SNOWBALL SLINGSHOT MATH

CREATED BY BROOKE BROWN

CONTENTS

Snowball Slingshot Math Stations

The following Snowball Slingshot math activities are perfect for winter or Winter Parties! Each activity or game is designed to be used with mini marshmallows or white pom pom balls. Students will also need to construct a simple slingshot device to launch their marshmallows and will need:

- 1 plastic 3-oz mini cup
- 1 7-inch balloon
- scissors

Instructions for creating the snowball slingshot are found on the following page.

Each station should be modeled and discussed with the teacher before being completed by students. 4-6 students can work at one station at a time, and each station should take students about 15-20 minutes to complete. Each station has a card tent with instructions as well as student recording sheets.

STATION MATERIALS

SNOWBALL SPLAT	• mini marshmallow and slingshot • snowball splat number mat taped together
SOARING SNOWBALLS	• mini marshmallow and slingshot • "Start Here" card • measurement cards
SNOW GLOBE SWISH	• mini marshmallow and slingshot • 6 large cups with paper snow globes attached
SNOWMAN SMASH	• mini marshmallow and slingshot • 12-15 mini cups with place value blocks attached
OPTIONAL BONUS: SNOWBALL STRUCTURES	• 24 mini marshmallows per student (you can also used white playdough) • 24 toothpicks

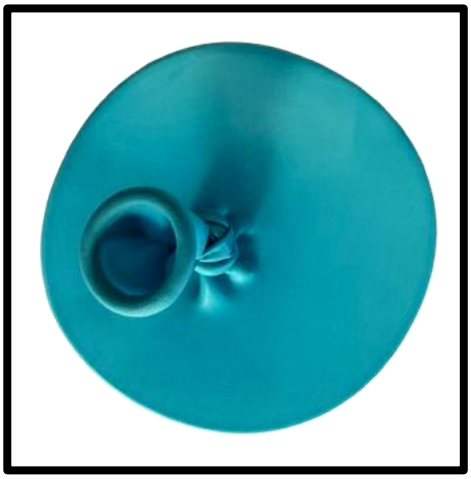
Marshmallow Slingshots

1) Cut the bottom off a plastic 3-oz mini cup.

2) Tie the balloon.

3) Snip the end off the other side of the balloon.

4) Stretch the balloon opening around the larger rimmed end of the cup.

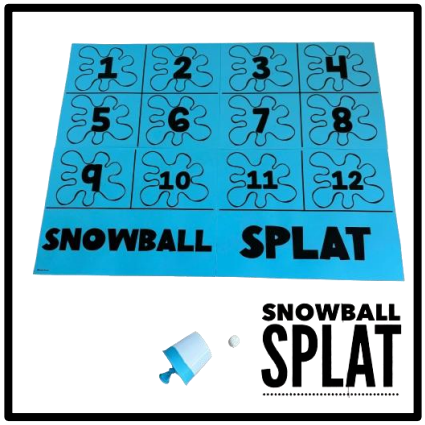


Place a marshmallow inside the opening of the cup. Pull the knot on the balloon back to launch the marshmallow.

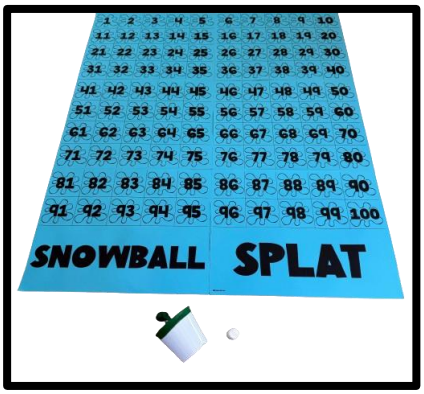
SNOWBALL SLINGSHOT STATIONS

Tape rulers together.

Tape number mats together and place against a wall.

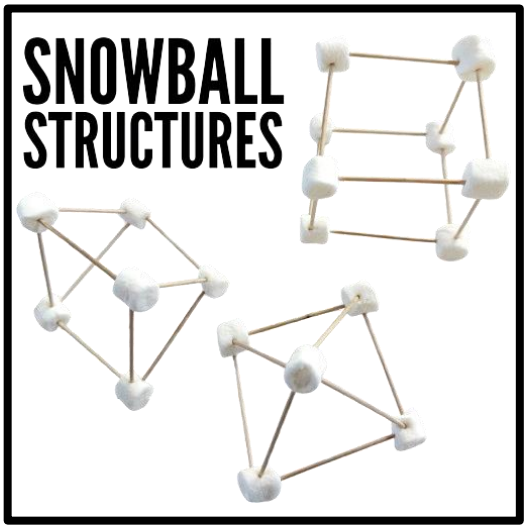


2 MAT OPTIONS

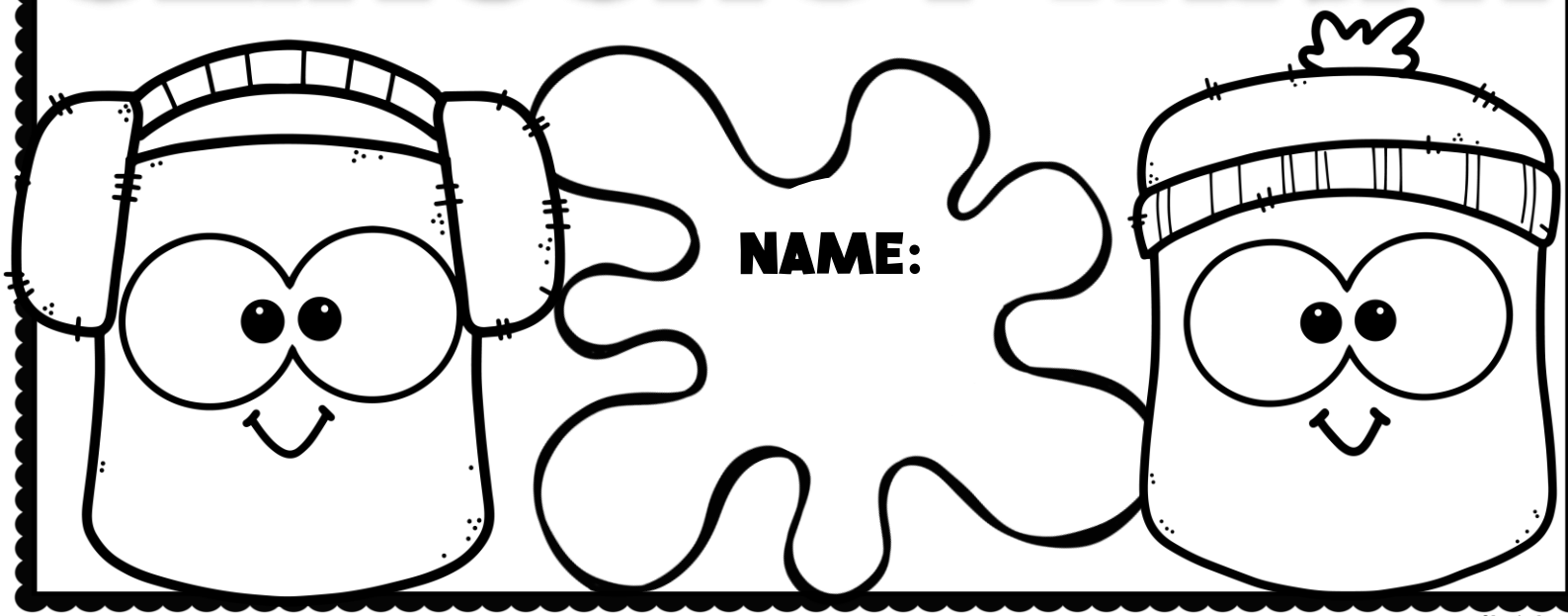


Arrange cups against a wall.

Stack cups in snowman shapes.

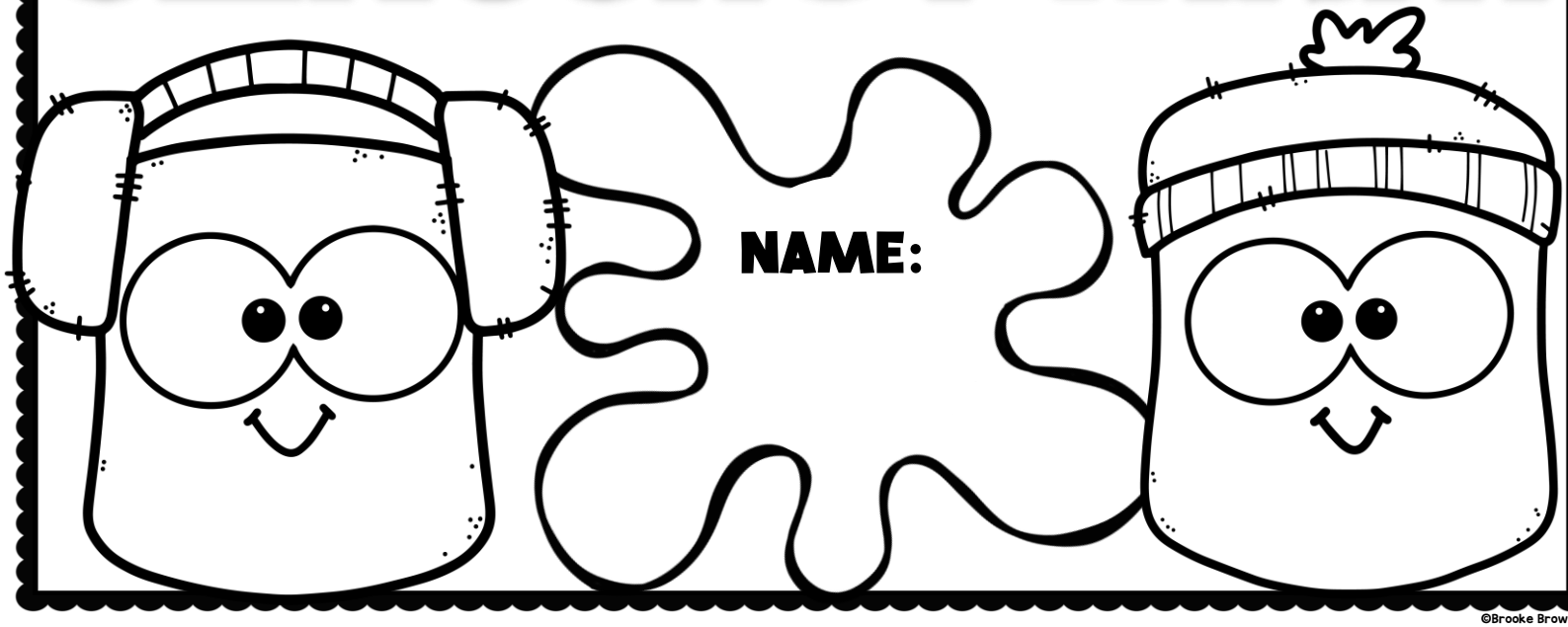


SNOWBALL SLINGSHOT MATH



NAME:

SNOWBALL SLINGSHOT MATH



NAME:

©Brooke Brown

SNOWBALL SPLAT

There are several different variations of this activity, so it is easy to differentiate for multiple ages and abilities. Two different number mats are provided:

Pages 13-16: Numbers 1-12
Pages 17-22: Numbers 1-100

After taping a number mat together, place it on the floor against a wall.

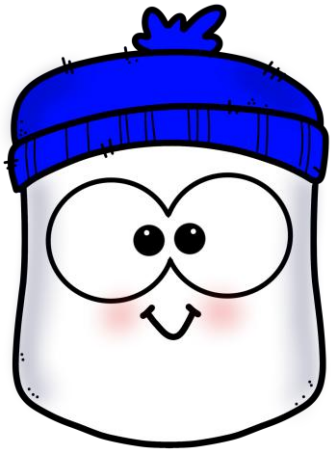
VARIATIONS:

- Names for a Number
- Comparing Numbers
- Addition Basic Facts
- Double-Digit Addition
- Subtraction Basic Facts
- Double-Digit Subtraction
- Multiplication Basic Facts
- Double-Digit Multiplication

SNOWBALL SPLAT

NAMES FOR A NUMBER

1) Launch your marshmallow onto the Snowball Splat mat.
2) Write down the number that your marshmallow lands on.
3) Write 3 different "names" for that number. You can draw pictures, make tally marks, write words, or write number models/equations.



NAMES FOR THE NUMBER **12**

twelve

10 + 2

SNOWBALL SPLAT

COMPARING NUMBERS

1) Launch your marshmallow onto the Snowball Splat mat.
2) Write down the number that your marshmallow lands on.
3) Launch your marshmallow again and write down the second number.
4) Write the symbol in the middle to compare the values of the numbers: < (less than), > (greater than), or = (equal).

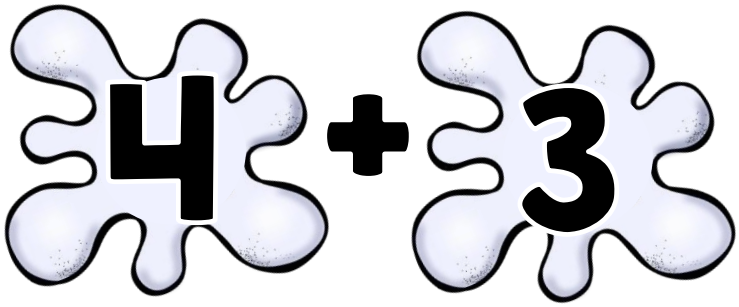
12 > 8

LAUNCH 1 LAUNCH 2

SNOWBALL SPLAT

ADDITION

1) Launch your marshmallow onto the Snowball Splat mat.
2) Write down the number that your marshmallow lands on.
3) Launch your marshmallow onto the mat again.
4) Write down the second number.
5) Add the numbers together and write the sum.



LAUNCH 1 LAUNCH 2

SNOWBALL SPLAT

SUBTRACTION

1) Launch your marshmallow onto the Snowball Splat mat.
2) Repeat to launch your marshmallow one more time.
3) Write down the larger number first and the smaller number second.
4) Subtract the numbers and write the difference.

9 - 5 = 4

LAUNCH 1 LAUNCH 2

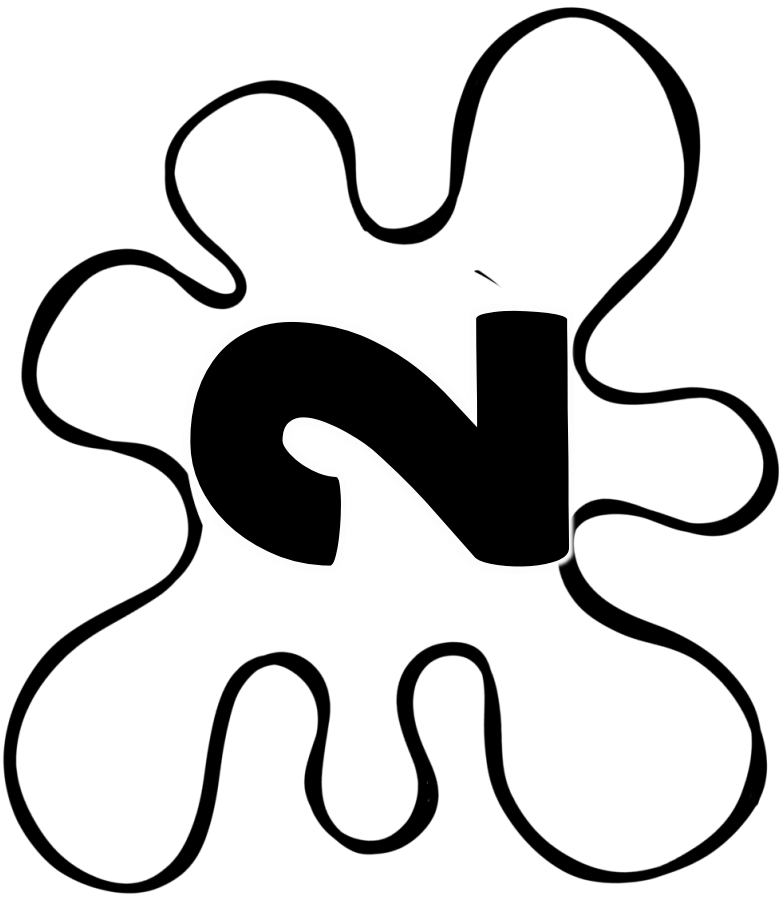
SNOWBALL SPLAT

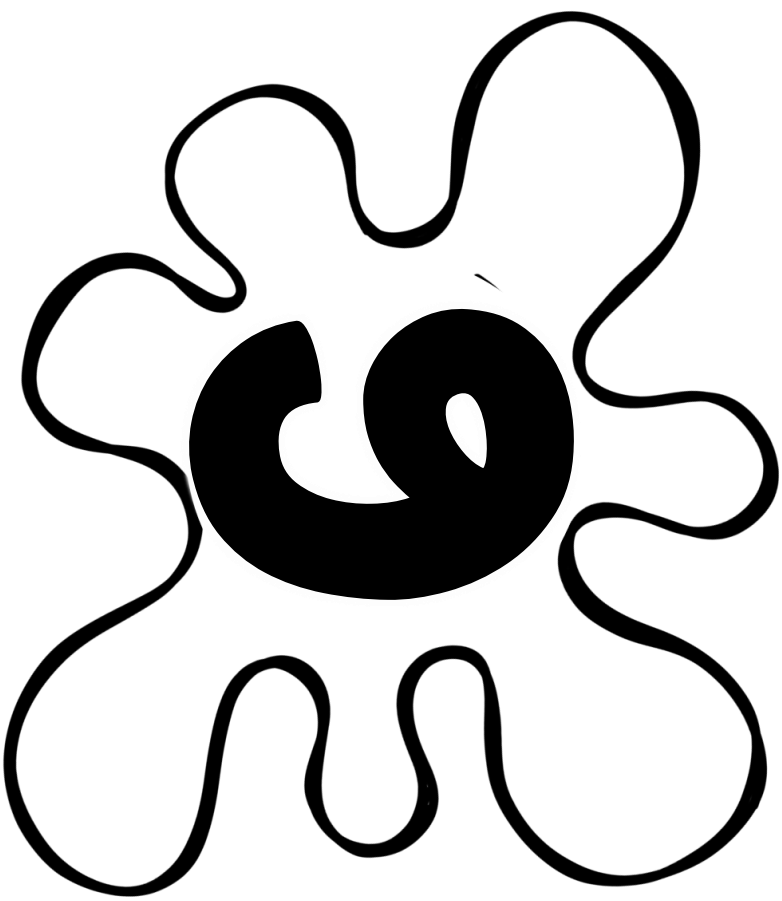
MULTIPLICATION

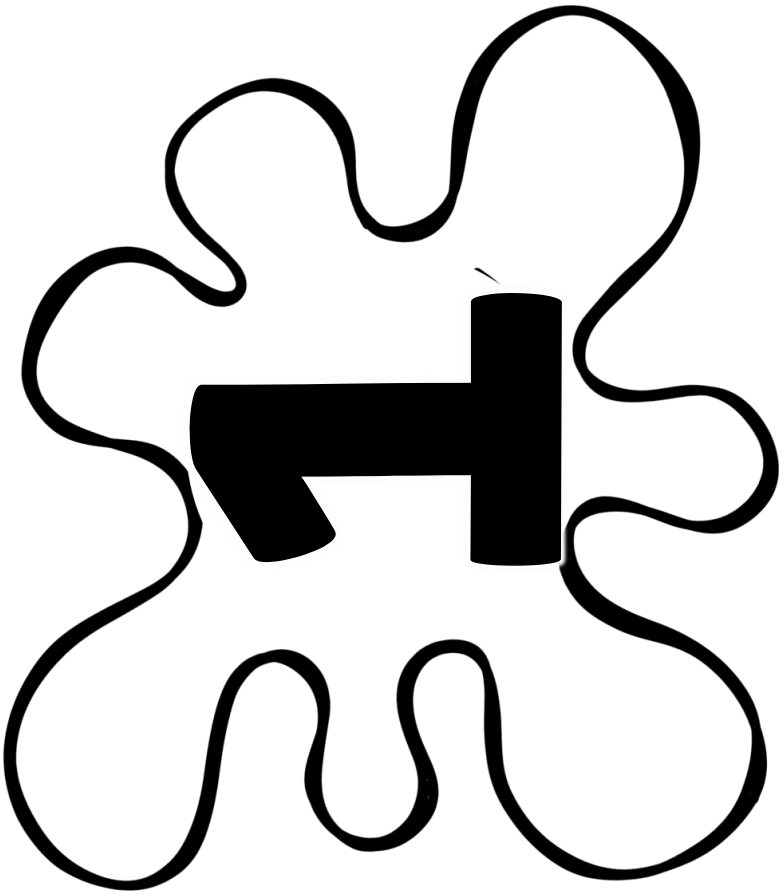
1) Launch your marshmallow onto the Snowball Splat mat.
2) Write down the number that your marshmallow lands on.
3) Launch your marshmallow onto the mat again.
4) Write down the second number.
5) Multiply the numbers together and write the product.

