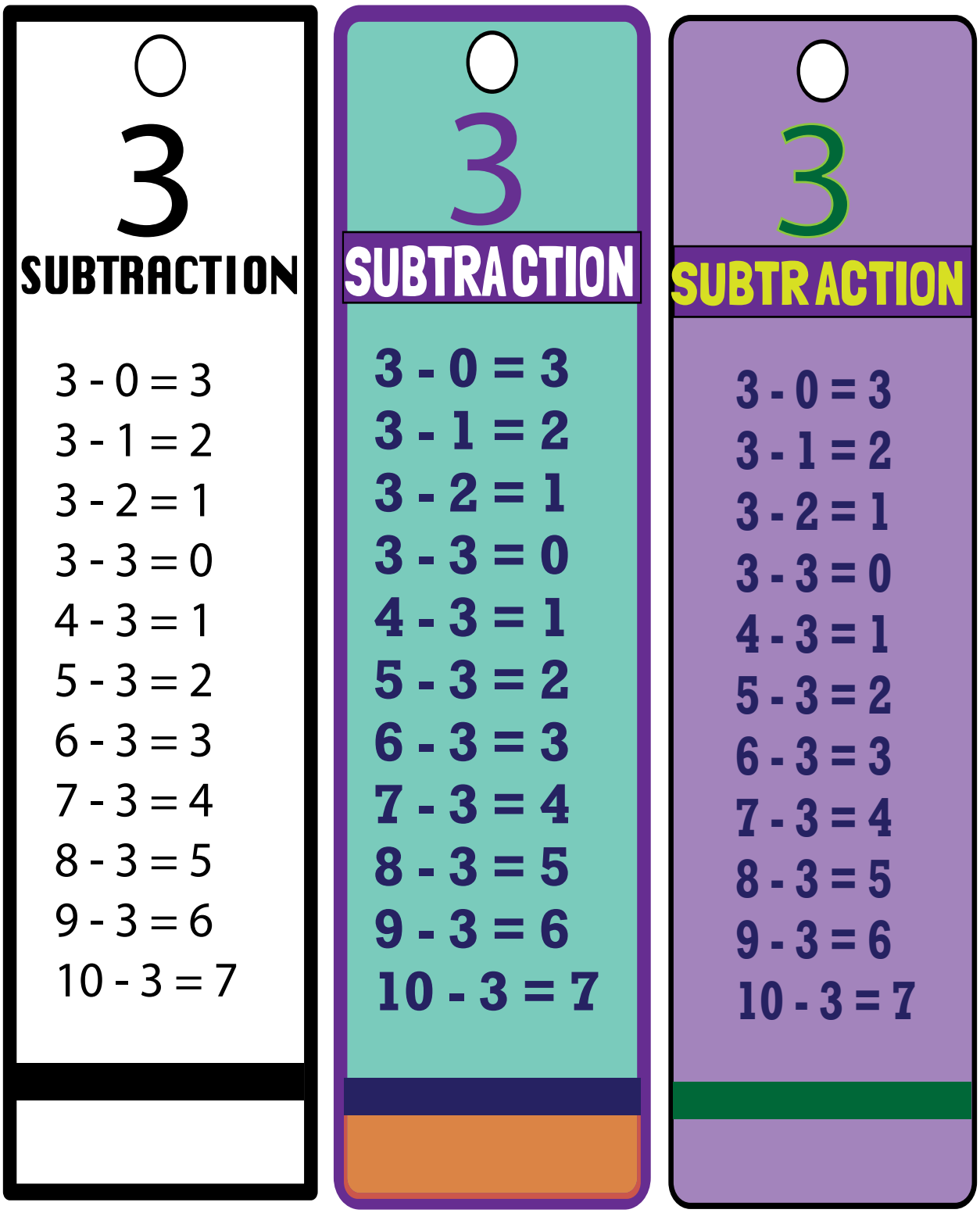
2 - 0 = 2
2 - 1 = 1
2 - 2 = 0
3 - 2 = 1
4 - 2 = 2
5 - 2 = 3
6 - 2 = 4
7 - 2 = 5
8 - 2 = 6
9 - 2 = 7
10 - 2 = 8

