DO-IT-YOURSELF BINGO CARDS

B	I	N	G	O
		FREE		

B	I	N	G	O
		FREE		

B	I	N	G	O
		FREE		

B	I	N	G	O
		FREE		

FOR MEASUREMENT BINGO, SELECT 24 TERMS FROM THE LIST BELOW AND WRITE THEM ON YOUR CARD BEFORE THE GAME BEGINS. WHEN THE CALLER READS A MEASUREMENT, COVER IT WITH A MARKER IF IT IS ON YOUR CARD!

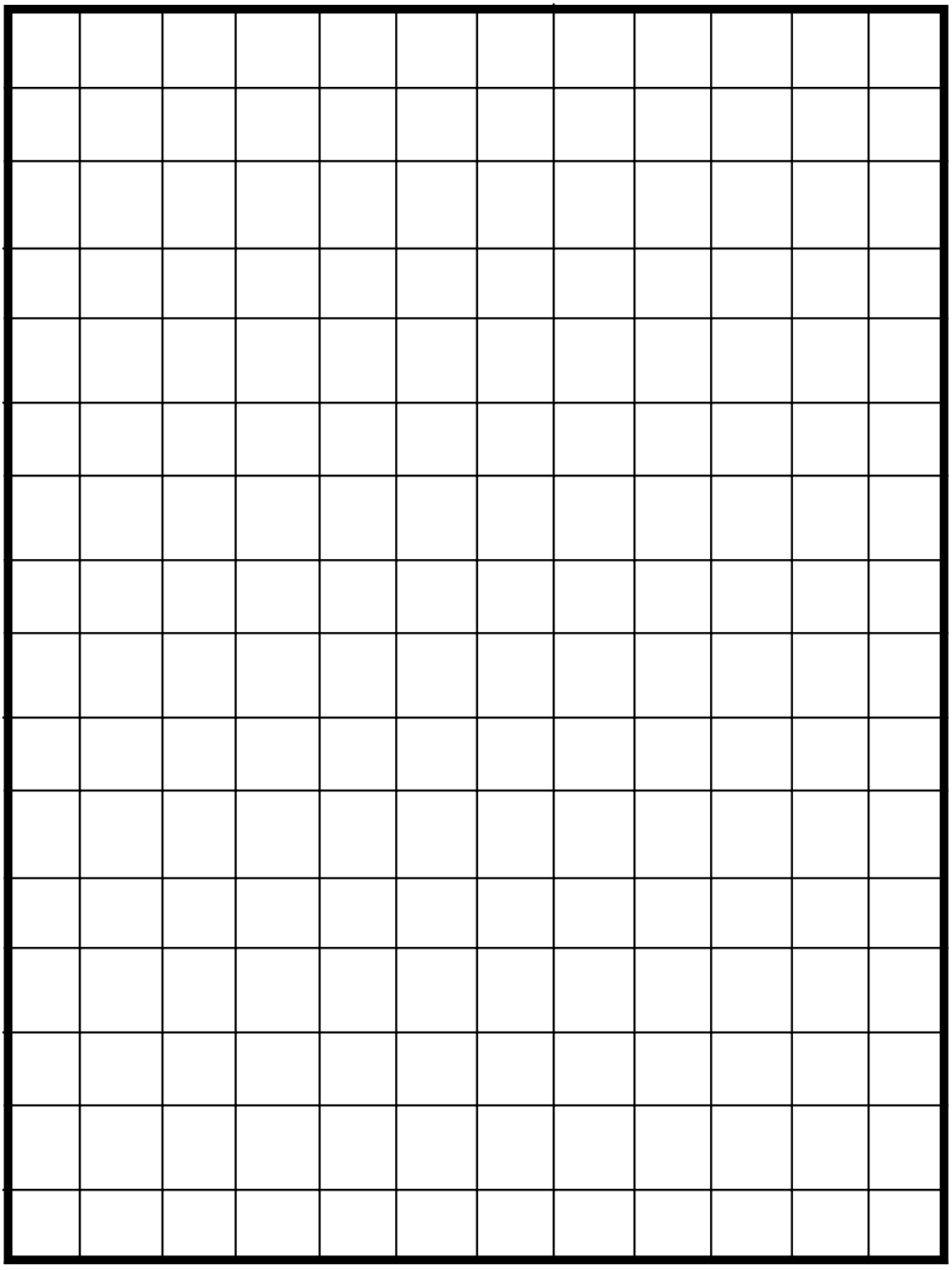
1 YARD	**3000 KILOLITERS**	**2 PINTS**
2 HOURS	**2 QUARTS**	**3 METERS**
2 FEET	**10 YEARS**	**1 POUND**
100 YEARS	**24 INCHES**	**3 WEEKS**
2 CUPS	**1 YEAR**	**18 INCHES**
2 DAYS	**1 TON**	**1 FOOT**
1000 MILLIMETERS		**1 METER**
36 INCHES		**5 LITERS**
500 GRAMS	**4 QUARTS**	**3 KILOGRAMS**
90 MINUTES	**1 MINUTE**	**1 KILOMETER**
50 CENTIMETERS		**2 GALLONS**
1 $\frac{1}{2}$ QUARTS		