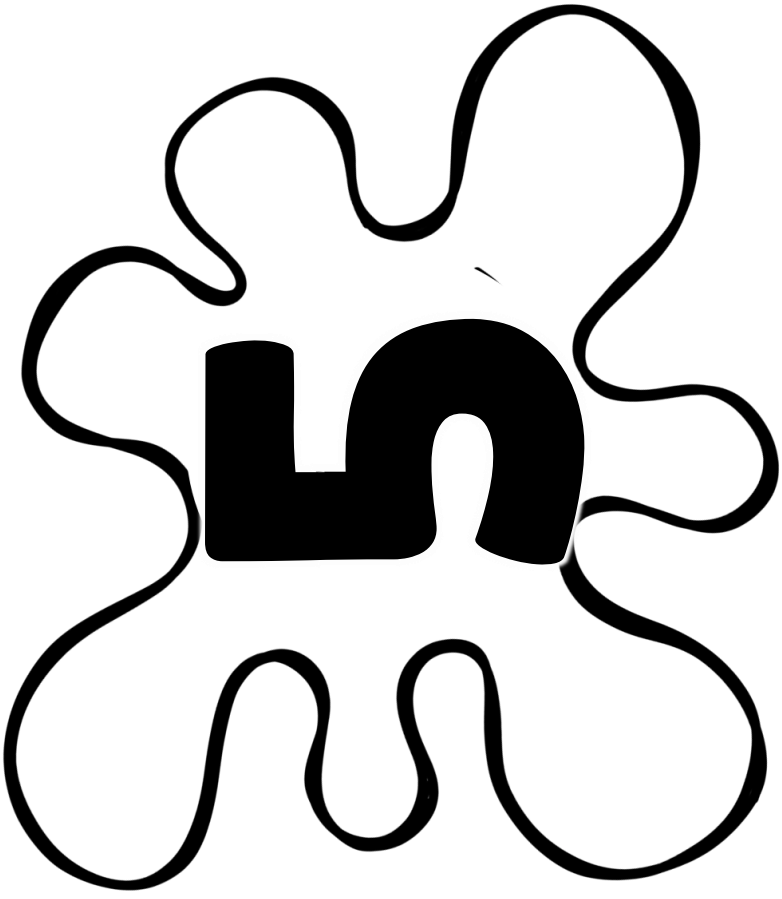
4 x 5 = 20

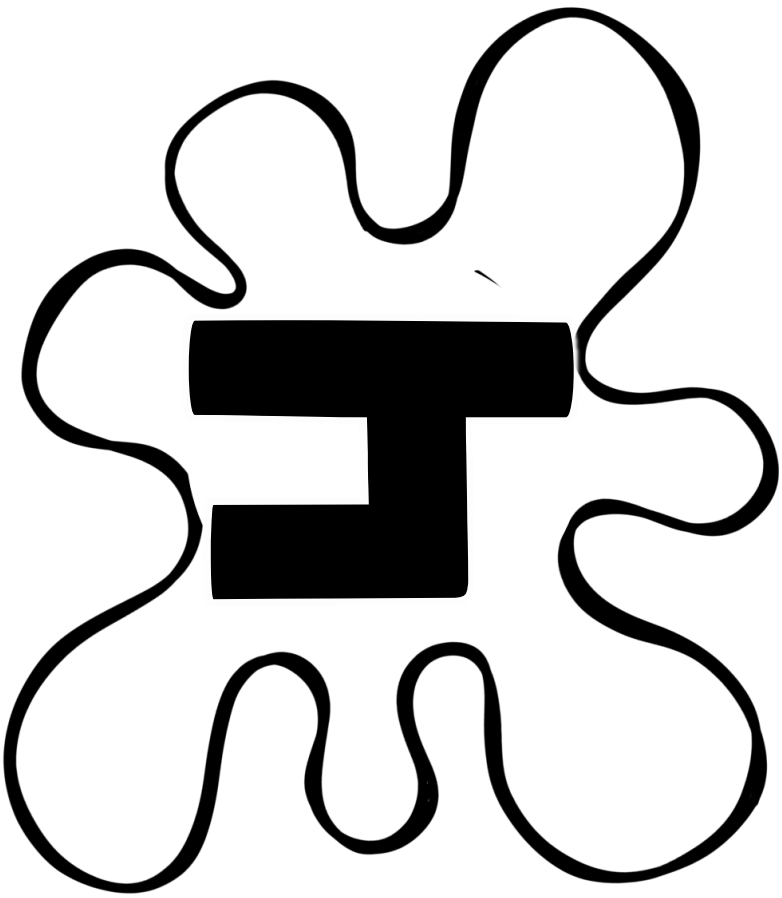
LAUNCH 1 LAUNCH 2

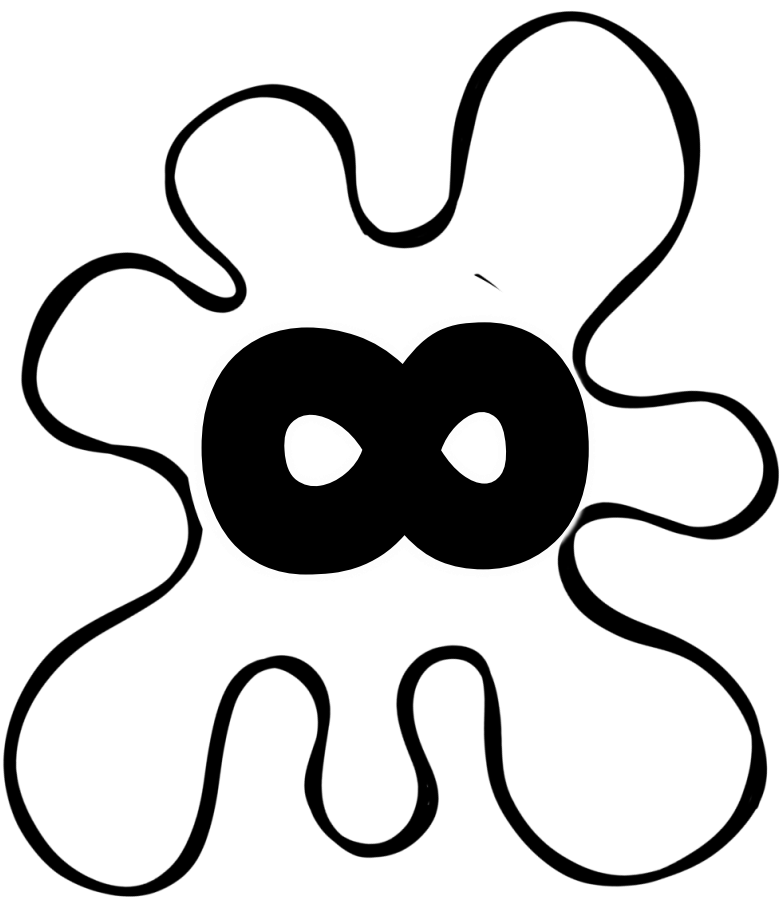


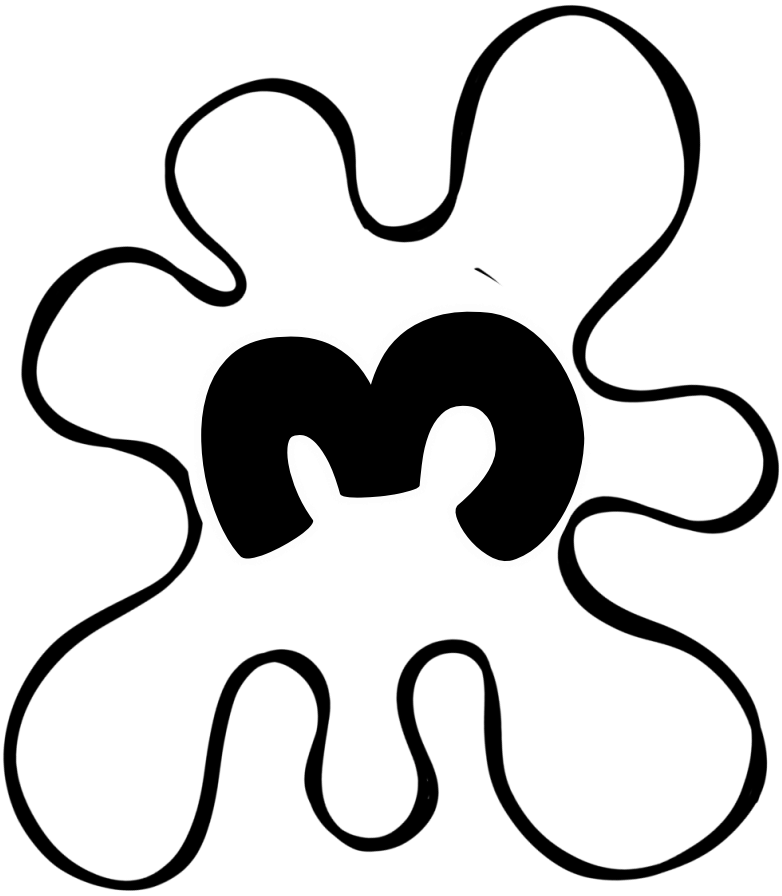


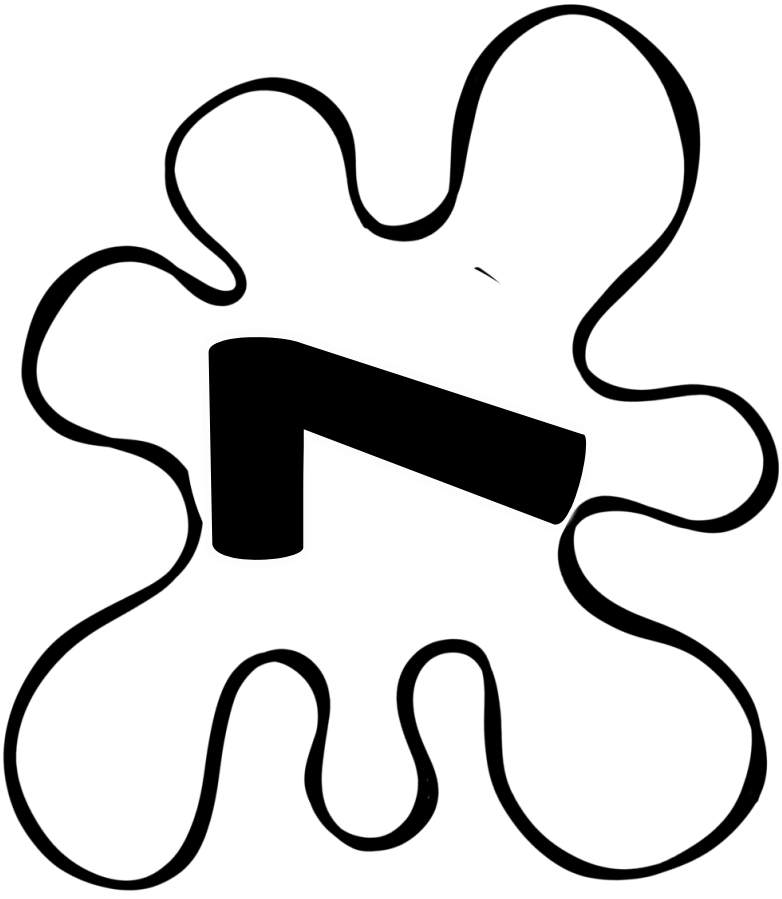


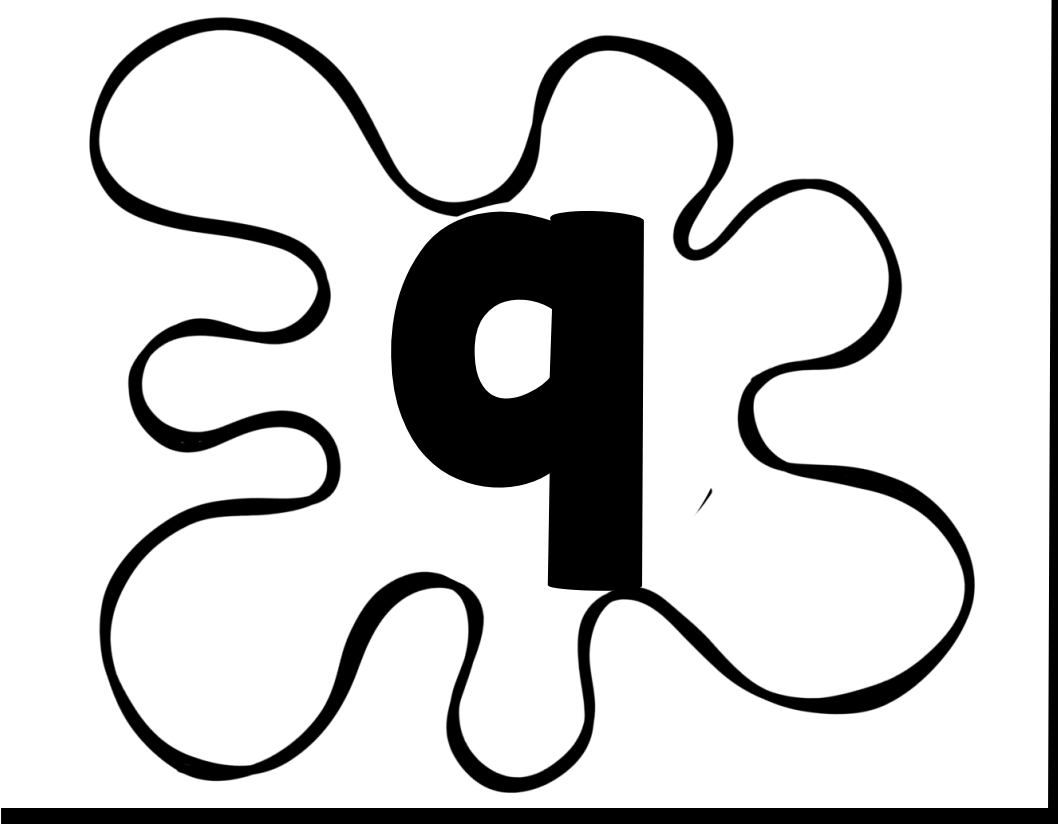


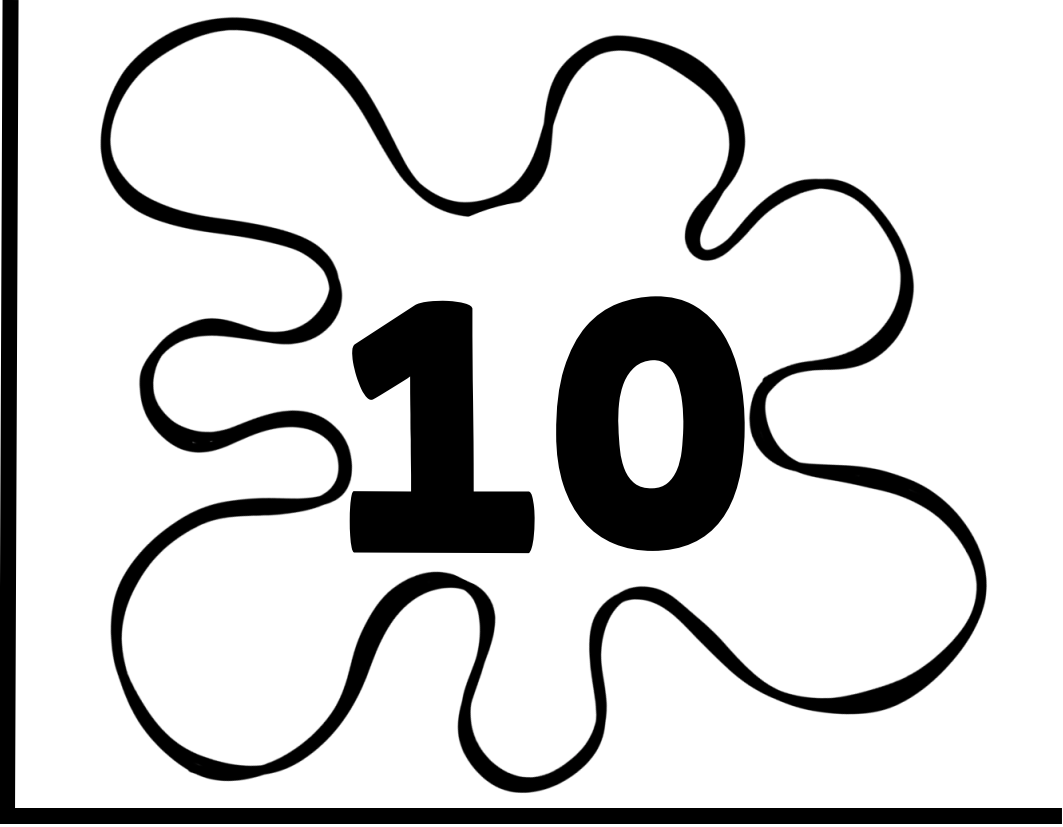




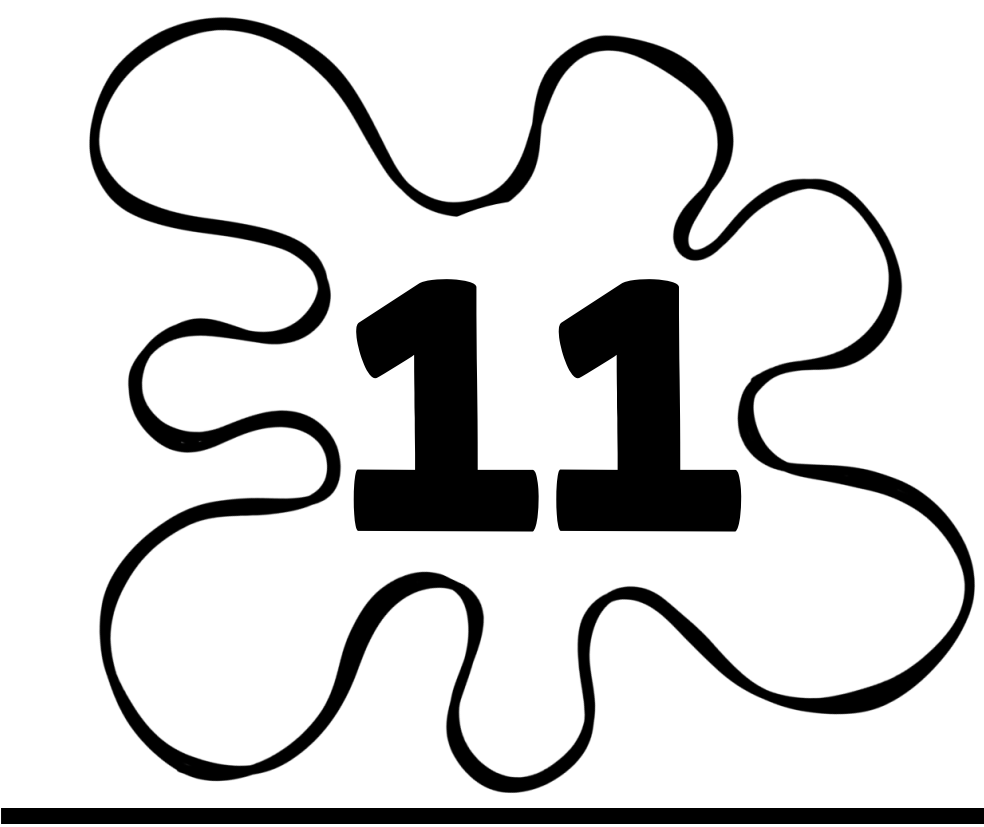


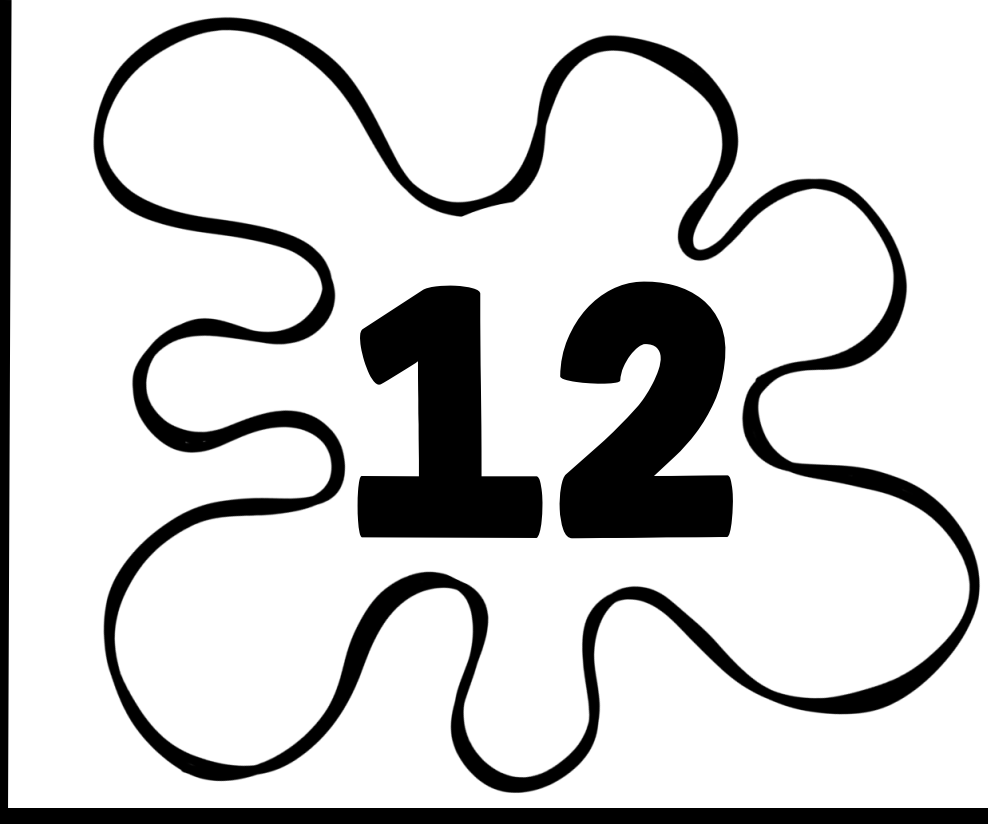




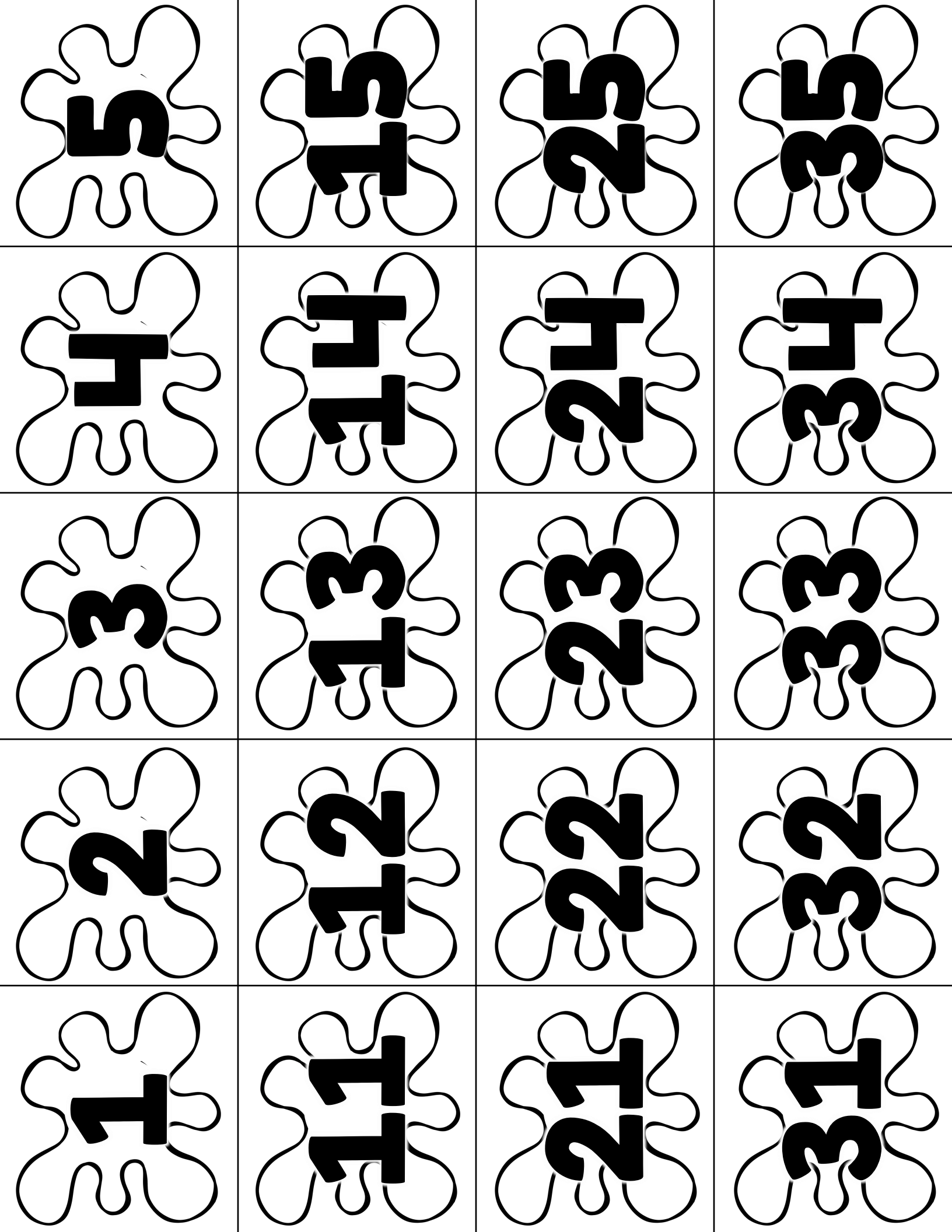


SNOWBALL





SPLAT


5
15
25
35
1
11
21
31
3
13
23
33
2
12
22
32
1
11
21
31

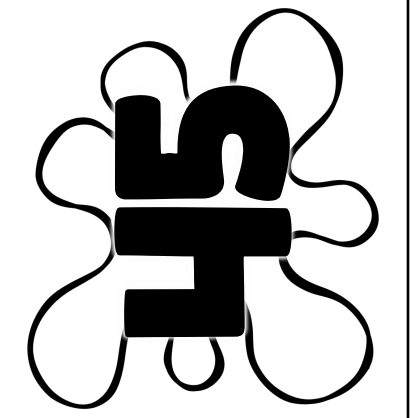
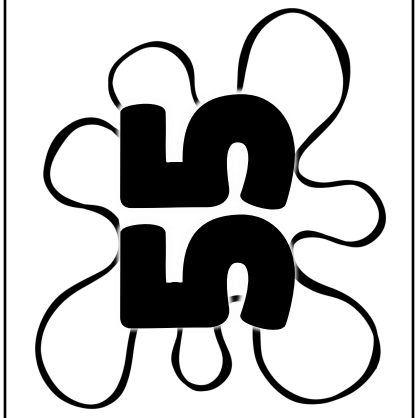
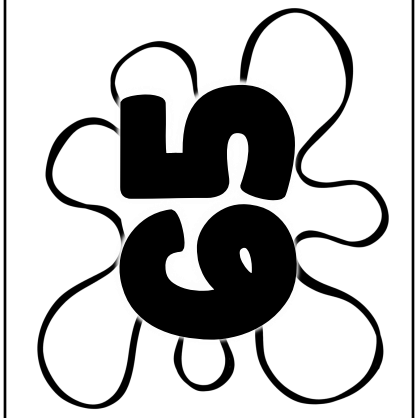
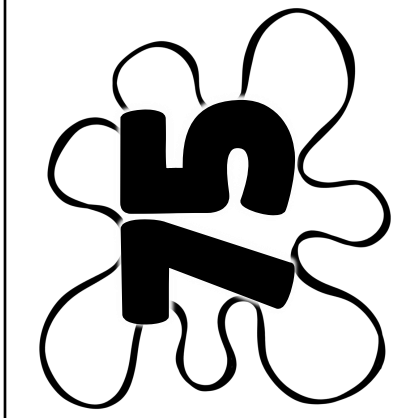