2

SUBTRACTION

2 - 0 = 2
2 - 1 = 1
2 - 2 = 0
3 - 2 = 1
4 - 2 = 2
5 - 2 = 3
6 - 2 = 4
7 - 2 = 5
8 - 2 = 6
9 - 2 = 7
10 - 2 = 8

BOOKMARKS


3
SUBTRACTION
3 - 0 = 3
3 - 1 = 2
3 - 2 = 1
3 - 3 = 0
4 - 3 = 1
5 - 3 = 2
6 - 3 = 3
7 - 3 = 4
8 - 3 = 5
9 - 3 = 6
10 - 3 = 7
3
SUBTRACTION
3 - 0 = 3
3 - 1 = 2
3 - 2 = 1
3 - 3 = 0
4 - 3 = 1
5 - 3 = 2
6 - 3 = 3
7 - 3 = 4
8 - 3 = 5
9 - 3 = 6
10 - 3 = 7
3
SUBTRACTION
3 - 0 = 3
3 - 1 = 2
3 - 2 = 1
3 - 3 = 0
4 - 3 = 1
5 - 3 = 2
6 - 3 = 3
7 - 3 = 4
8 - 3 = 5
9 - 3 = 6
10 - 3 = 7

BOOKMARKS

4
SUBTRACTION

4 - 0 = 4
4 - 1 = 3
4 - 2 = 2
4 - 3 = 1
4 - 4 = 0
5 - 4 = 1
6 - 4 = 2
7 - 4 = 3
8 - 4 = 4
9 - 4 = 5
10 - 4 = 6