Measurement Bingo Call-Outs

1. three feet
2. 12 inches
3. 1 yard
4. 2 feet
5. $1\frac{1}{2}$ feet
6. 1 meter
7. 24 inches
8. 1 pint
9. 2000 pounds
10. $\frac{1}{2}$ meter
11. 1 quart
12. half gallon
13. 8 quarts
14. 60 seconds
15. 120 minutes
16. 52 weeks
17. 1 gallon
18. 100 centimeters
19. 1000 meters
20. 300 centimeters
21. $\frac{1}{2}$ kilogram
22. 16 ounces
23. 3000 grams
24. 3 liters
25. 5000 milliliters
26. $1\frac{1}{2}$ hours
27. 52 weeks
28. 21 days
29. 48 hours
30. 1 century
31. 1 decade
32. 6 pints

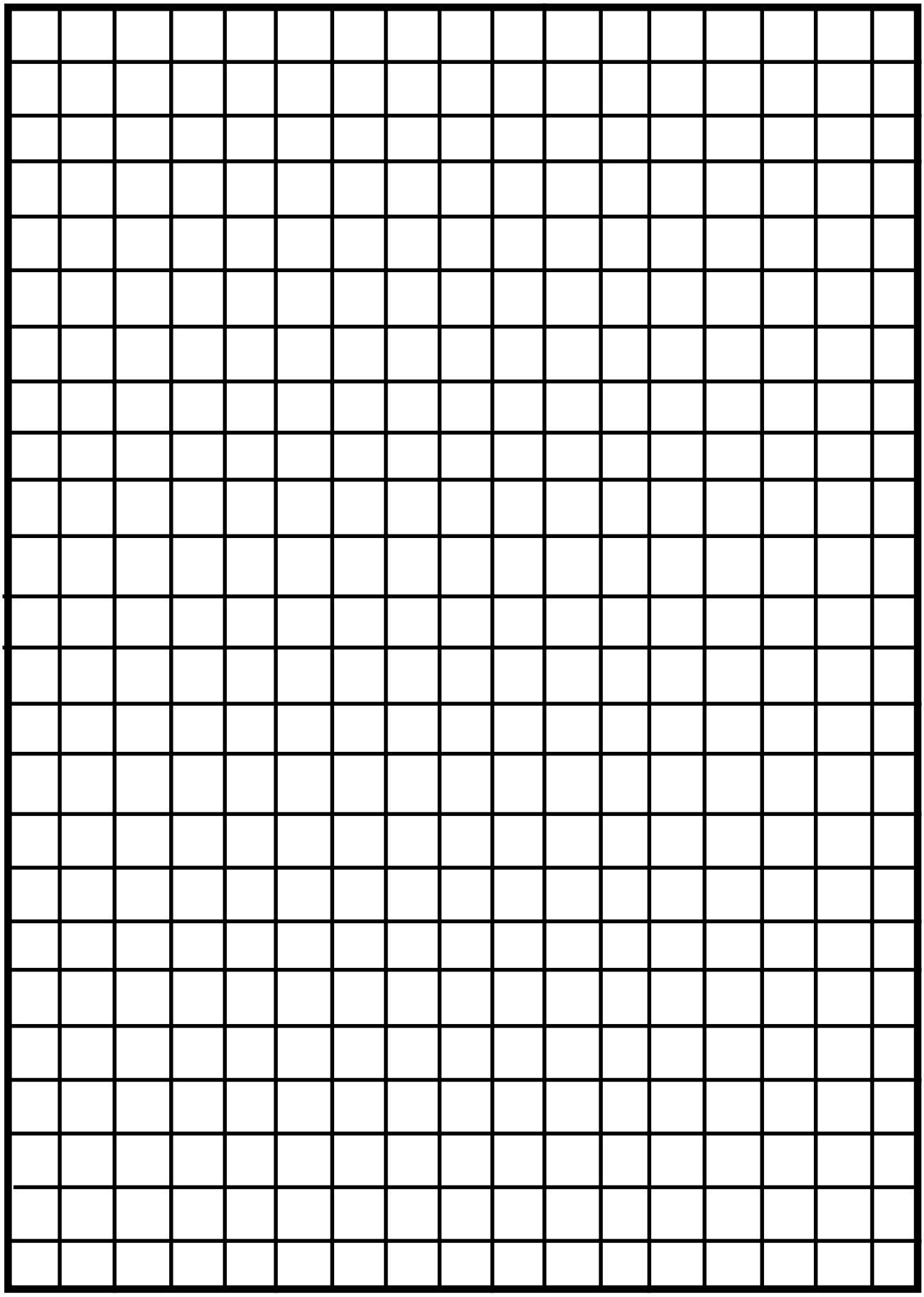
Half-Inch Graph Paper

Name_____ Date__/__/__