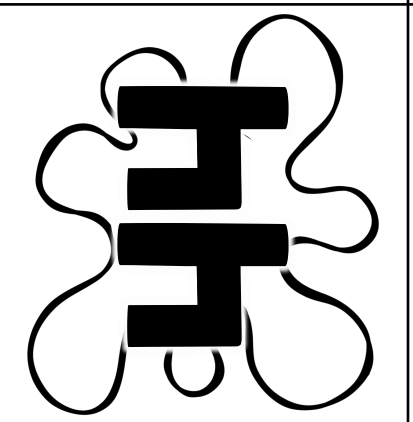
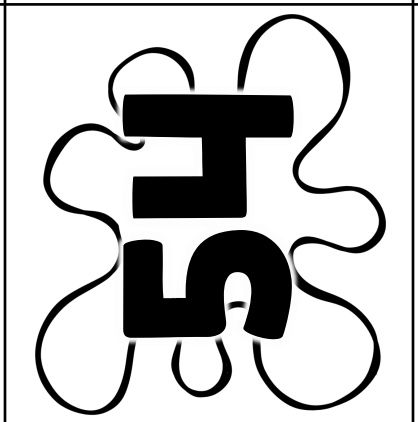
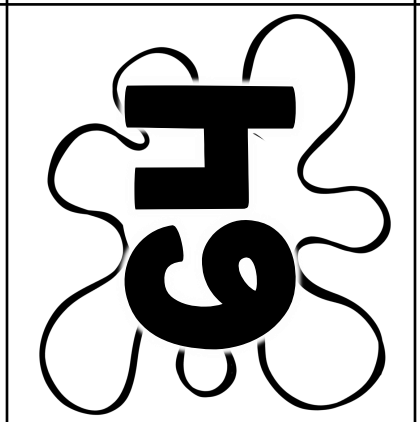
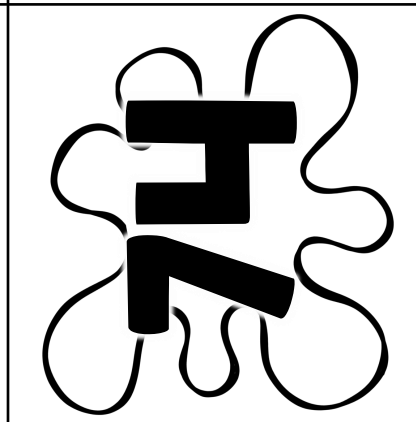
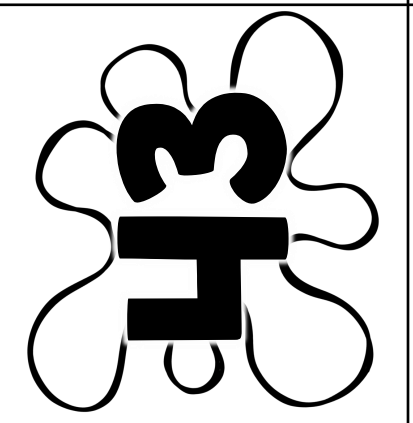
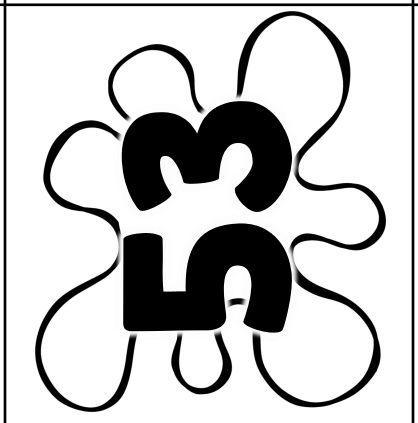
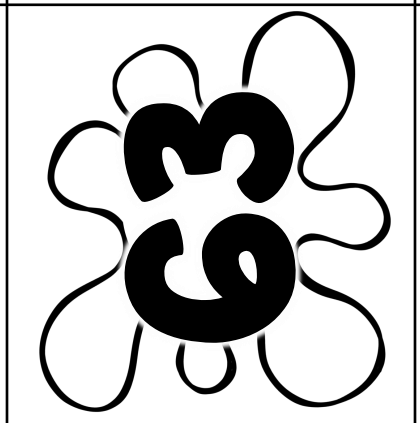
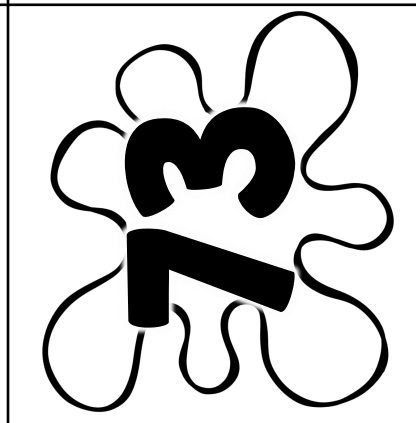
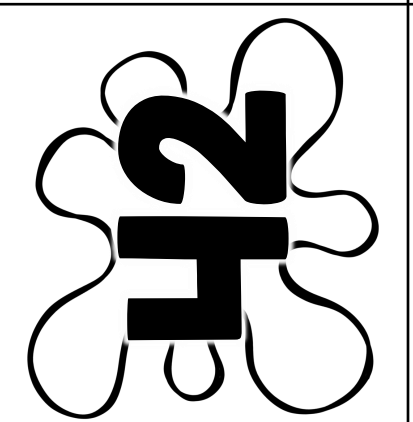
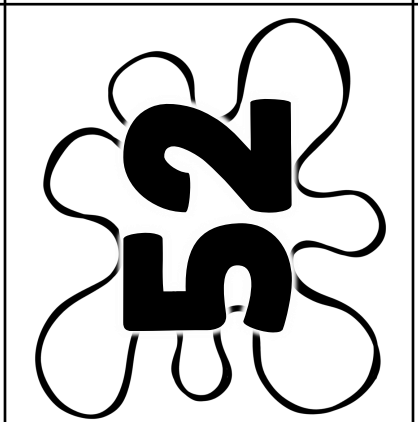
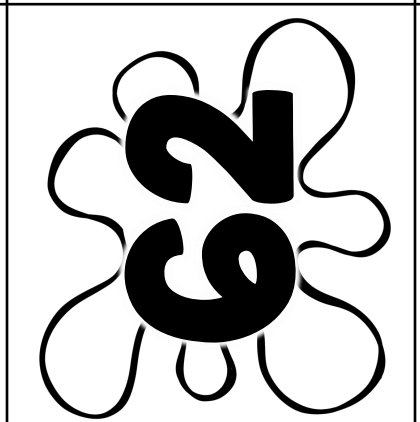
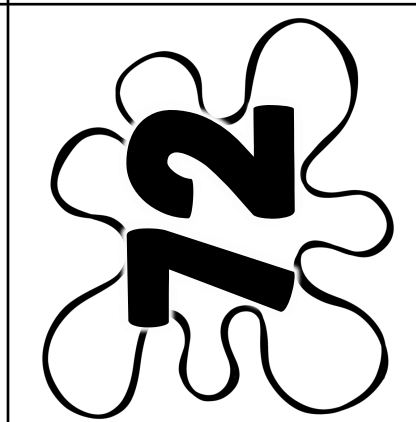
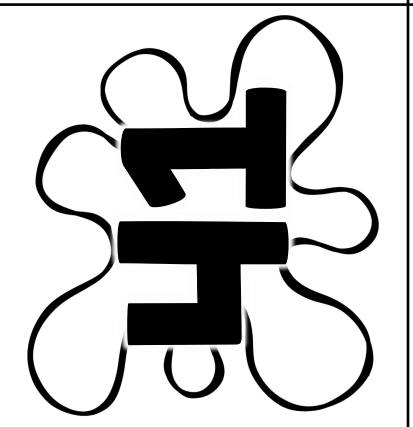
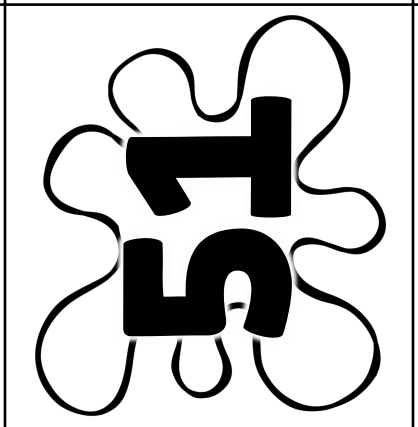
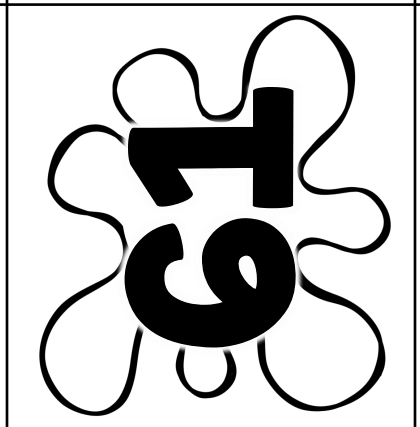
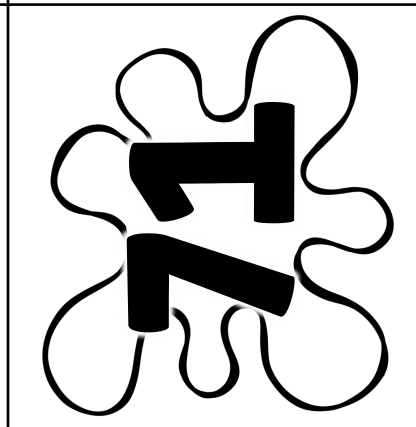
10 | 20 | 30 | 40