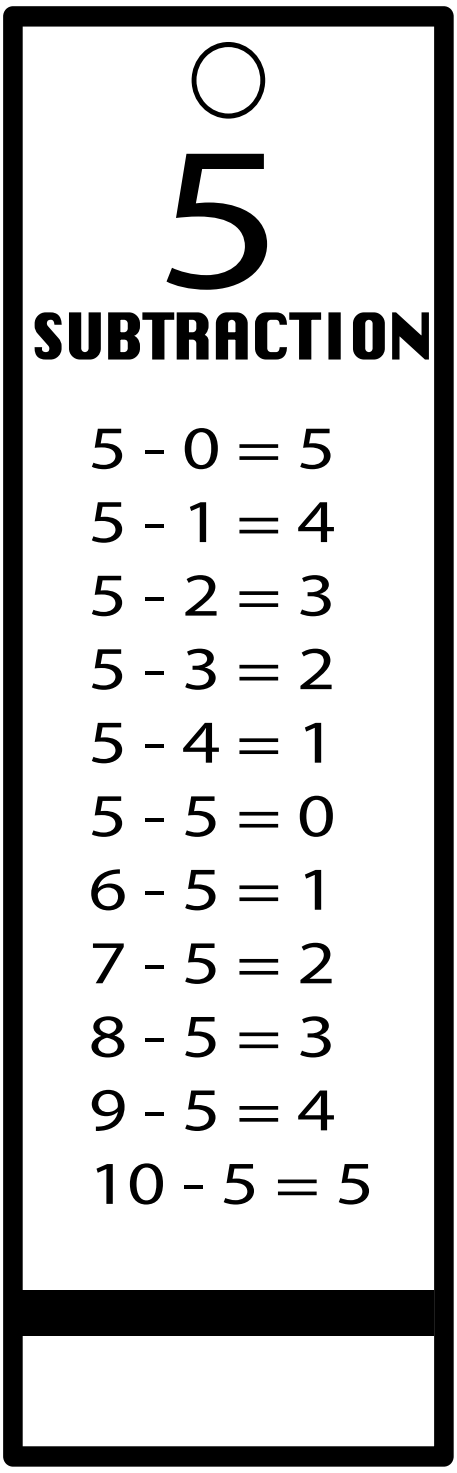
4
SUBTRACTION

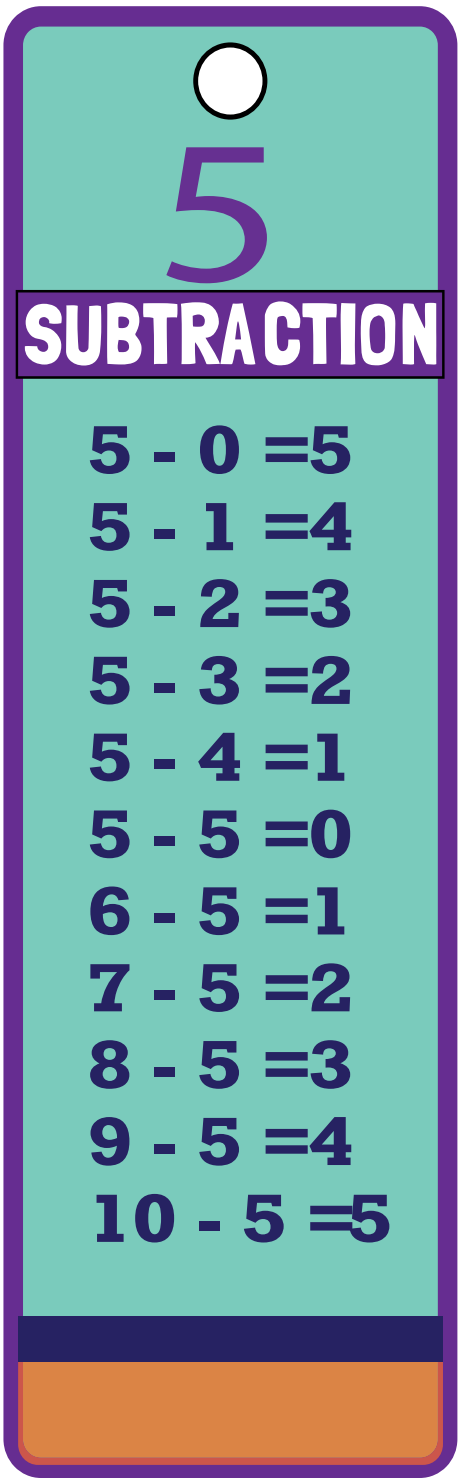
4 - 0 = 4
4 - 1 = 3
4 - 2 = 2
4 - 3 = 1
4 - 4 = 0
5 - 4 = 1
6 - 4 = 2
7 - 4 = 3
8 - 4 = 4
9 - 4 = 5
10 - 4 = 6