One-Centimeter Graph Paper

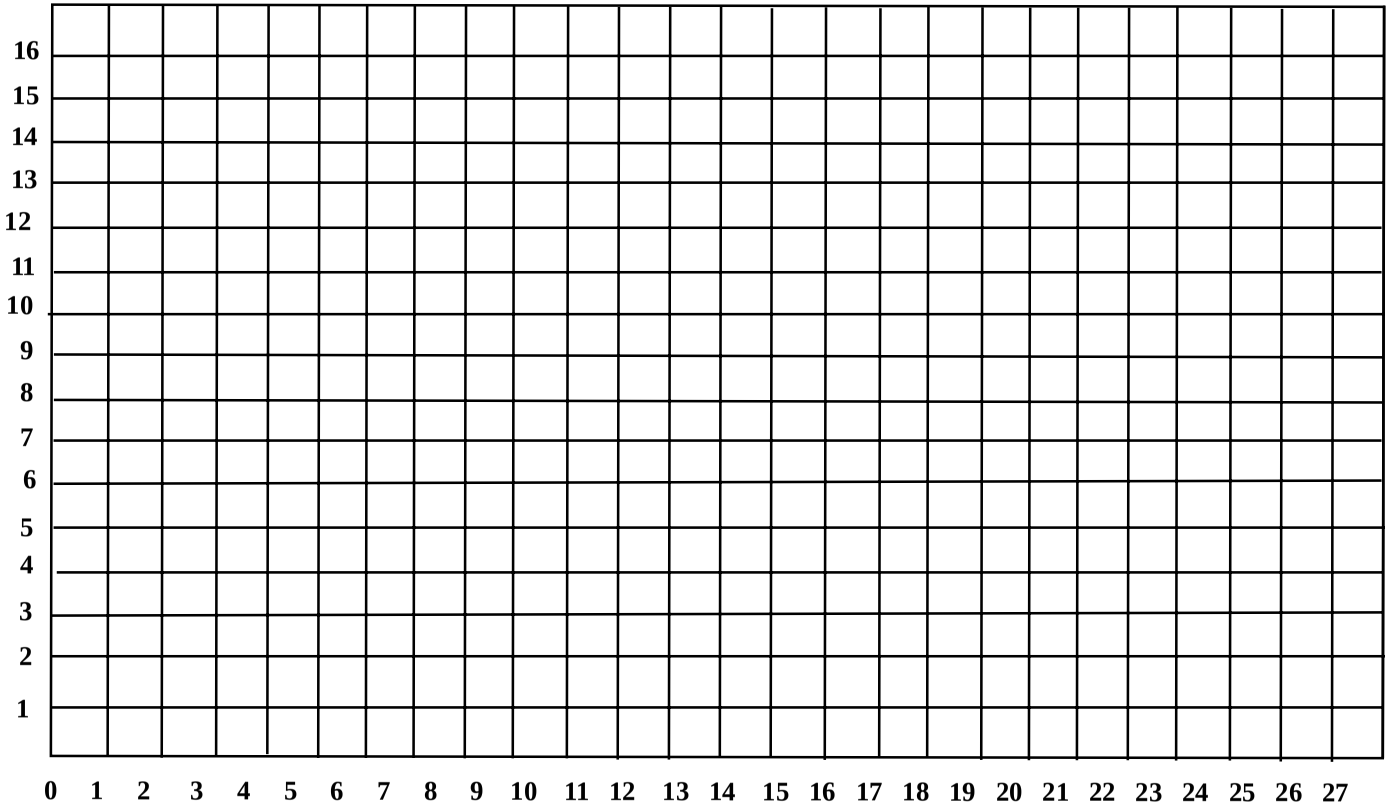
Name_____ Date__/__/__



Name_____**Date**___/___/___

Using Coordinates

A. Connect these points in order. What picture do you see?
(6,7) (17 1/2, 7) (18, 6) (18 1/2, 4) (16 1/2, 2) (15, 2) (14, 1) (12 1/2, 0) (8, 2 1/2) (8, 3) (5, 3 1/2) (4,3) (0, 3) (0, 3 1/2) (5 1/2, 6) (6, 7)



B. Use your own graph paper to see what happens when you multiply each number in the pairs above by 2.

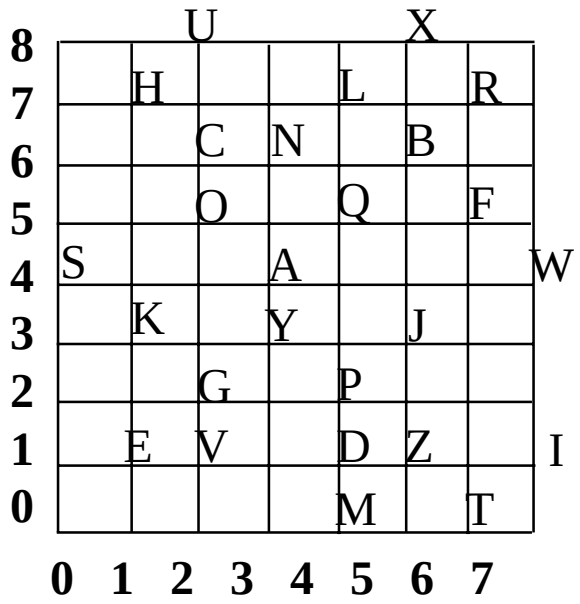
C. What happens when only the first numbers of the ordered pairs are multiplied by 2?