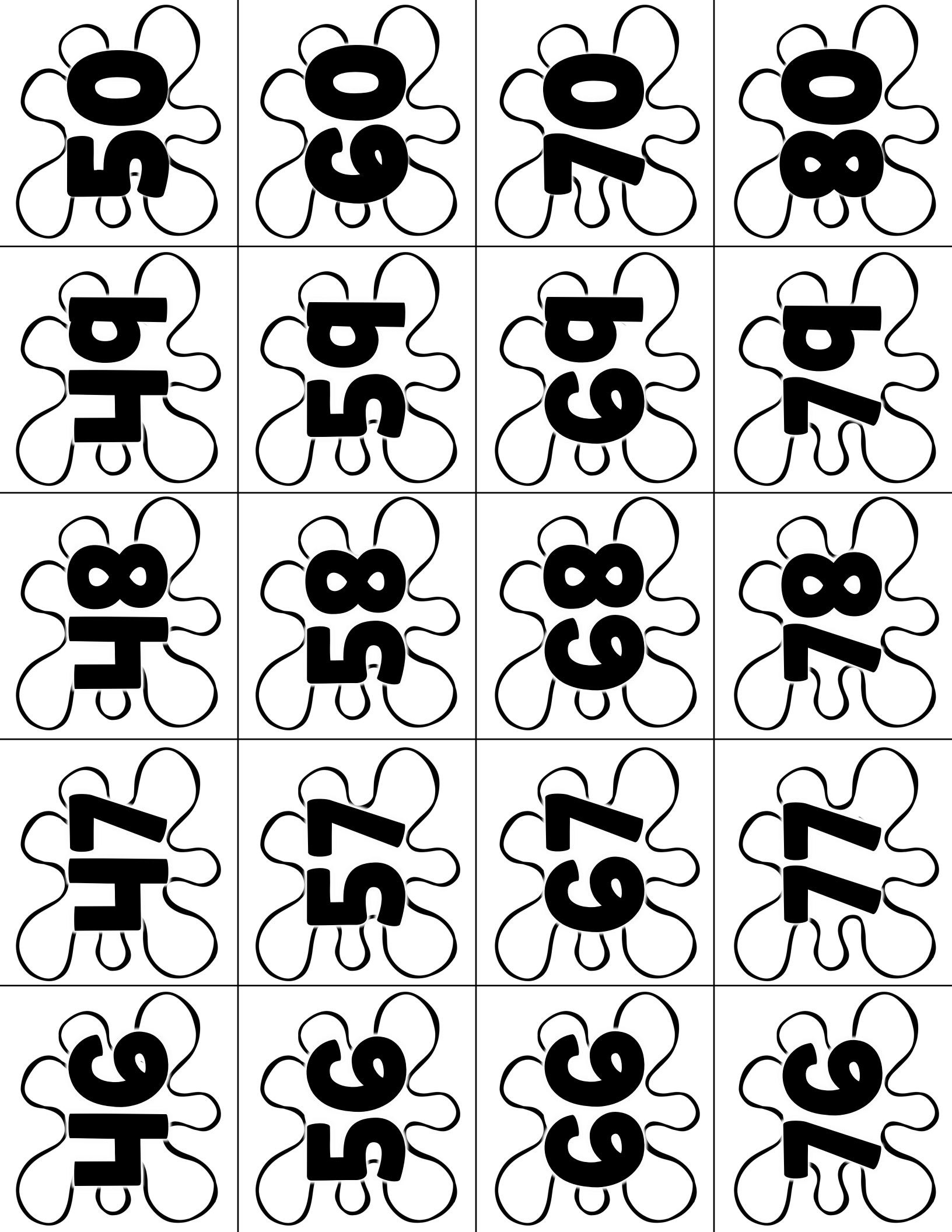
9 | 19 | 29 | 39

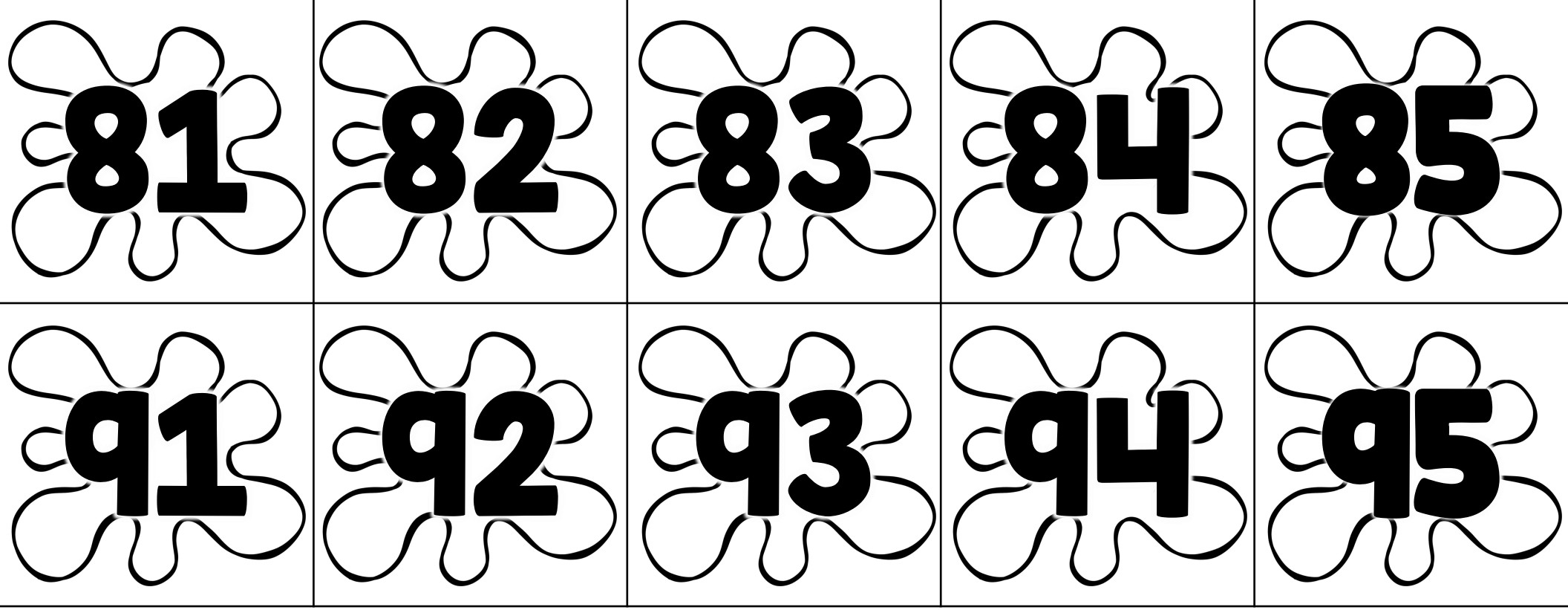
8 | 18 | 28 | 38

7 | 17 | 27 | 37

6 | 16 | 26 | 36


55

55

55

55

51

51

51

51

53

53

53

53

52

52

52

52

51

51

51

51


50
50
70
80
60
60
60
60
80
80
80
80
70
70
70
70
90
90
90
90



SNOWBALL

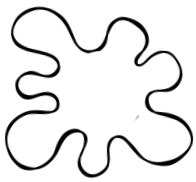
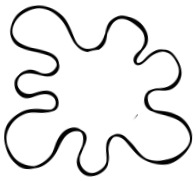
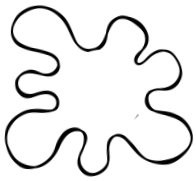
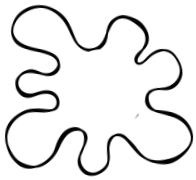
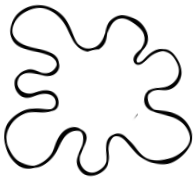
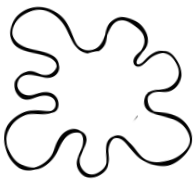
86	87	88	89	90
96	97	98	99	100

SPLAT

SNOWBALL SPLAT

NAME: _____

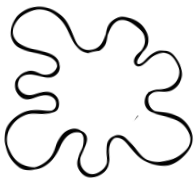
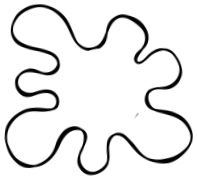
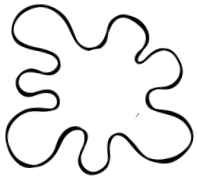
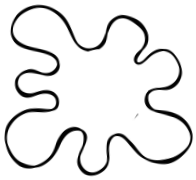
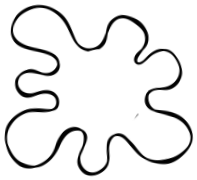
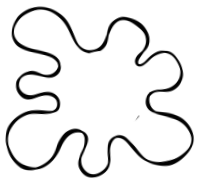
Write 3 different "names" for each number. You can draw pictures, make tally marks, write words, or write number models/equations.

 NUMBER	 NUMBER	 NUMBER
 NUMBER	 NUMBER	 NUMBER

SNOWBALL SPLAT

NAME: _____

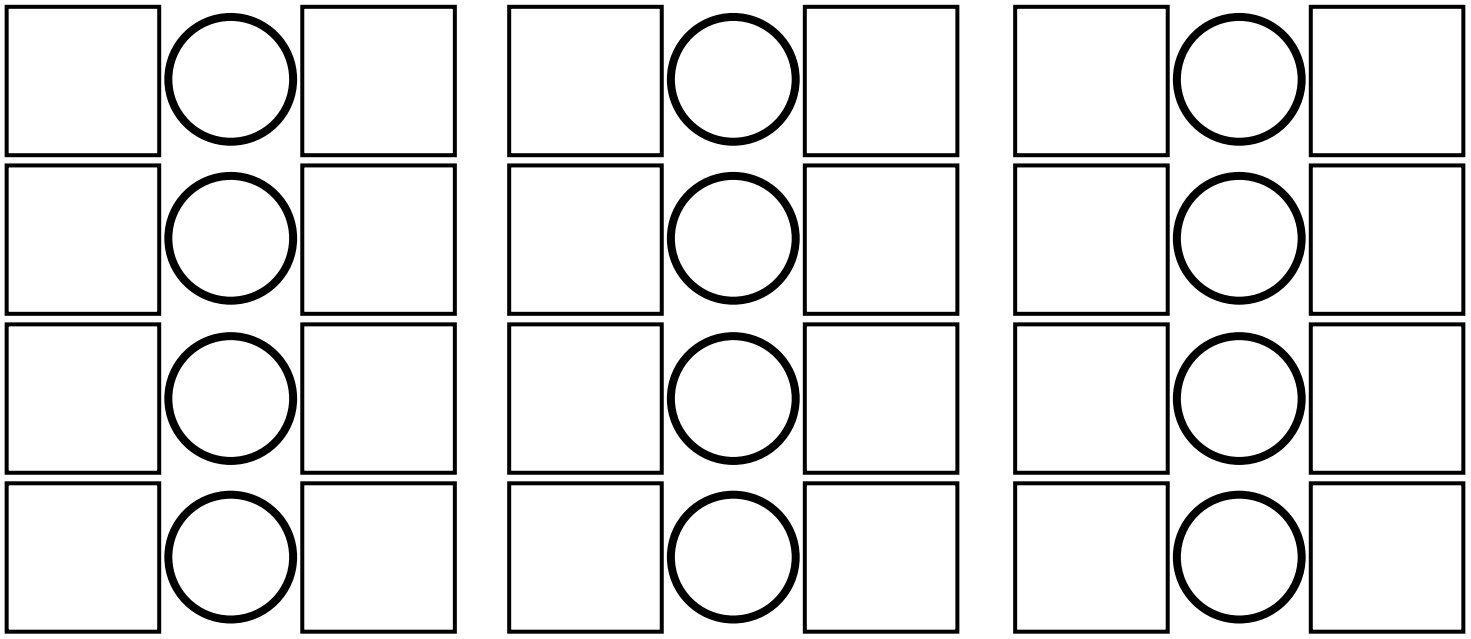
Write 3 different "names" for each number. You can draw pictures, make tally marks, write words, or write number models/equations.

 NUMBER	 NUMBER	 NUMBER
 NUMBER	 NUMBER	 NUMBER

SNOWBALL SPLAT

NAME: _____

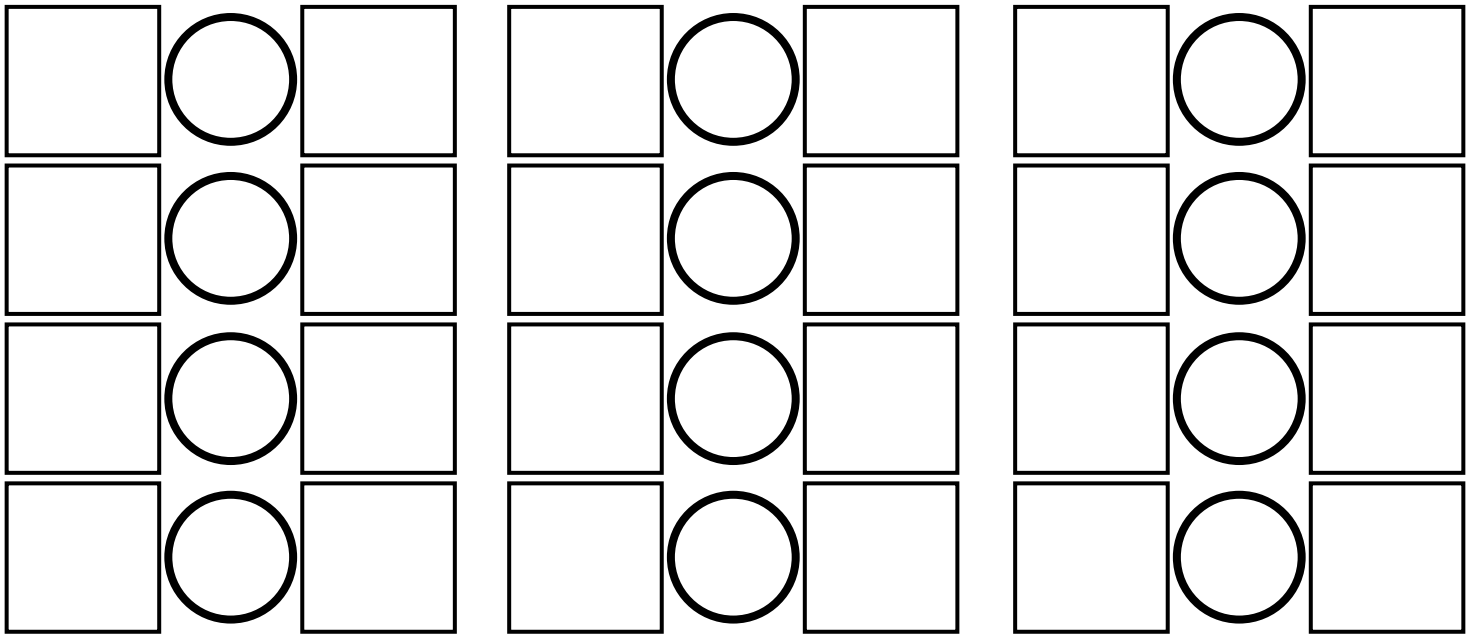
Write the symbol in the middle to compare the values of the numbers: < (less than), > (greater than), or = (equal).



SNOWBALL SPLAT

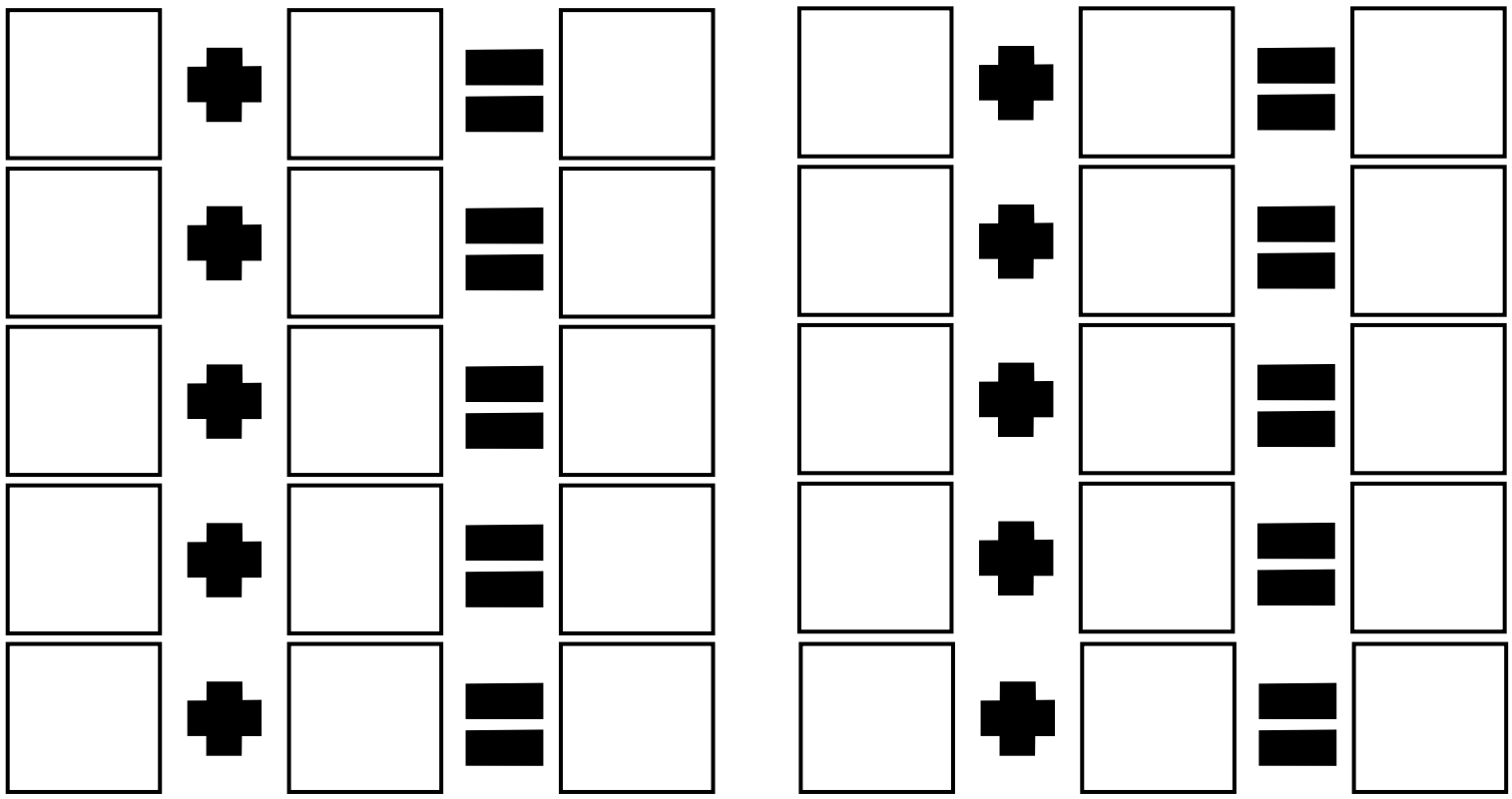
NAME: _____

Write the symbol in the middle to compare the values of the numbers: < (less than), > (greater than), or = (equal).