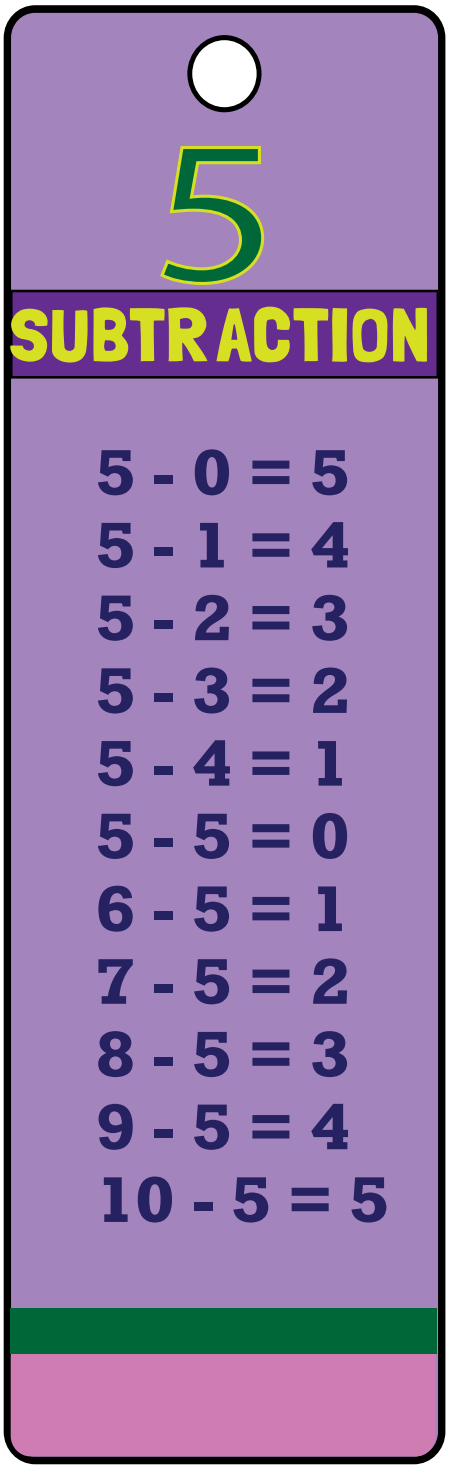
4
SUBTRACTION

4 - 0 = 4
4 - 1 = 3
4 - 2 = 2
4 - 3 = 1
4 - 4 = 0
5 - 4 = 1
6 - 4 = 2
7 - 4 = 3
8 - 4 = 4
9 - 4 = 5
10 - 4 = 6

BOOKMARKS


5
SUBTRACTION
5 - 0 = 5
5 - 1 = 4
5 - 2 = 3
5 - 3 = 2
5 - 4 = 1
5 - 5 = 0
6 - 5 = 1
7 - 5 = 2
8 - 5 = 3
9 - 5 = 4
10 - 5 = 5


5
SUBTRACTION
5 - 0 =5
5 - 1 =4
5 - 2 =3
5 - 3 =2
5 - 4 =1
5 - 5 =0
6 - 5 =1
7 - 5 =2
8 - 5 =3
9 - 5 =4
10 - 5 =5


5
SUBTRACTION
5 - 0 = 5
5 - 1 = 4
5 - 2 = 3
5 - 3 = 2
5 - 4 = 1
5 - 5 = 0
6 - 5 = 1
7 - 5 = 2
8 - 5 = 3
9 - 5 = 4
10 - 5 = 5

BOOKMARKS

6
SUBTRACTION

6 - 0 = 6
6 - 1 = 5
6 - 2 = 4
6 - 3 = 3
6 - 4 = 2
6 - 5 = 1
6 - 6 = 0
7 - 6 = 1
8 - 6 = 2
9 - 6 = 3
10 - 6 = 4