D. What happens when you double the second numbers of the ordered pairs?

Name_____**Date**___/___/___

Expressions of Appalachian Mountain Folk

1. Decode to find the word which is defined for you.



_____
(1,7) (2,5) (4,7) (4,7) (1,1) (6,7)
A small valley

_____
(2,2) (3,4) (3,6) (4,1) (1,1) (6,7)
To look at

_____
(4,2) (2,5) (1,3) (1,1)
Paper Bag

_____
(1,3) (7,1) (2,1) (2,1) (1,1) (6,7)
Cover; a lid for a pot or a blanket

_____
(0,4) (4,0) (3,4) (2,6) (1,3) - (4,1) (3,4) (5,6)
On the dot, exactly

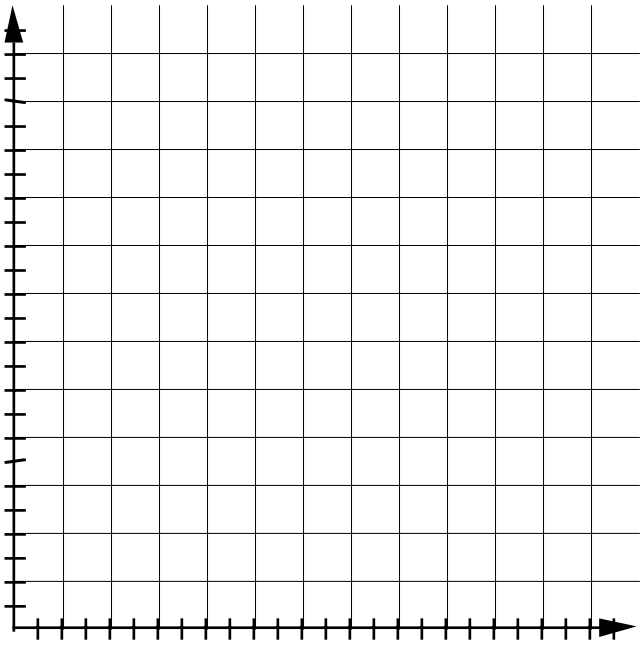
_____
(2,1) (7,1) (6,0) (6,0) (4,7) (1,1) (0,4)
Food