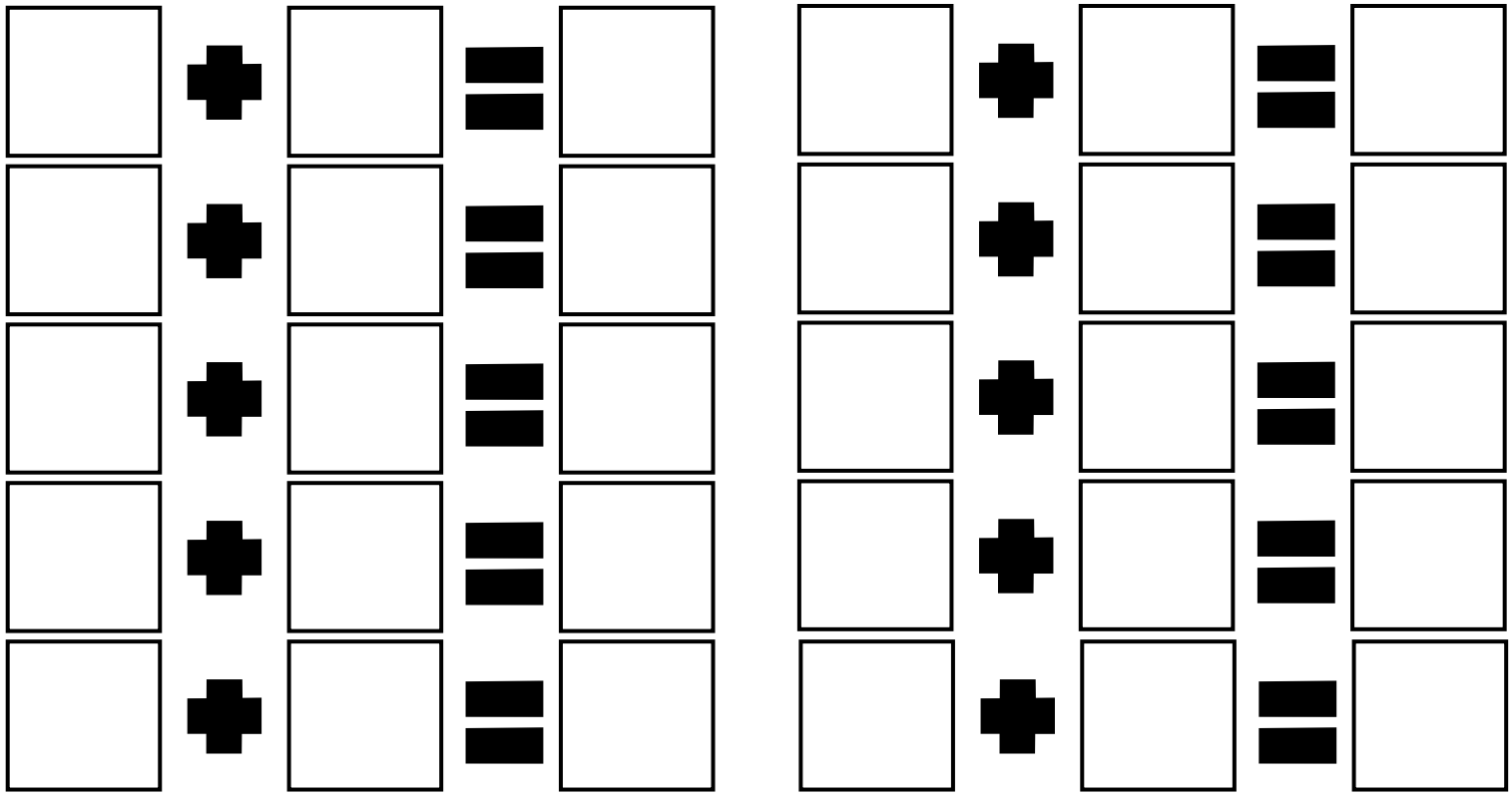
SNOWBALL SPLAT

NAME: _____



SNOWBALL SPLAT

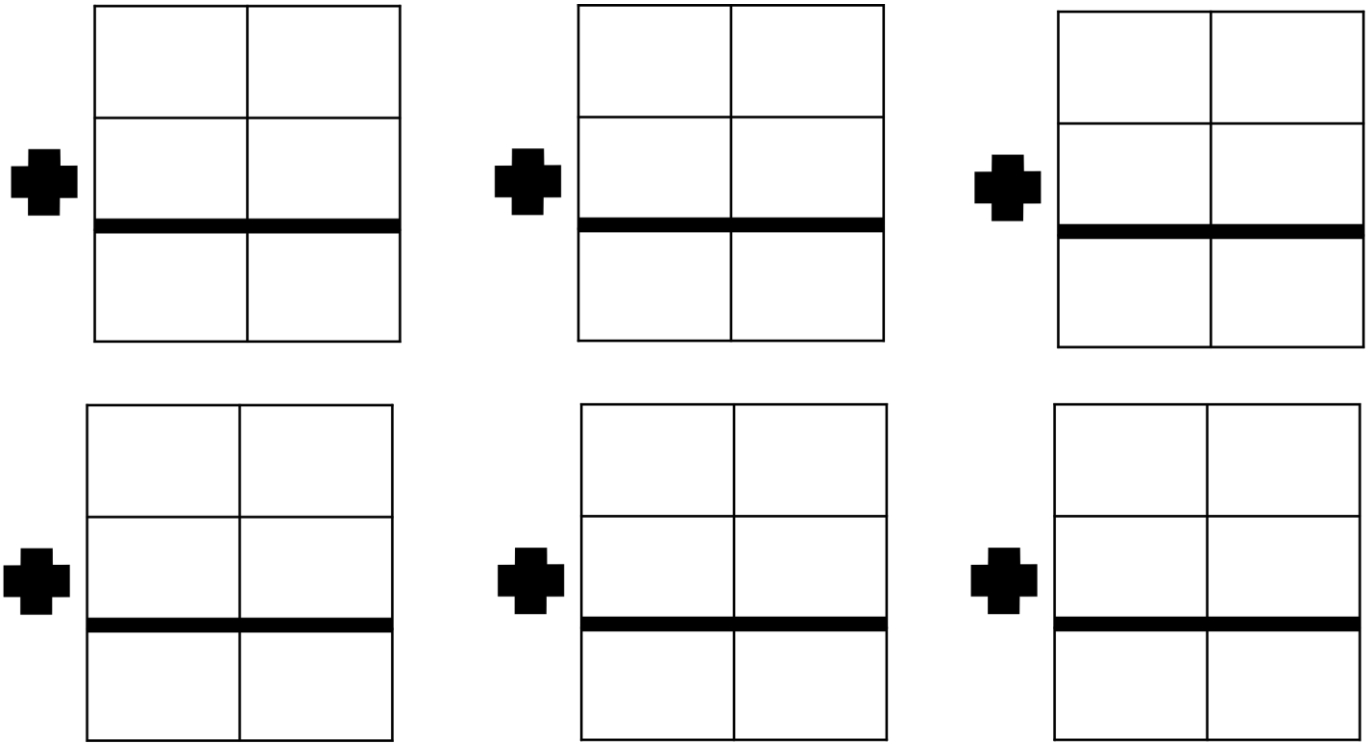
NAME: _____



©Brooke Brown

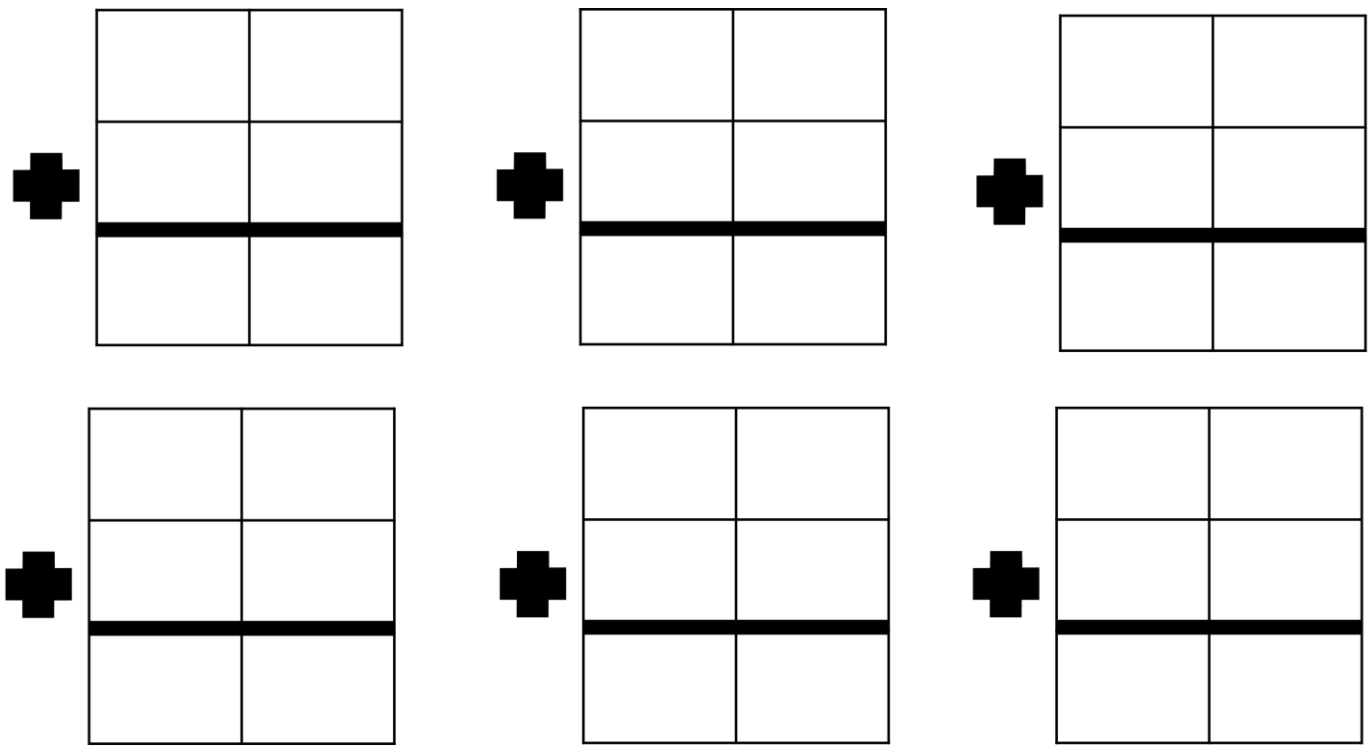
SNOWBALL SPLAT

NAME: _____



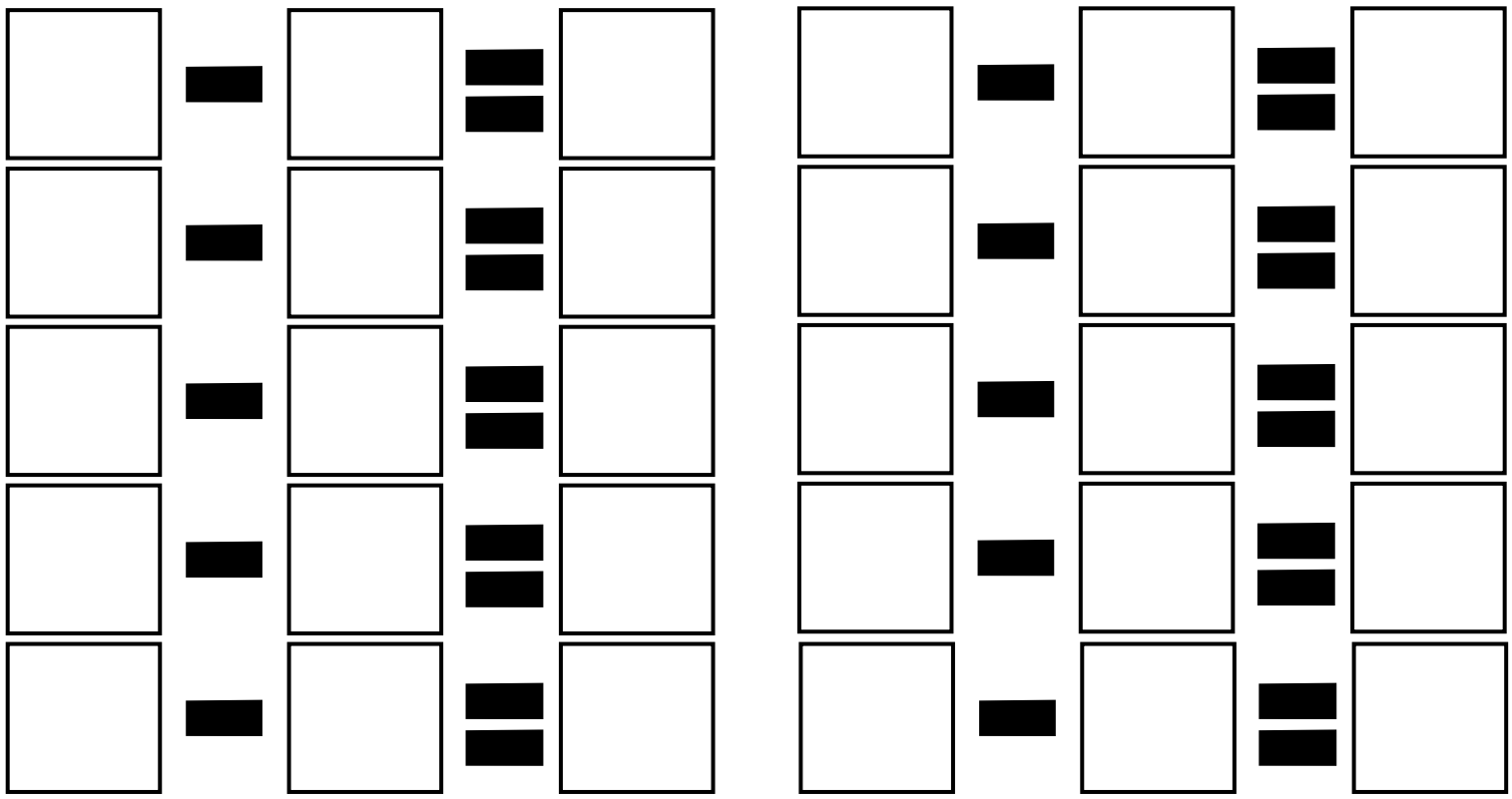
SNOWBALL SPLAT

NAME: _____



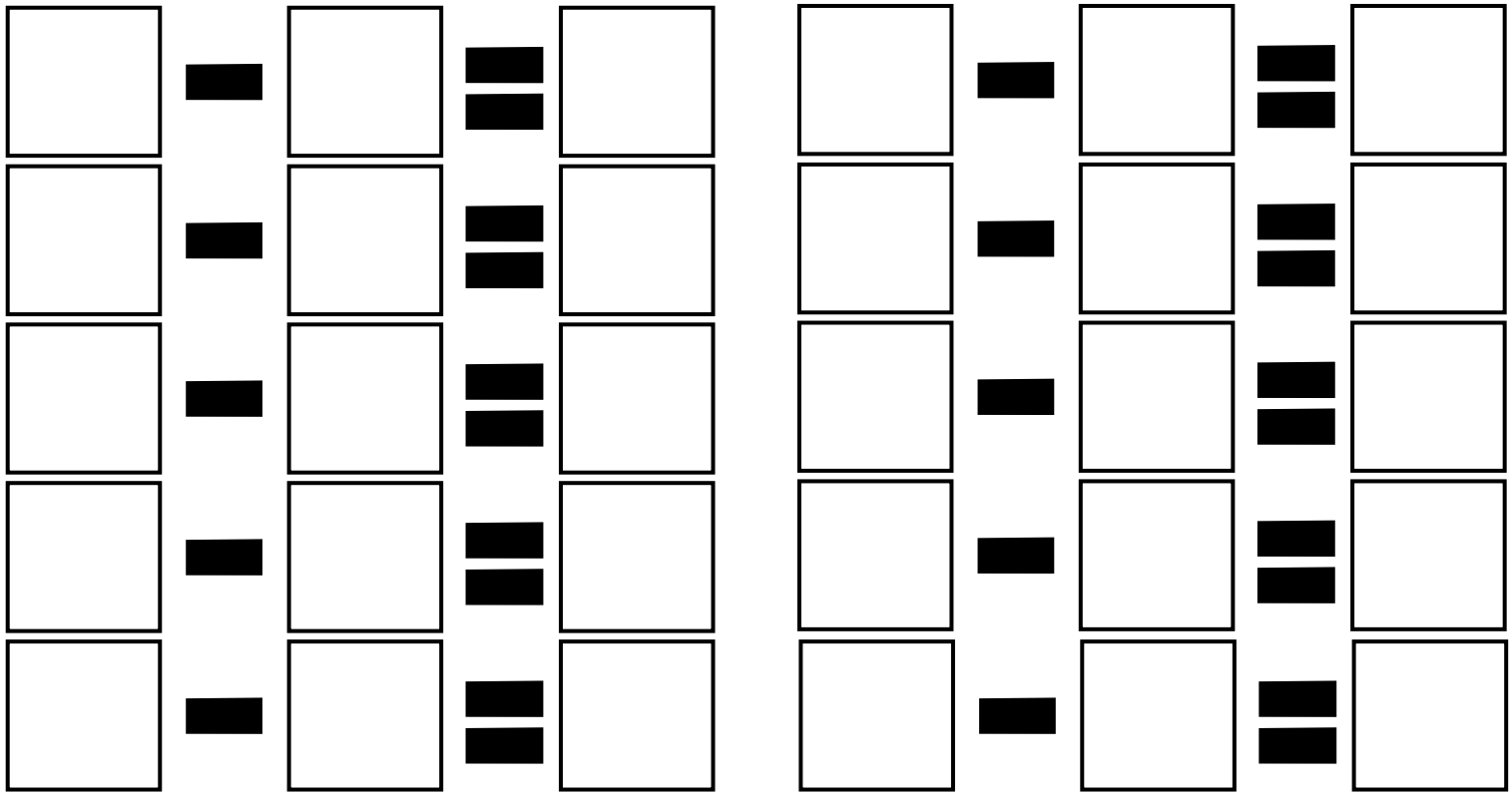
SNOWBALL SPLAT

NAME: _____



SNOWBALL SPLAT

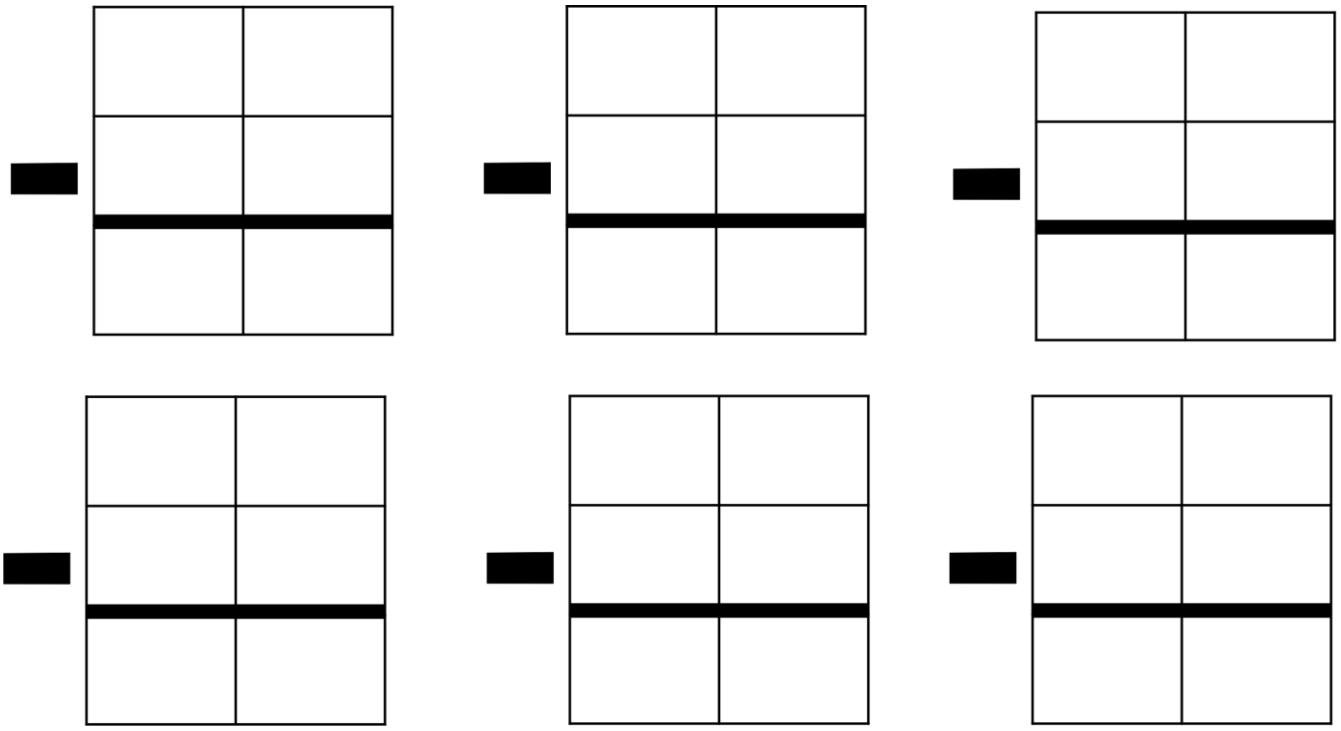
NAME: _____



©Brooke Brown

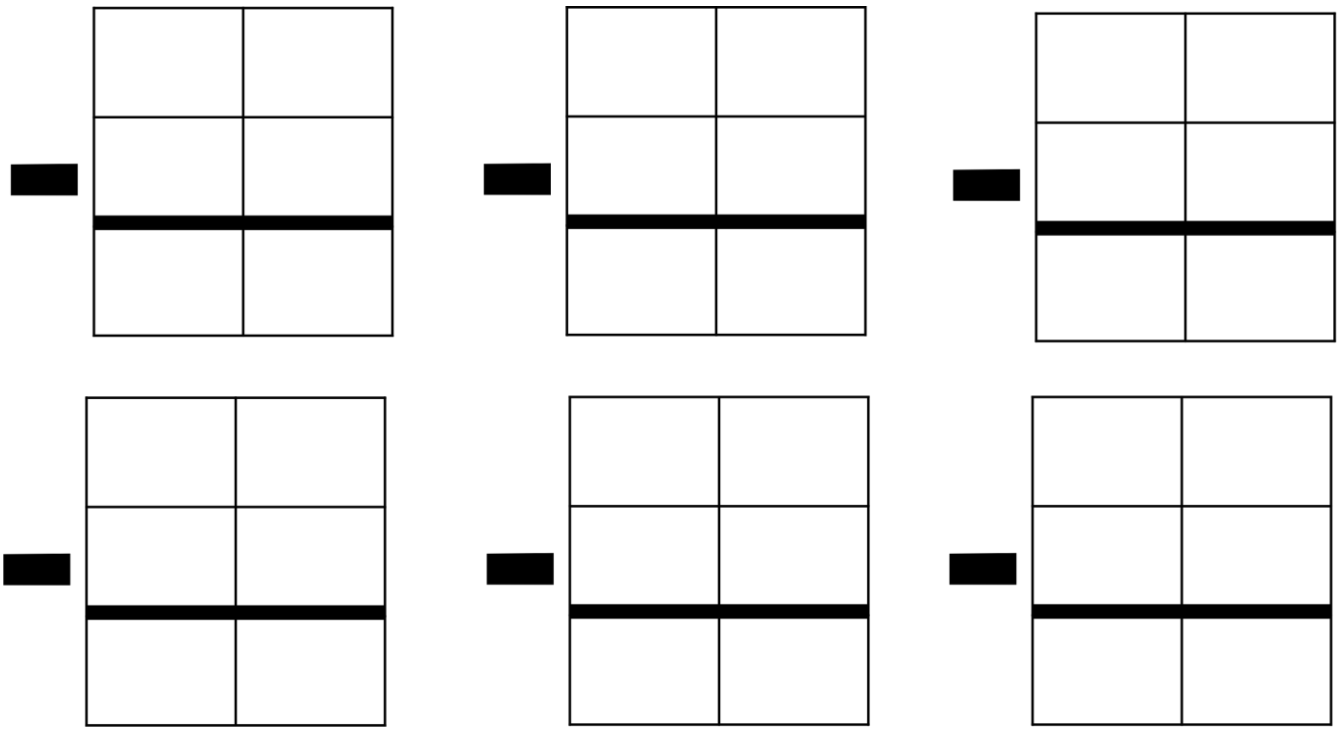
SNOWBALL SPLAT

NAME: _____



SNOWBALL SPLAT

NAME: _____



SNOWBALL SPLAT

NAME: _____

	×		=			×		=	
	×		=			×		=	
	×		=			×		=	
	×		=			×		=	
	×		=			×		=	

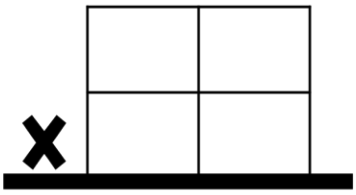
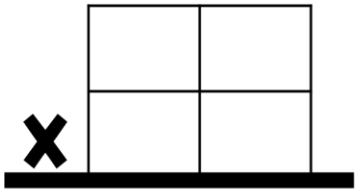
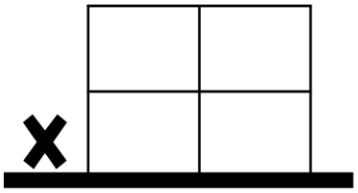
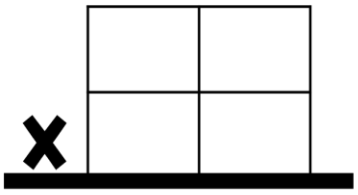
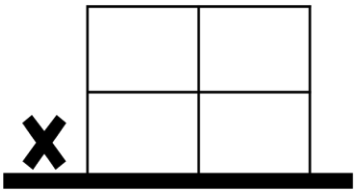
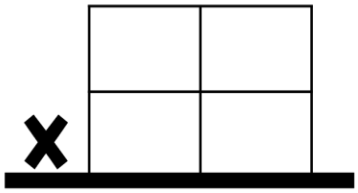
SNOWBALL SPLAT

NAME: _____

	×		=			×		=	
	×		=			×		=	