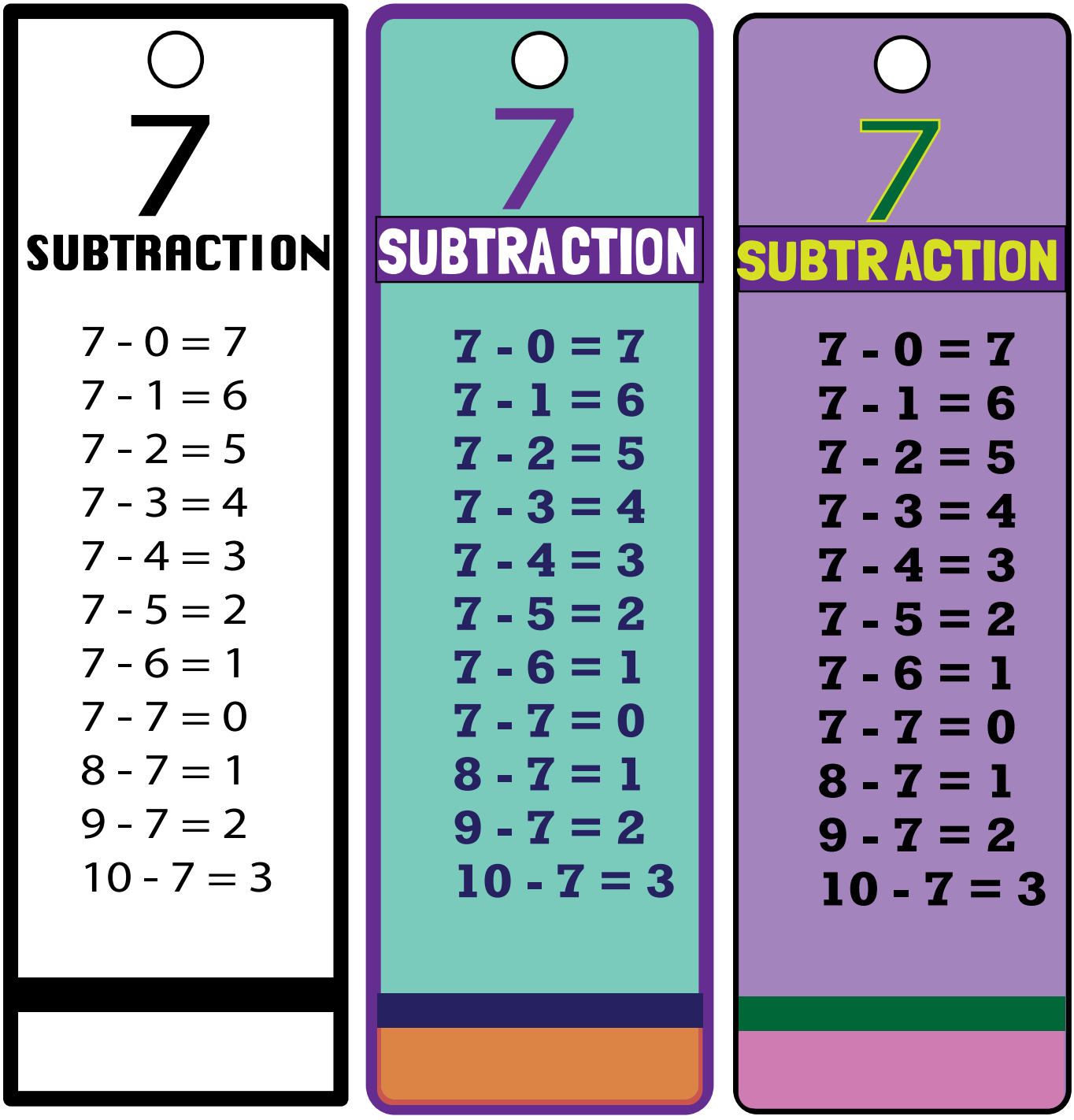
6
SUBTRACTION

6 - 0 = 6
6 - 1 = 5
6 - 2 = 4
6 - 3 = 3
6 - 4 = 2
6 - 5 = 1
6 - 6 = 0
7 - 6 = 1
8 - 6 = 2
9 - 6 = 3
10 - 6 = 4

6
SUBTRACTION

6 - 0 = 6
6 - 1 = 5
6 - 2 = 4
6 - 3 = 3
6 - 4 = 2
6 - 5 = 1
6 - 6 = 0
7 - 6 = 1
8 - 6 = 2
9 - 6 = 3
10 - 6 = 4

BOOKMARKS


7
SUBTRACTION
7 - 0 = 7
7 - 1 = 6
7 - 2 = 5
7 - 3 = 4
7 - 4 = 3
7 - 5 = 2
7 - 6 = 1
7 - 7 = 0
8 - 7 = 1
9 - 7 = 2
10 - 7 = 3
7
SUBTRACTION
7 - 0 = 7
7 - 1 = 6
7 - 2 = 5
7 - 3 = 4
7 - 4 = 3
7 - 5 = 2
7 - 6 = 1
7 - 7 = 0
8 - 7 = 1
9 - 7 = 2
10 - 7 = 3
7
SUBTRACTION
7 - 0 = 7
7 - 1 = 6
7 - 2 = 5
7 - 3 = 4
7 - 4 = 3
7 - 5 = 2
7 - 6 = 1
7 - 7 = 0
8 - 7 = 1
9 - 7 = 2
10 - 7 = 3

BOOKMARKS

8
SUBTRACTION

8 - 0 = 8
8 - 1 = 7
8 - 2 = 6
8 - 3 = 5
8 - 4 = 4
8 - 5 = 3
8 - 6 = 2
8 - 7 = 1
8 - 8 = 0
9 - 8 = 1
10 - 8 = 2

8
SUBTRACTION

8 - 0 = 8
8 - 1 = 7
8 - 2 = 6
8 - 3 = 5
8 - 4 = 4
8 - 5 = 3
8 - 6 = 2
8 - 7 = 1
8 - 8 = 0
9 - 8 = 1
10 - 8 = 2