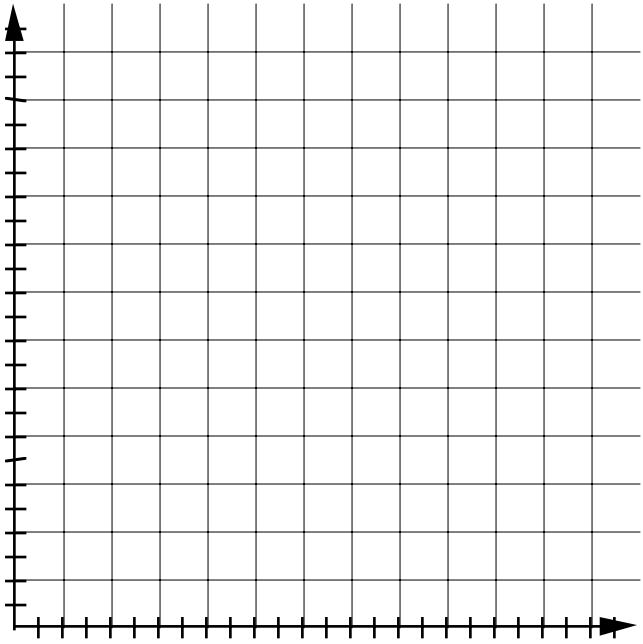
_____ _____
(6,5) (2,8) (6,7) (4,2) (7,1) (1,1) (2,6) (1,1)
A great distannce

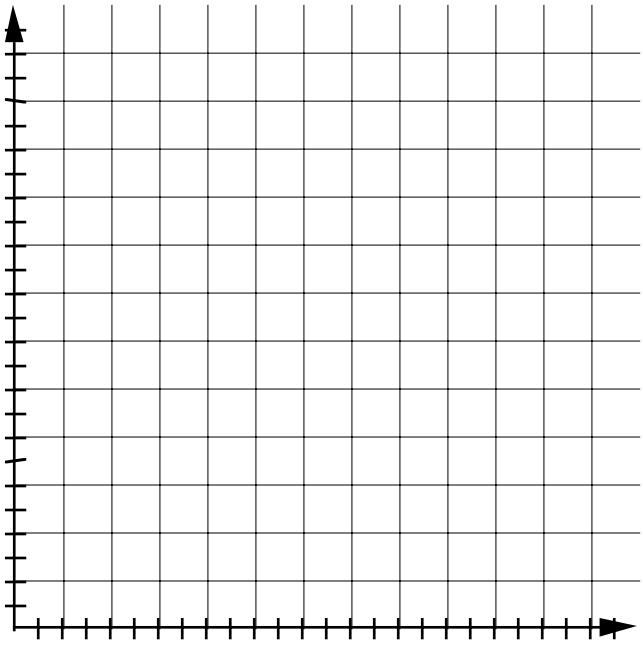
_____ _____
(4,2) (2,8) (6,0) (2,5) (2,8) (6,0)
Angry or annoyed

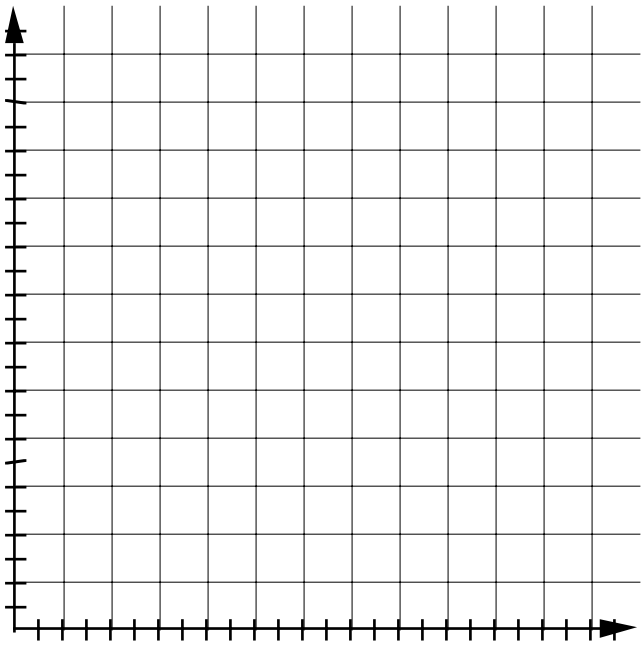
2. Interview people in your neighborhood to find other expressions from different parts of the country. Write the definitions for those words on another sheet of paper and use this code to write the coordinates.