	×		=			×		=	
	×		=			×		=	
	×		=			×		=	

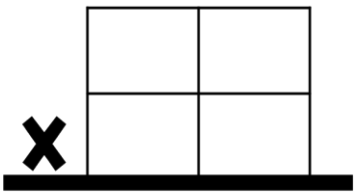
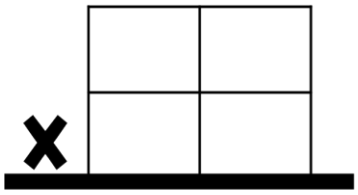
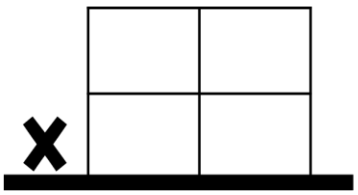
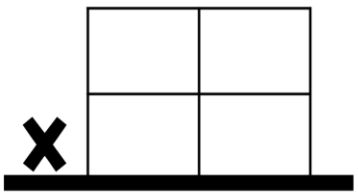
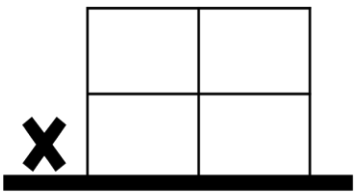
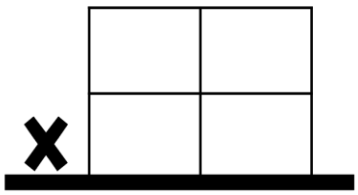
SNOWBALL SPLAT

NAME: _____

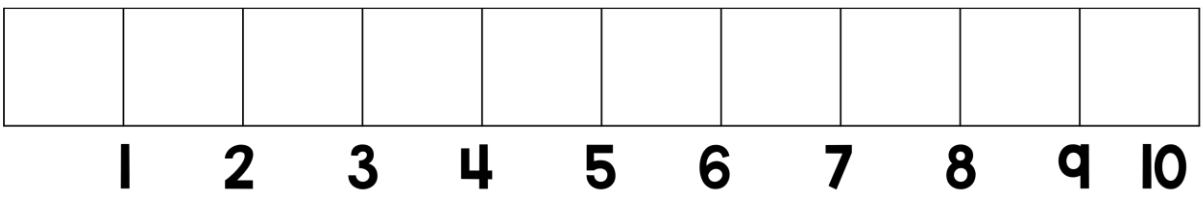
SNOWBALL SPLAT

NAME: _____

SOARING SNOWBALLS

1) Place your snowball slingshot on the "Start Here" snowball.
2) Launch your marshmallow and measure how far it goes.
3) Write down your measurement.
4) Repeat 4 more times.
5) Answer the questions about your measurements.



SOARING SNOWBALLS

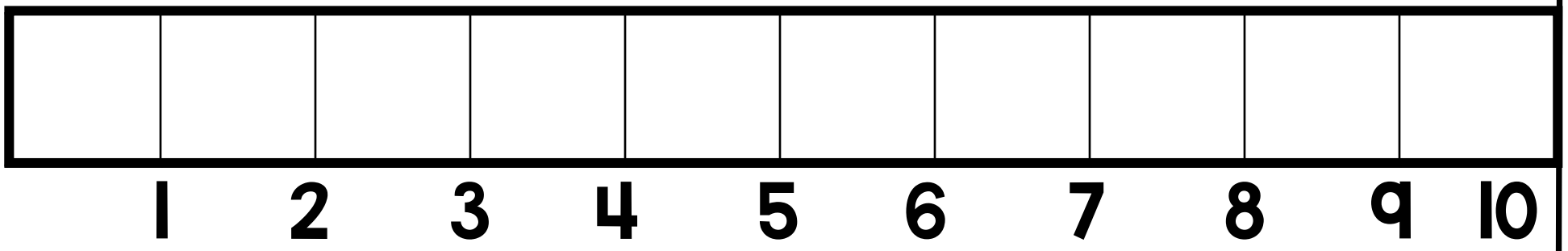
1) Place your snowball slingshot on the "Start Here" snowball.
2) Launch your marshmallow and measure how far it goes.
3) Write down your measurement.
4) Repeat 9 more times.
5) Write down your 10 launch distances in order.
6) Answer the questions about your data.