8
SUBTRACTION

8 - 0 = 8
8 - 1 = 7
8 - 2 = 6
8 - 3 = 5
8 - 4 = 4
8 - 5 = 3
8 - 6 = 2
8 - 7 = 1
8 - 8 = 0
9 - 8 = 1
10 - 8 = 2

BOOKMARKS

9

SUBTRACTION

9 - 0 = 9
9 - 1 = 8
9 - 2 = 7
9 - 3 = 6
9 - 4 = 5
9 - 5 = 4
9 - 6 = 3
9 - 7 = 2
9 - 8 = 1
9 - 9 = 0
10 - 9 = 1

9

SUBTRACTION

9 - 0 = 9
9 - 1 = 8
9 - 2 = 7
9 - 3 = 6
9 - 4 = 5
9 - 5 = 4
9 - 6 = 3
9 - 7 = 2
9 - 8 = 1
9 - 9 = 0
10 - 9 = 1

9

SUBTRACTION

9 - 0 = 9
9 - 1 = 8
9 - 2 = 7
9 - 3 = 6
9 - 4 = 5
9 - 5 = 4
9 - 6 = 3
9 - 7 = 2
9 - 8 = 1
9 - 9 = 0
10 - 9 = 1

BOOKMARKS

10
SUBTRACTION

10 - 0 = 10
10 - 1 = 9
10 - 2 = 8
10 - 3 = 7
10 - 4 = 6
10 - 5 = 5
10 - 6 = 4
10 - 7 = 3
10 - 8 = 2
10 - 9 = 1
10 - 10 = 0