Name_____**Date**___/___/___

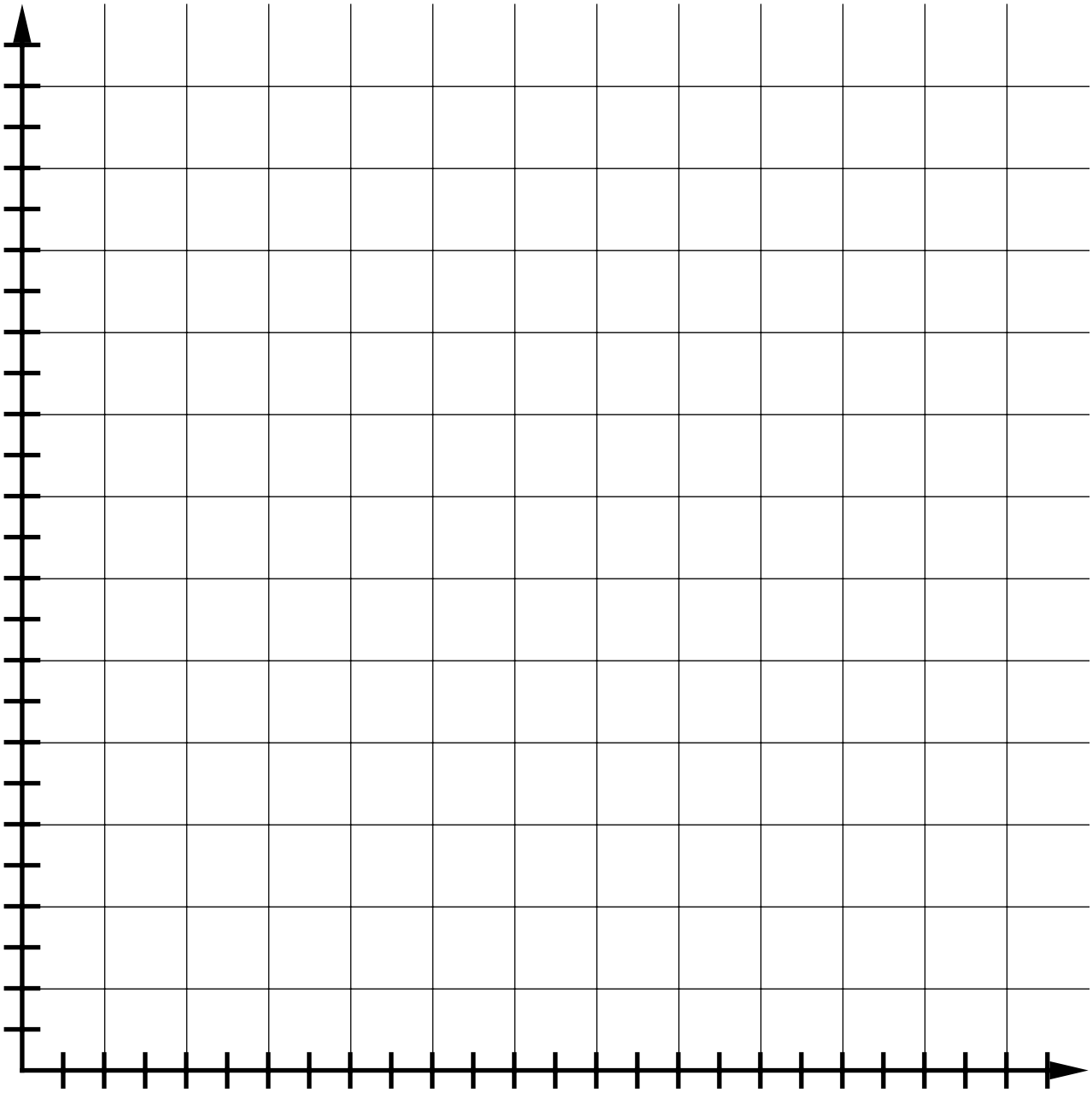








Name_____**Date**___/___/___