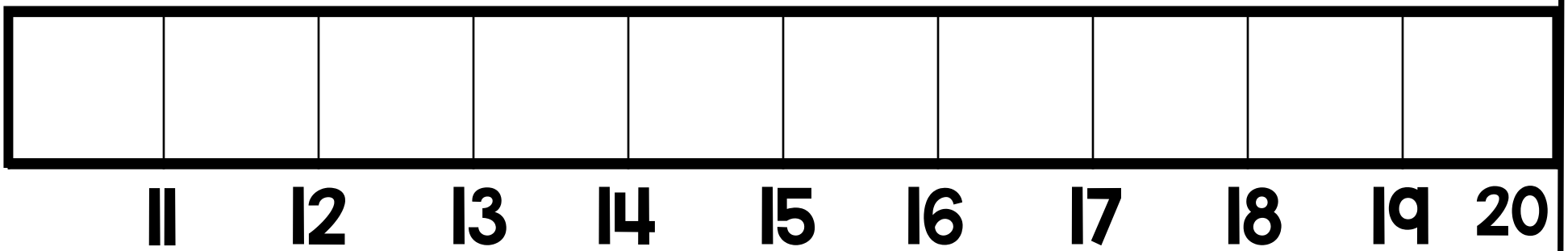
1	2	3	4	5	6	7	8	9	10

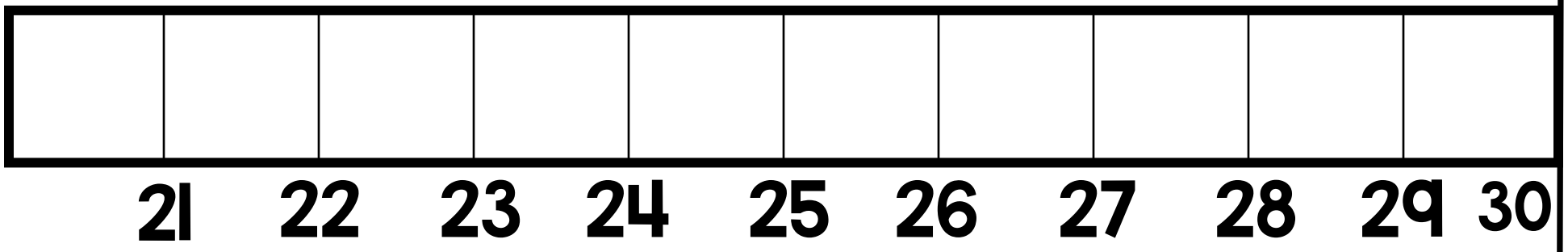

START
HERE
©Brooke Brown

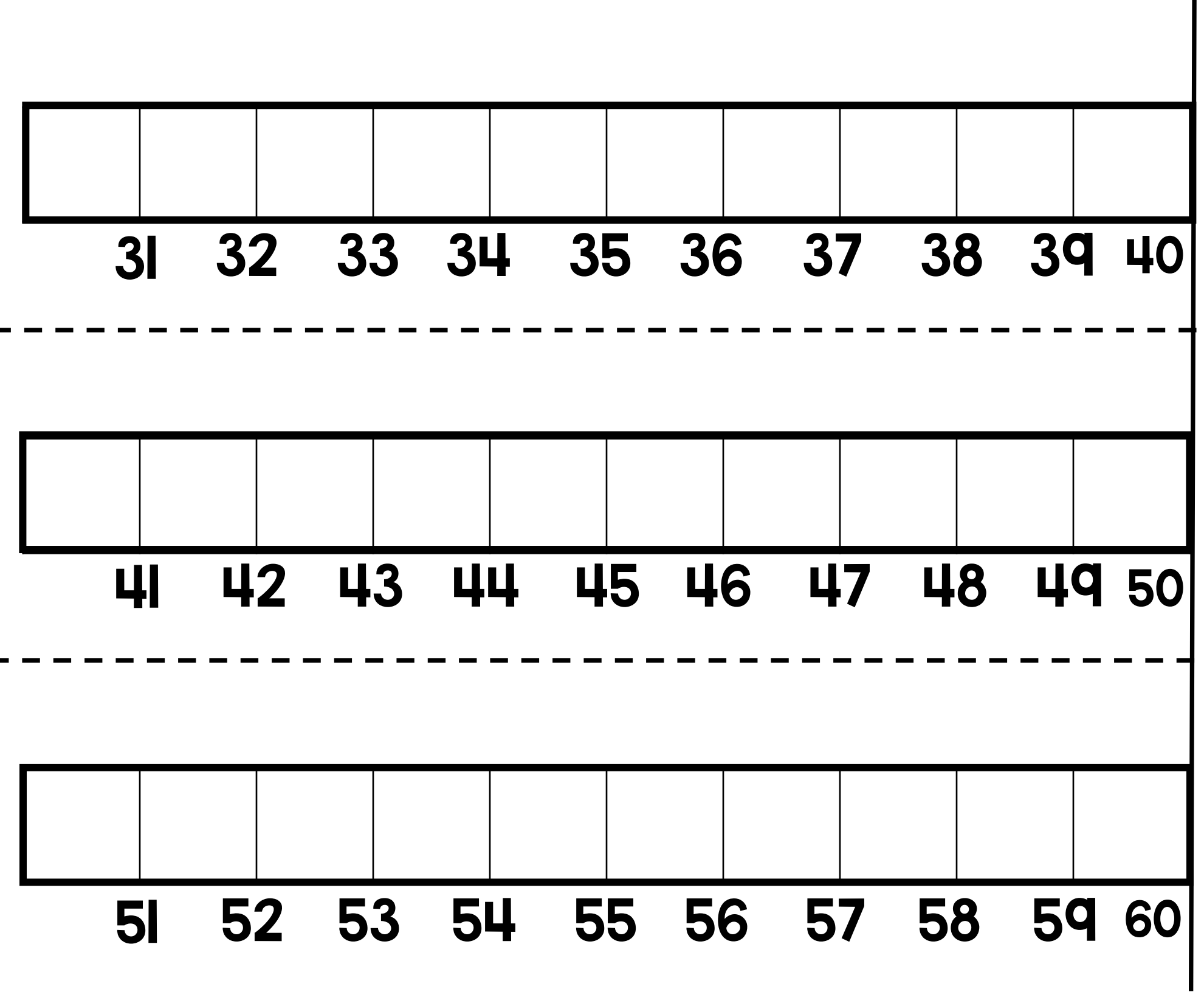

START
HERE
©Brooke Brown

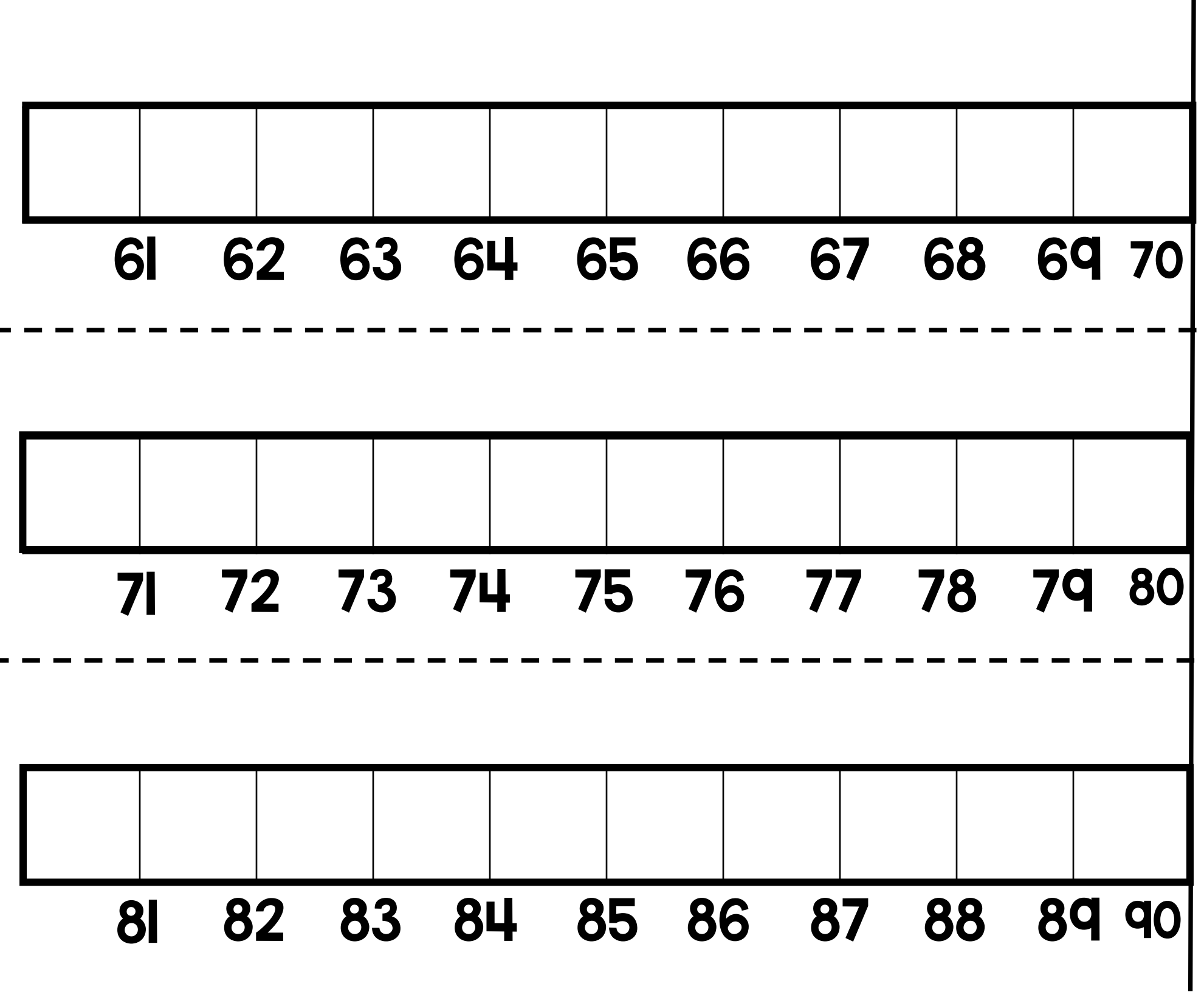
SOARING SNOWBALLS

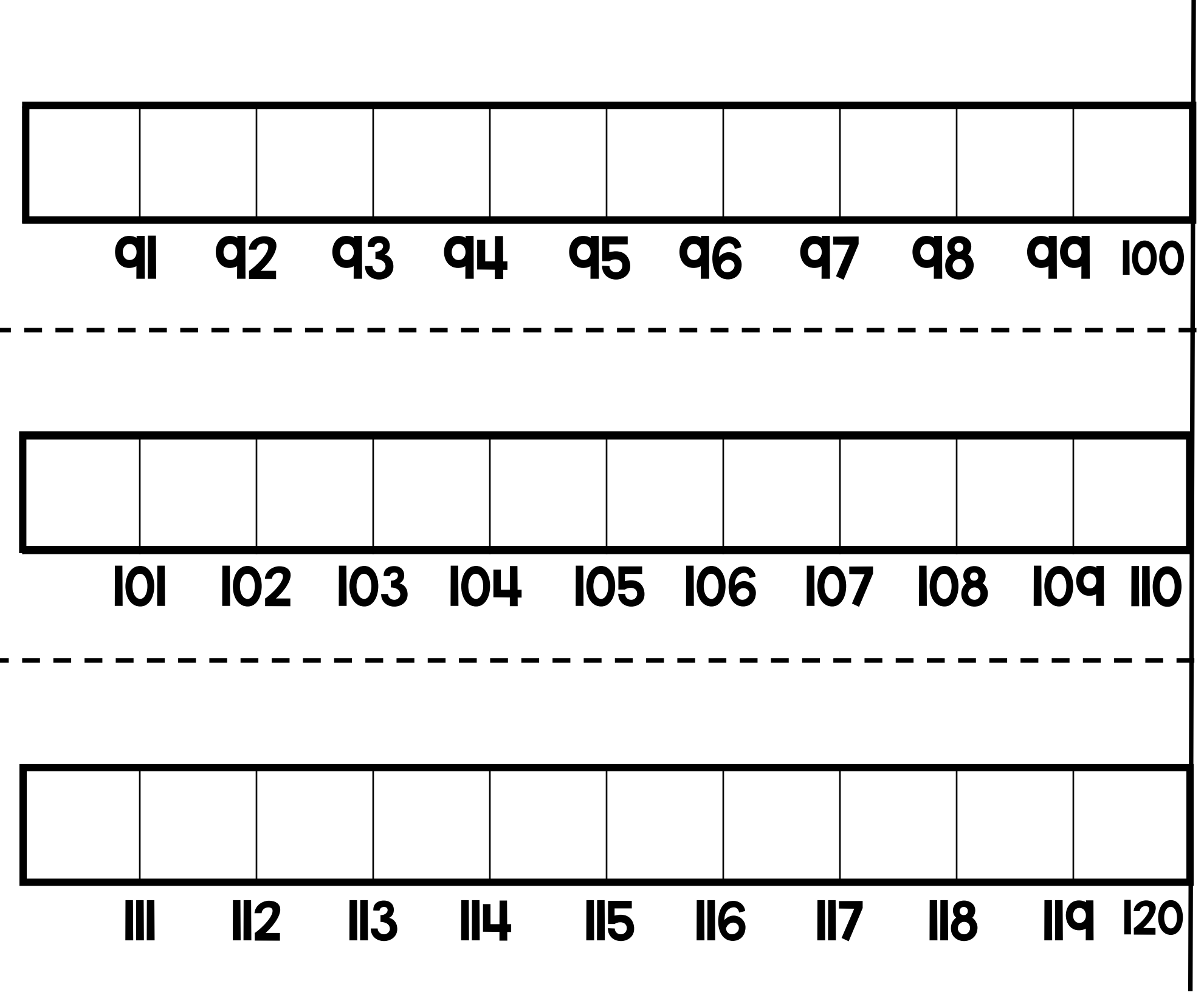






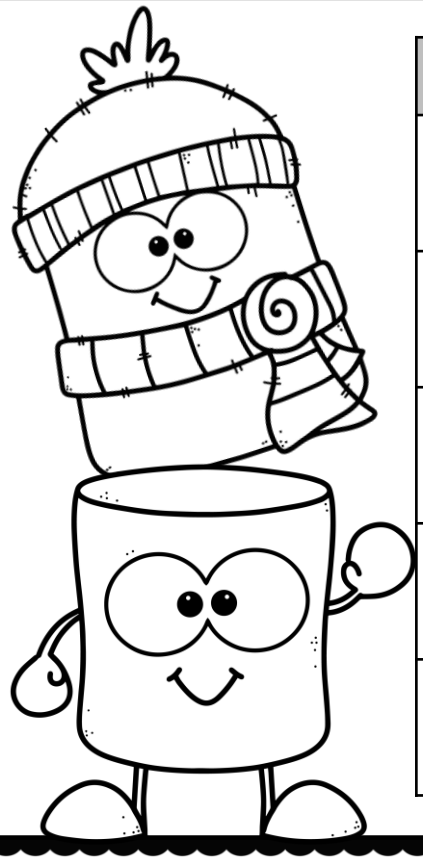

31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60


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

SOARING SNOWBALLS

NAME: _____



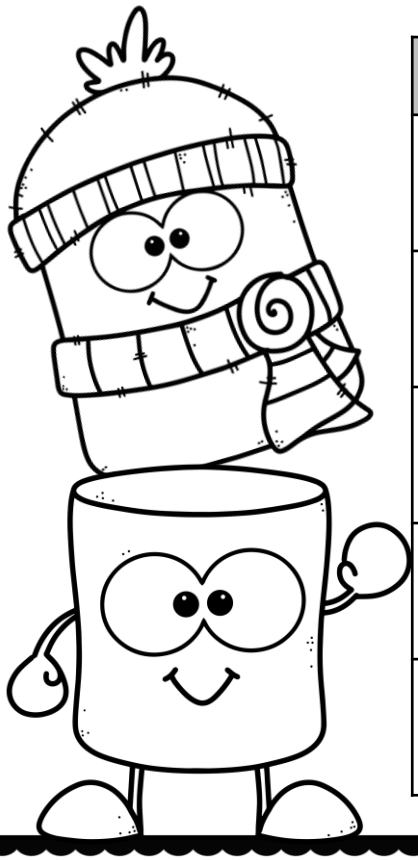
LAUNCH	DISTANCE
1	
2	
3	
4	
5	

How long was your FARTHEST launch?

How long was your SHORTEST launch?

SOARING SNOWBALLS

NAME: _____



LAUNCH	DISTANCE
1	
2	
3	
4	
5	

How long was your FARTHEST launch?

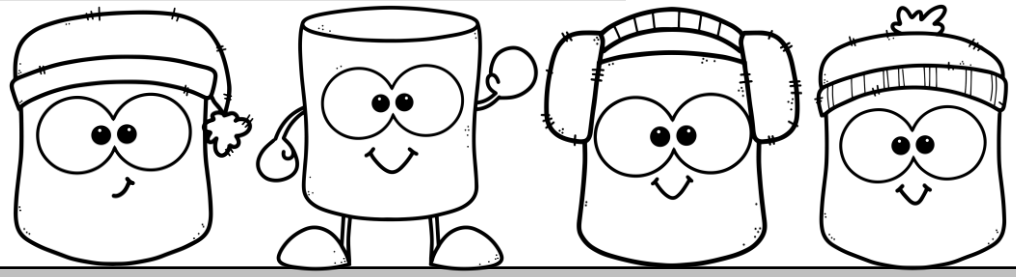
How long was your SHORTEST launch?

©Brooke Brown

SOARING SNOWBALLS

NAME: _____

LAUNCH	DISTANCE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



LAUNCHES IN ORDER

_____, _____, _____, _____, _____, _____, _____, _____, _____, _____

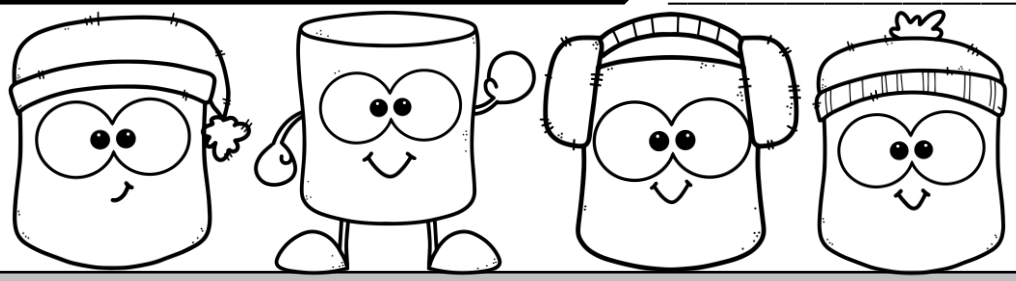
MAXIMUM	MINIMUM	RANGE

MEDIAN	MODE

SOARING SNOWBALLS

NAME: _____

LAUNCH	DISTANCE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



LAUNCHES IN ORDER

_____, _____, _____, _____, _____, _____, _____, _____, _____, _____

MAXIMUM	MINIMUM	RANGE

MEDIAN	MODE

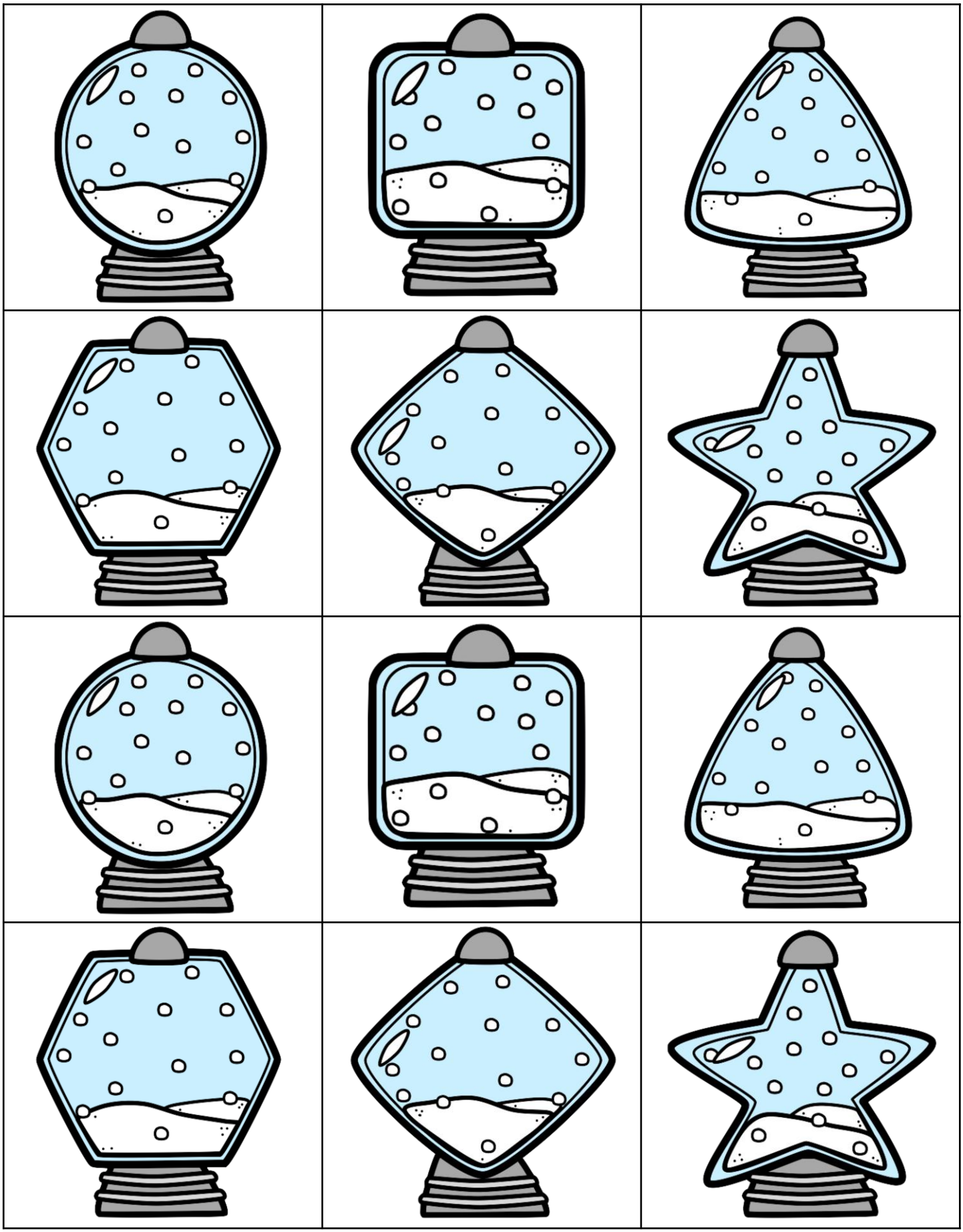
©Brooke Brown

SNOW GLOBE SWISH

1) Launch your marshmallow into a snow globe cup.
2) Make a tally mark to show which snow globe shape it landed in.
3) Repeat 9 more times.
4) Color the bars on the graph to match your tally mark totals.

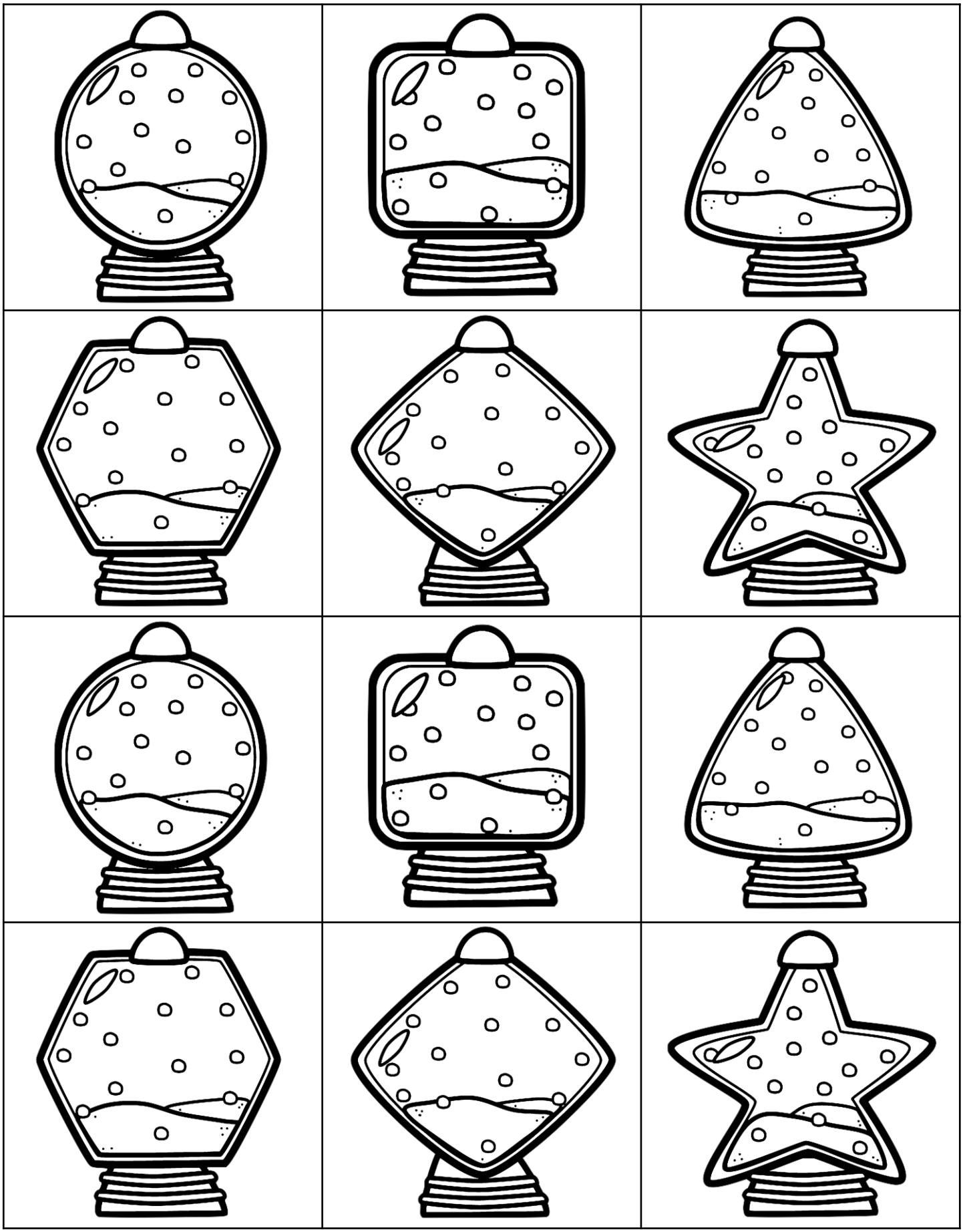
SNOW GLOBE SWISH

Tape snow globes to 6 large cups.
Arrange cups against a wall.



SNOW GLOBE SWISH

Tape snow globes to 6 large cups.
Arrange cups against a wall.

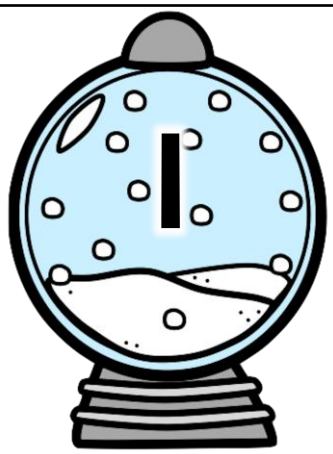


SNOW GLOBE SWISH

1) Launch your marshmallow into a snow globe cup.
2) Make a tally mark to show which cup it landed in.
3) Repeat 9 more times.
4) Add up the value of all cups and write the total.
5) Write the total number in expanded form.

SNOW GLOBE SWISH

Tape snow globes to 6 large cups.
Arrange cups against a wall.

SNOW GLOBE SWISH

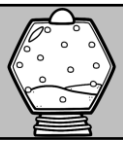
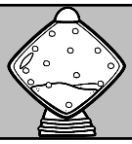
Tape snow globes to 6 large cups.
Arrange cups against a wall.

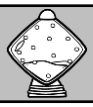
SNOW GLOBE SWISH

NAME: _____

MAKE A TALLY CHART.

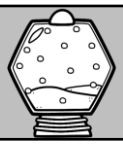
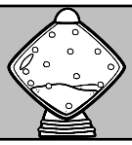
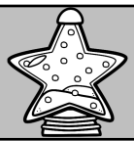
MAKE A GRAPH.

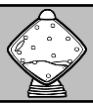
SNOW GLOBE SWISH

NAME: _____

MAKE A TALLY CHART.

MAKE A GRAPH.

SNOW GLOBE SWISH

NAME: _____

MAKE A TALLY CHART.

100,000	10,000	1,000	100	10	1

TOTAL VALUE:

_____ _____ _____ , _____ _____ _____

EXPANDED FORM:

_____ + _____ + _____ + _____ + _____ + _____

SNOW GLOBE SWISH

NAME: _____

MAKE A TALLY CHART.

100,000	10,000	1,000	100	10	1

TOTAL VALUE:

_____ _____ _____ , _____ _____ _____

EXPANDED FORM:

_____ + _____ + _____ + _____ + _____ + _____

SNOWMAN SMASH

1) Stack up your mini cups to make snowmen.
2) Launch your marshmallow <u>3 times</u> into the cup stacks.
3) Count the total number of ones, tens, and hundreds cups that fell over.
4) Draw the base ten blocks, then write the values and total.

ones

tens

hundreds

□ | .