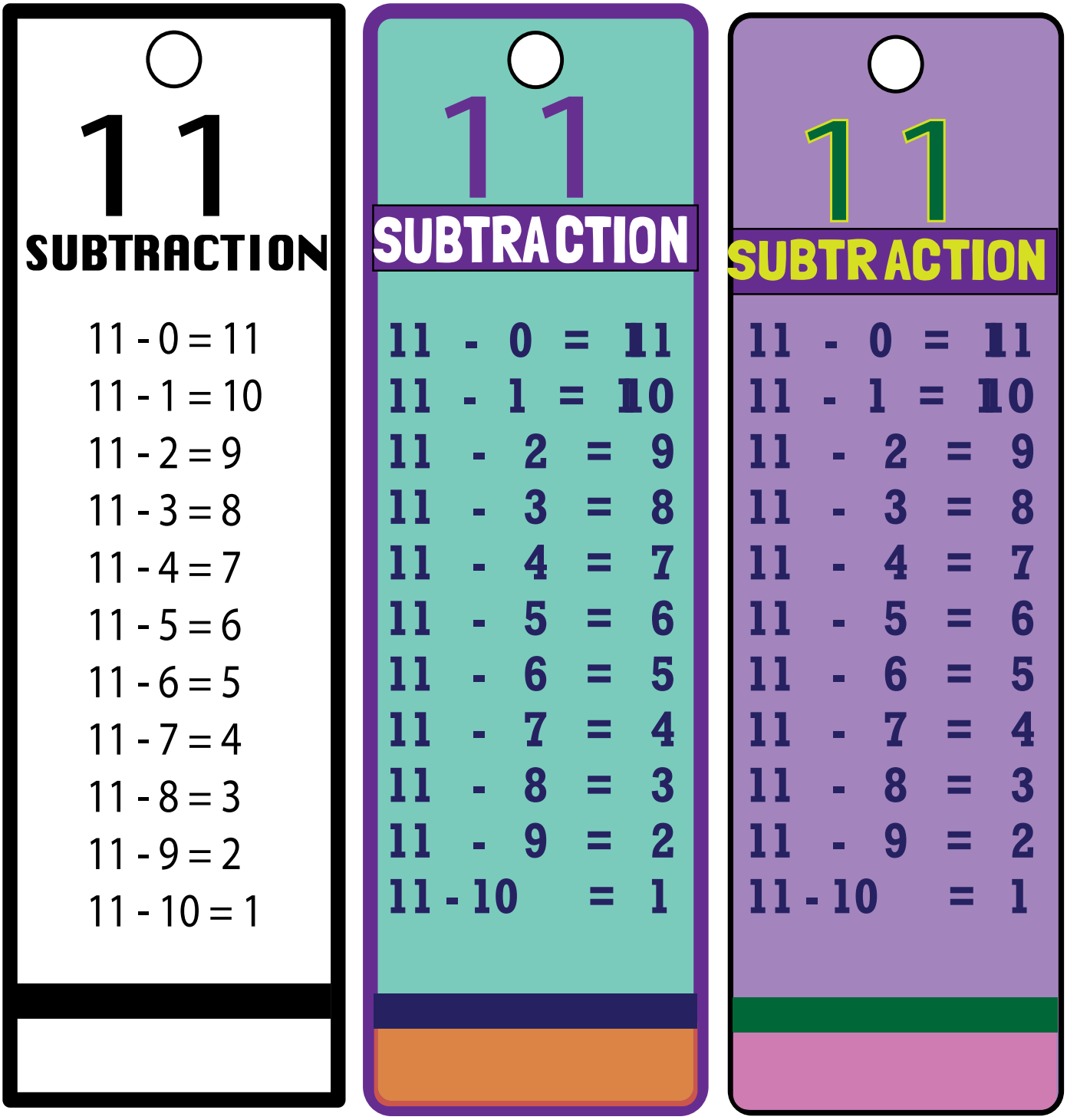
10
SUBTRACTION

10 - 0 = 10
10 - 1 = 9
10 - 2 = 8
10 - 3 = 7
10 - 4 = 6
10 - 5 = 5
10 - 6 = 4
10 - 7 = 3
10 - 8 = 2
10 - 9 = 1
10 - 10 = 0

10
SUBTRACTION

10 - 0 = 10
10 - 1 = 9
10 - 2 = 8
10 - 3 = 7
10 - 4 = 6
10 - 5 = 5
10 - 6 = 4
10 - 7 = 3
10 - 8 = 2
10 - 9 = 1
10 - 10 = 0

BOOKMARKS


11
SUBTRACTION
11 - 0 = 11
11 - 1 = 10
11 - 2 = 9
11 - 3 = 8
11 - 4 = 7
11 - 5 = 6
11 - 6 = 5
11 - 7 = 4
11 - 8 = 3
11 - 9 = 2
11 - 10 = 1
11
SUBTRACTION
11 - 0 = 11
11 - 1 = 10
11 - 2 = 9
11 - 3 = 8
11 - 4 = 7
11 - 5 = 6
11 - 6 = 5
11 - 7 = 4
11 - 8 = 3
11 - 9 = 2
11 - 10 = 1
11
SUBTRACTION
11 - 0 = 11
11 - 1 = 10
11 - 2 = 9
11 - 3 = 8
11 - 4 = 7
11 - 5 = 6
11 - 6 = 5
11 - 7 = 4
11 - 8 = 3
11 - 9 = 2
11 - 10 = 1

BOOKMARKS

12
SUBTRACTION

12 - 0 = 12
12 - 1 = 11
12 - 2 = 10
12 - 3 = 9
12 - 4 = 8
12 - 5 = 7
12 - 6 = 6
12 - 7 = 5
12 - 8 = 4
12 - 9 = 3
12 - 10 = 2

12
SUBTRACTION

12 - 0 = 12
12 - 1 = 11
12 - 2 = 10
12 - 3 = 9
12 - 4 = 8
12 - 5 = 7
12 - 6 = 6
12 - 7 = 5
12 - 8 = 4
12 - 9 = 3
12 - 10 = 2

12
SUBTRACTION

12 - 0 = 12
12 - 1 = 11
12 - 2 = 10
12 - 3 = 9
12 - 4 = 8
12 - 5 = 7
12 - 6 = 6
12 - 7 = 5
12 - 8 = 4
12 - 9 = 3
12 - 10 = 2