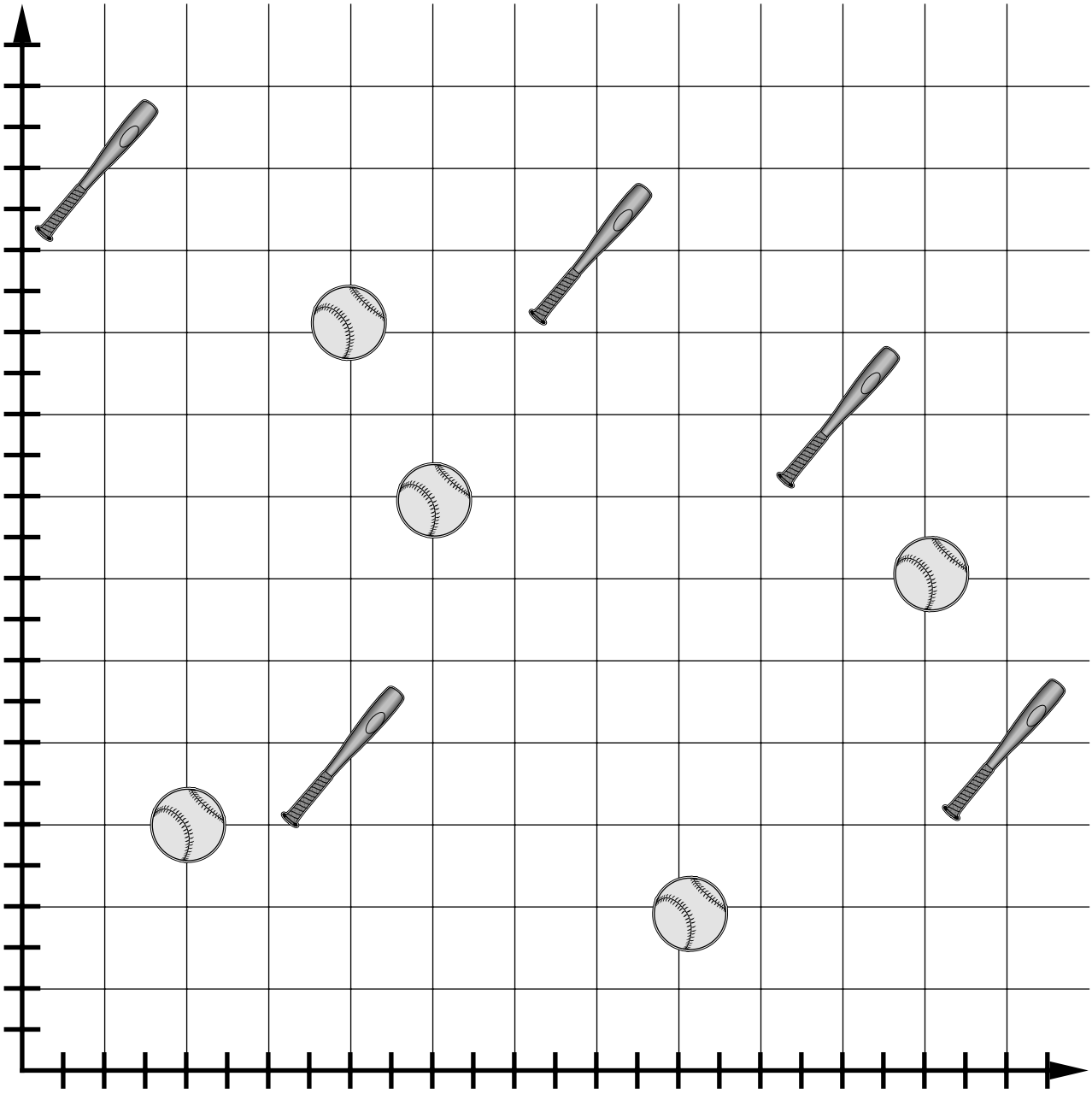


Name_____**Date**___/___/___

Find the Figures!!