100 + 10 + 1 = 111

hundreds tens ones

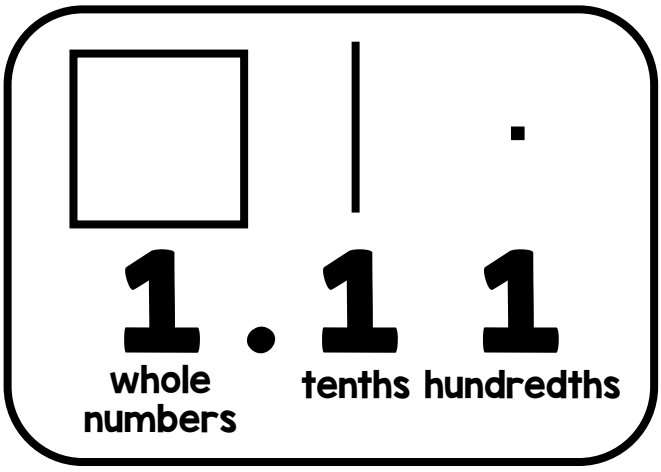
SNOWMAN SMASH

1) Stack up your mini cups to make snowmen.
2) Launch your marshmallow <u>3 times</u> into the cup stacks.
3) Count the total number of whole numbers, tenths, and hundredths cups that fell over.
4) Draw the base ten blocks and write the total decimal value.

hundredths

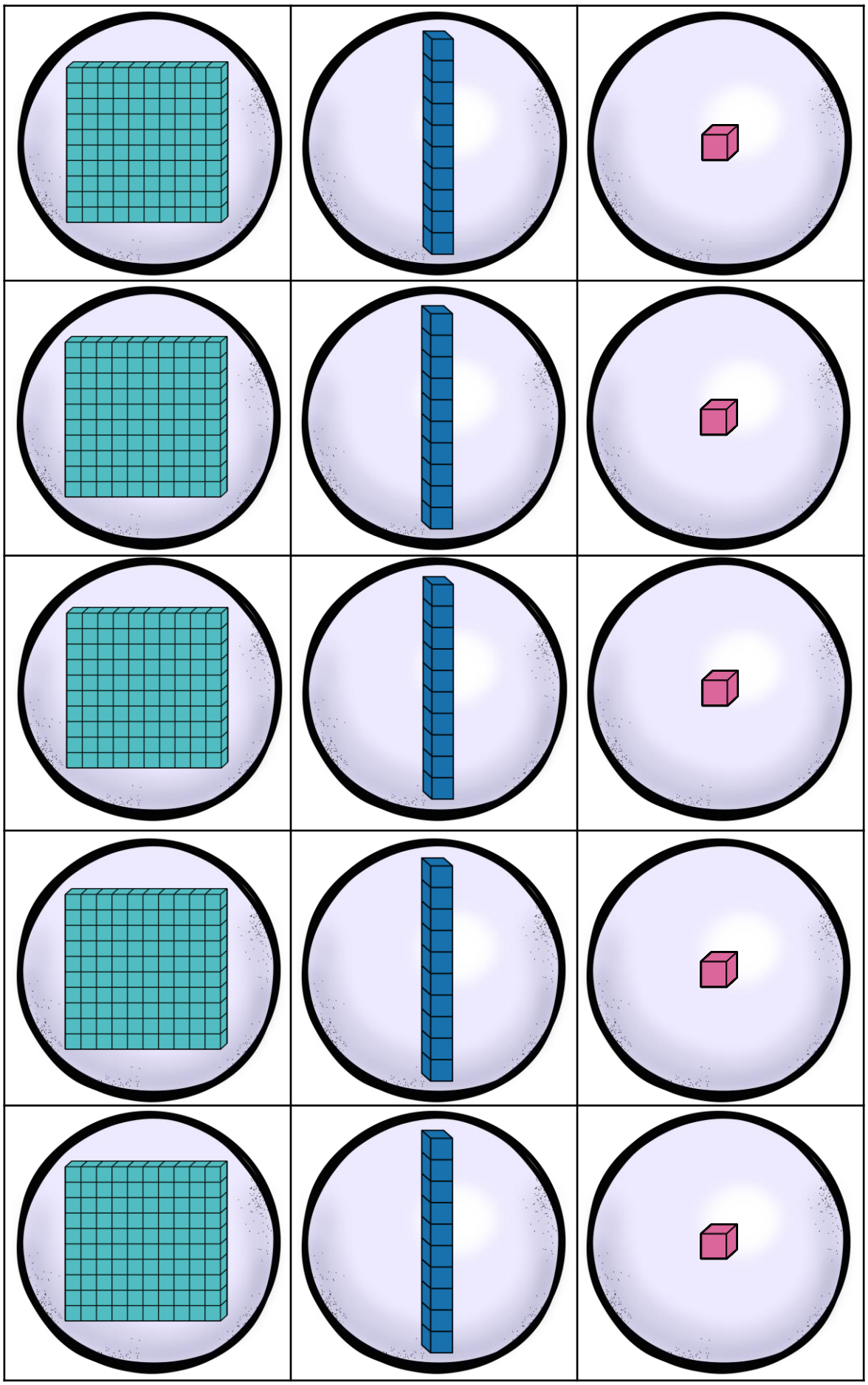
tenths

whole numbers



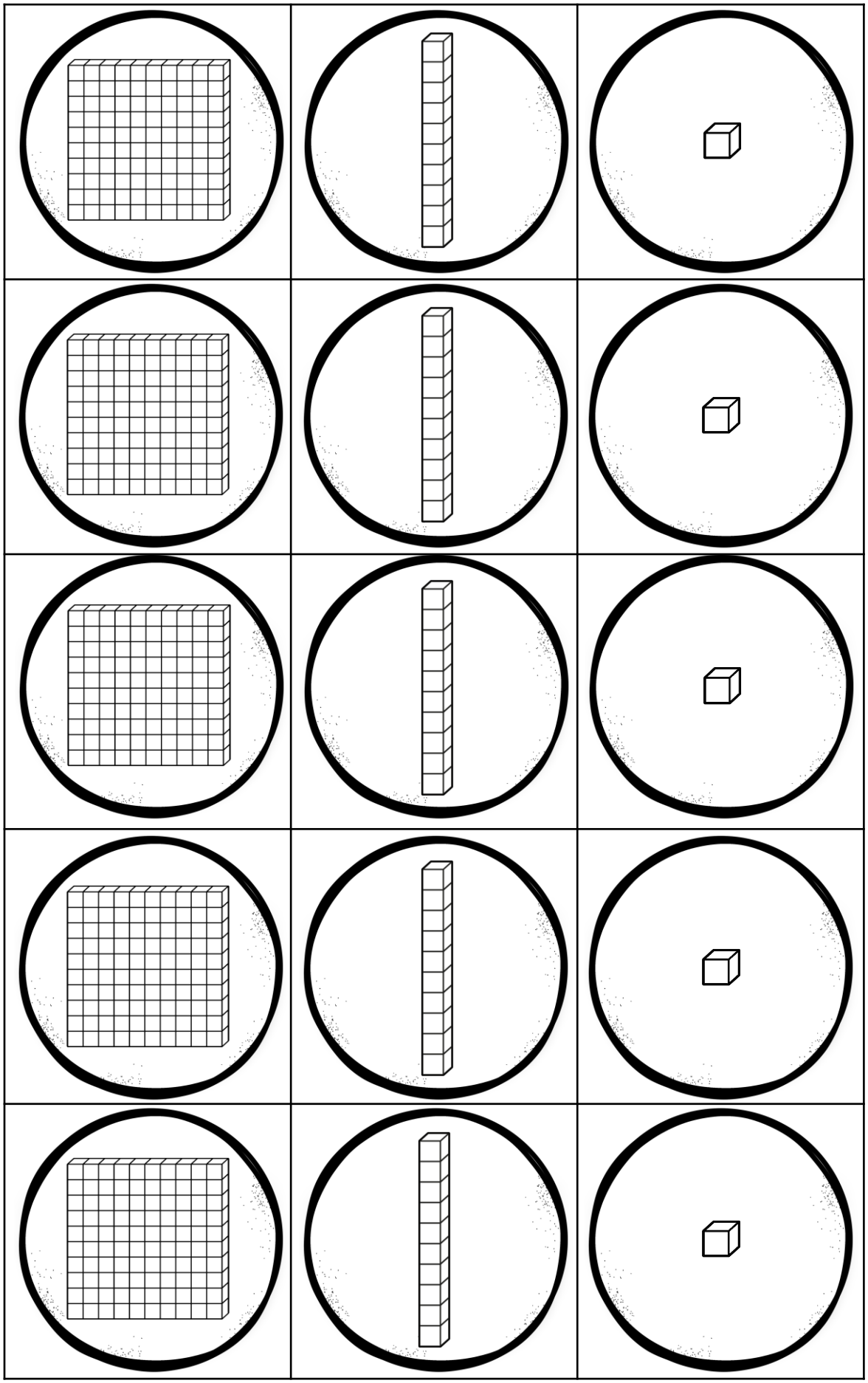
SNOWMAN SMASH

Tape blocks to 12-15 mini cups. Arrange cups in snowman stacks.



SNOWMAN SMASH

Tape blocks to 12-15 mini cups. Arrange cups in snowman stacks.



SNOWMAN SMASH

NAME: _____

Draw the base ten blocks, then write the values and total.

▪ = 1 | = 10 □ = 100

___+___+___ = ___	___+___+___ = ___	___+___+___ = ___	___+___+___ = ___
___+___+___ = ___	___+___+___ = ___	___+___+___ = ___	___+___+___ = ___

SNOWMAN SMASH

NAME: _____

Draw the base ten blocks, then write the values and total.

▪ = 1 | = 10 □ = 100

___+___+___ = ___	___+___+___ = ___	___+___+___ = ___	___+___+___ = ___
___+___+___ = ___	___+___+___ = ___	___+___+___ = ___	___+___+___ = ___

©Brooke Brown

SNOWMAN SMASH

NAME: _____

Draw the base ten blocks, then write the total decimal value.

☐ = whole numbers | = tenths ▪ = hundredths

___•___ ___	___•___ ___	___•___ ___	___•___ ___
___•___ ___	___•___ ___	___•___ ___	___•___ ___

SNOWMAN SMASH

NAME: _____

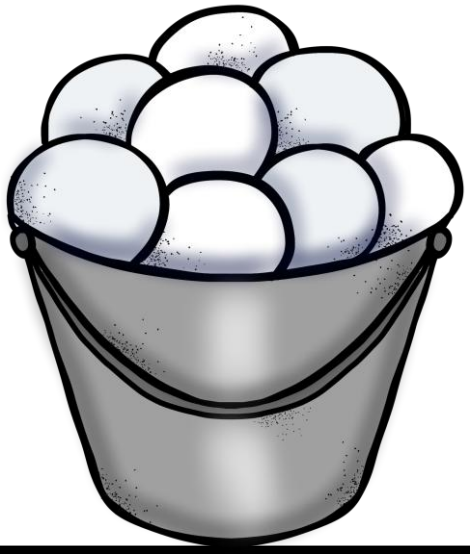
Draw the base ten blocks, then write the total decimal value.

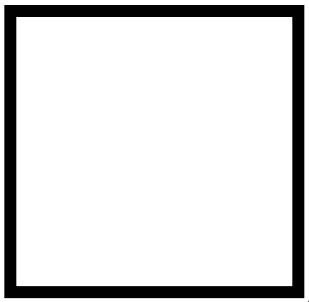
☐ = whole numbers | = tenths ▪ = hundredths

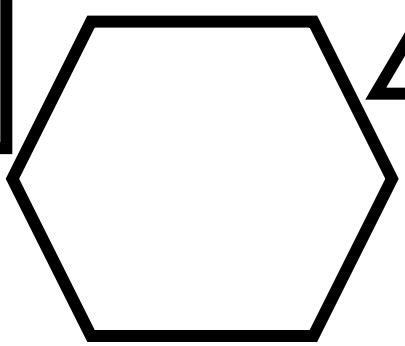
___•___ ___	___•___ ___	___•___ ___	___•___ ___
___•___ ___	___•___ ___	___•___ ___	___•___ ___

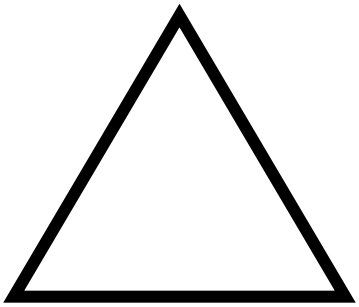
SNOWBALL STRUCTURES

Follow the instructions and pictures on your recording sheet to create 2D shapes out of marshmallows and toothpicks.





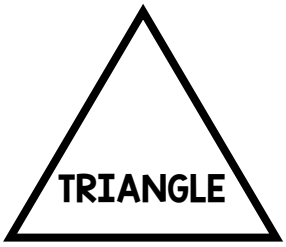
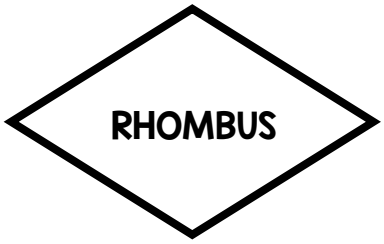




SNOWBALL STRUCTURES

NAME: _____

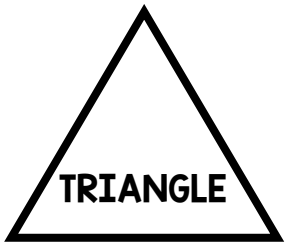
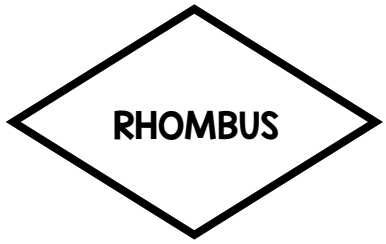
Color each shape after you build it.
Count the sides and vertices.

 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____
 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____

SNOWBALL STRUCTURES

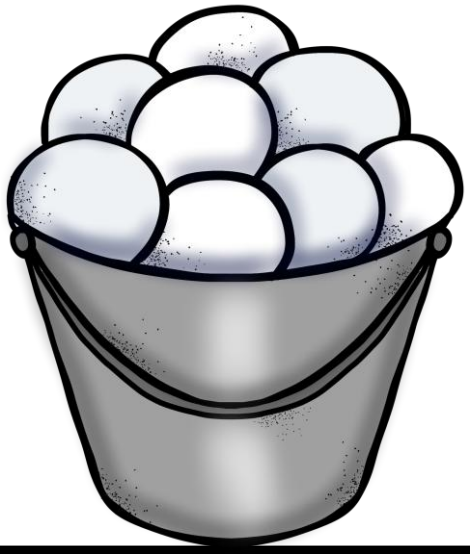
NAME: _____

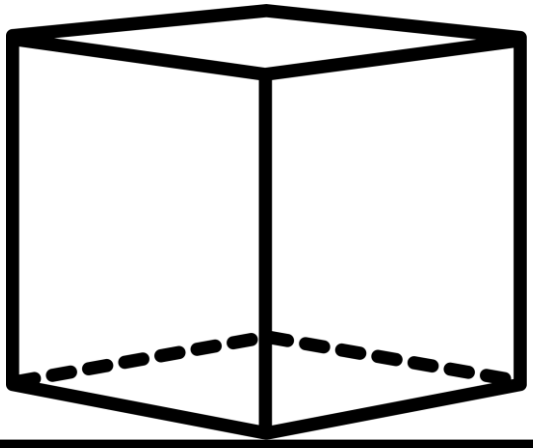
Color each shape after you build it.
Count the sides and vertices.

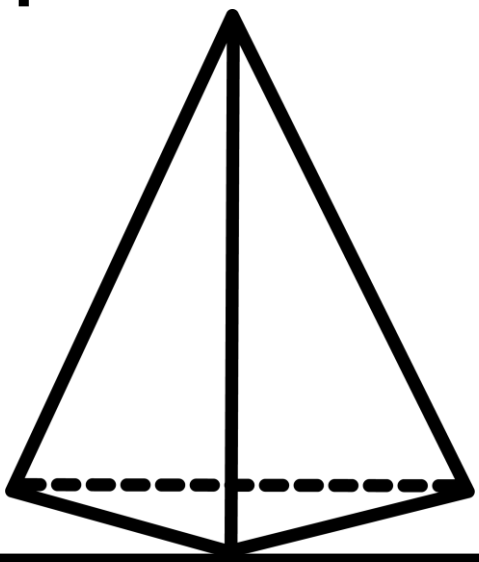
 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____
 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____	 How many sides?____ How many vertices?____

SNOWBALL STRUCTURES

Follow the instructions and pictures on your recording sheet to create 3D solids out of marshmallows and toothpicks.





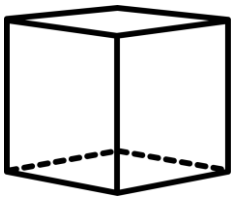


SNOWBALL STRUCTURES

NAME: _____

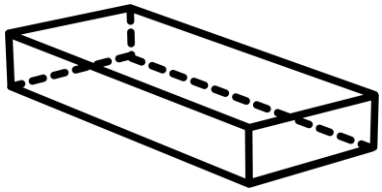
Color each 3D solid after you build it. Count the faces, edges, and vertices.

CUBE



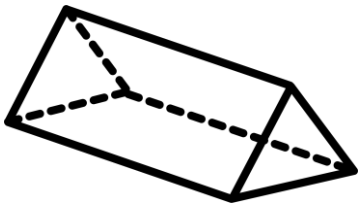
How many faces?____
How many edges?____
How many vertices?____

RECTANGULAR PRISM



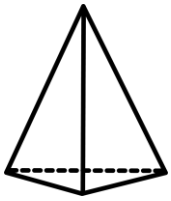
How many faces?____
How many edges?____
How many vertices?____

TRIANGULAR PRISM



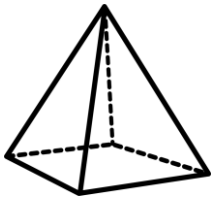
How many faces?____
How many edges?____
How many vertices?____

TRIANGULAR PYRAMID



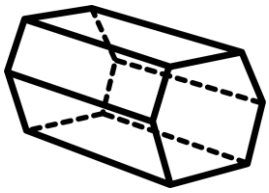
How many faces?____
How many edges?____
How many vertices?____

SQUARE PYRAMID



How many faces?____
How many edges?____
How many vertices?____

HEXAGONAL PRISM



How many faces?____
How many edges?____
How many vertices?____

SNOWBALL STRUCTURES

NAME: _____

Color each 3D solid after you build it. Count the faces, edges, and vertices.

CUBE

How many faces?____
How many edges?____
How many vertices?____

RECTANGULAR PRISM

How many faces?____
How many edges?____
How many vertices?____

TRIANGULAR PRISM

How many faces?____
How many edges?____
How many vertices?____

TRIANGULAR PYRAMID

How many faces?____
How many edges?____
How many vertices?____

SQUARE PYRAMID

How many faces?____
How many edges?____
How many vertices?____

HEXAGONAL PRISM

How many faces?____
How many edges?____
How many vertices?____

©Brooke Brown

SNOWBALL STRUCTURES

NAME: _____

What shapes and structures can build? Draw your creations below.

SNOWBALL STRUCTURES

NAME: _____

What shapes and structures can build? Draw your creations below.

©Brooke Brown

TERMS OF USE & CREDITS

Thank you for purchasing a resource created by Brooke Brown of Teach Outside the Box, LLC!

YOU MAY	▪ Use resources for your own personal use. ▪ Use resources for your own classroom and/or students ▪ Copy resources for use in your classroom by your students. ▪ Purchase unlimited additional licenses for others. ▪ Review resources for the purpose of recommendation, provided that you provide a link for resources to be purchased directly from Teach Outside the Box.
YOU MAY NOT	▪ Give resources to others without first purchasing additional licenses. ▪ Copy resources for use by others without first purchasing additional licenses. ▪ Post resources (or any portion or modification thereof) on the internet or any website without first obtaining written consent from Brooke Brown. ▪ Copy or modify any part of this document to offer to others for free or for sale.
CREDITS	Thank you to the following artists for your amazing fonts, digital elements, and clip art that make my resources beautiful and functional!