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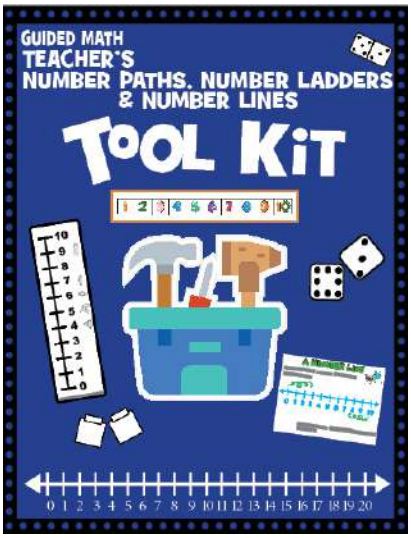

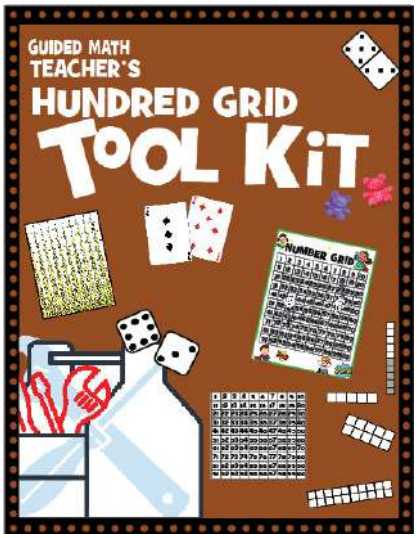

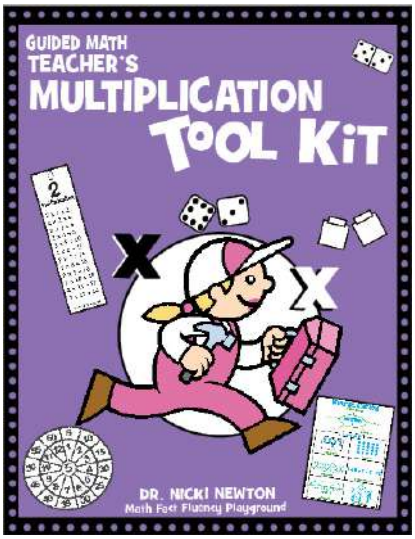

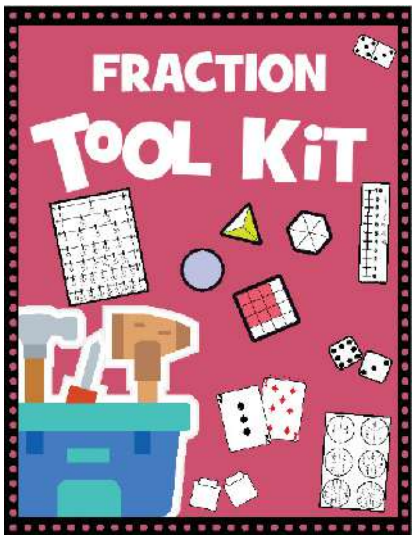

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GUIDED MATH SUBTRACTION MATS TEACHER'S TOOL KIT

Guided Math Templates help students to visualize and do the math.

This must-have book of resources provides teachers with the templates, tools, and blackline masters that they need to use to support children in learning subtraction. There are also number bonds. Built on Dr. Nicki's work with students and teachers around the world, these research based, student friendly resources allow all students to access the knowledge and skills needed to learn and practice subtraction.

This powerful resource includes:

- Thinking Templates so that students can practice and model their thinking. These include five frames, ten frames and twenty frames as well as number paths and number lines. There are also number bonds, part-part whole mats and spinners. Many of these templates are on the same page so students can solve one way and check another.

- Board Games that help students to practice their facts in fun and engaging ways. There are some premade games and other blank game templates so that the teacher can create differentiated game boards and also so that students can build their own games.

- Visual Flashcards that help students to practice their facts in fun and engaging ways. There are some premade ones. There are also blank flashcard templates so that the teacher and/or the student can make differentiated ones.

- Story Mats and Paper Manipulatives can help students to act out different problems. These 2 tools help students to not only solve but also to tell word problems. As with the other resources in this book, they work on visualizing and acting out the problems.

The Guided Math Teacher's Subtration Toolkit is the essential resource for teachers to prepare and deliver hands-on, visual lessons.