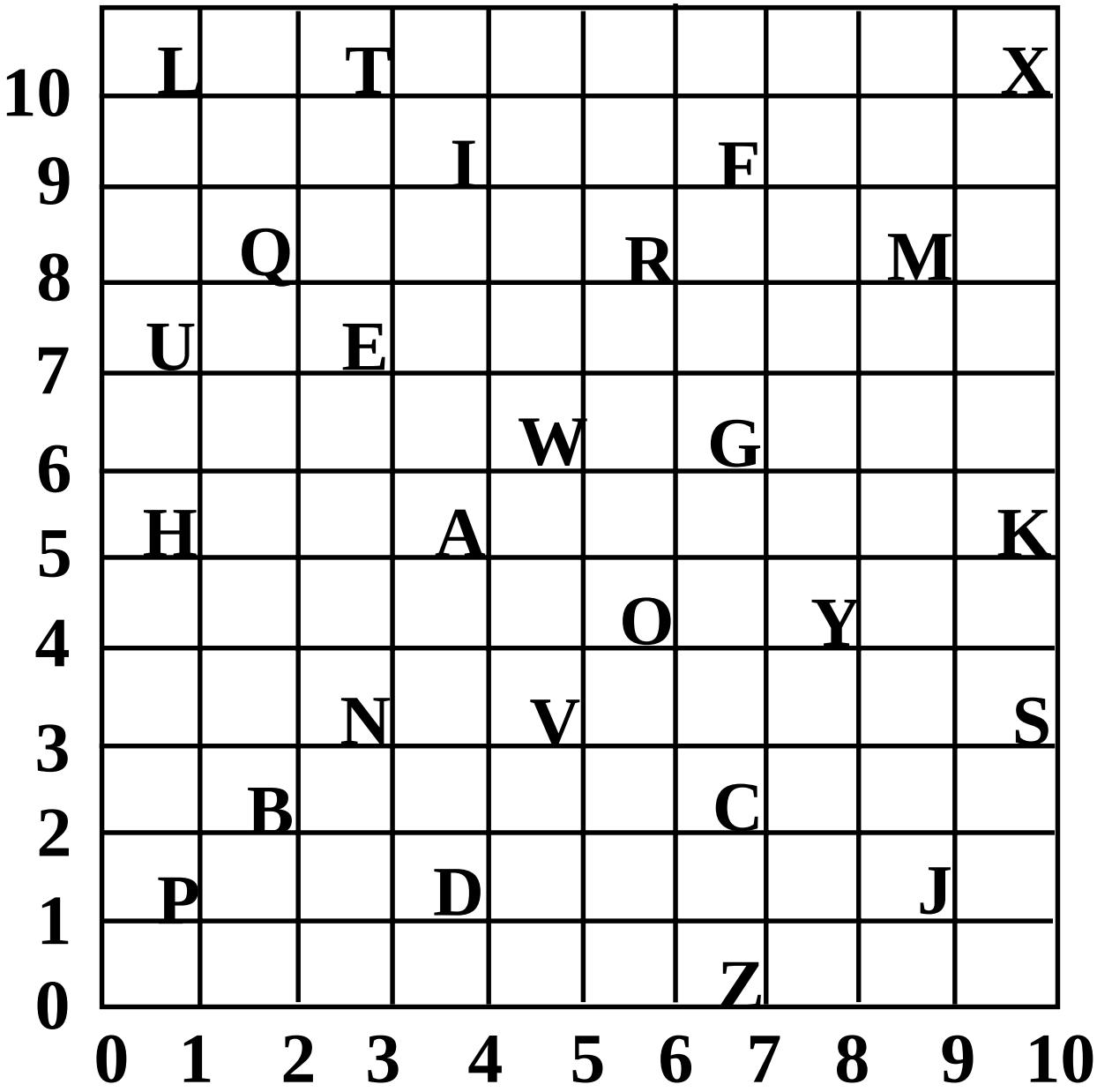
	A	B	C	D	E	F	G	H	I	J
10										
9										
8										
7										
6										
5										
4										
3										
2										
1										

Name_____**Date**___/___/___



Name_____Date___/___/___

Secret Code Grid



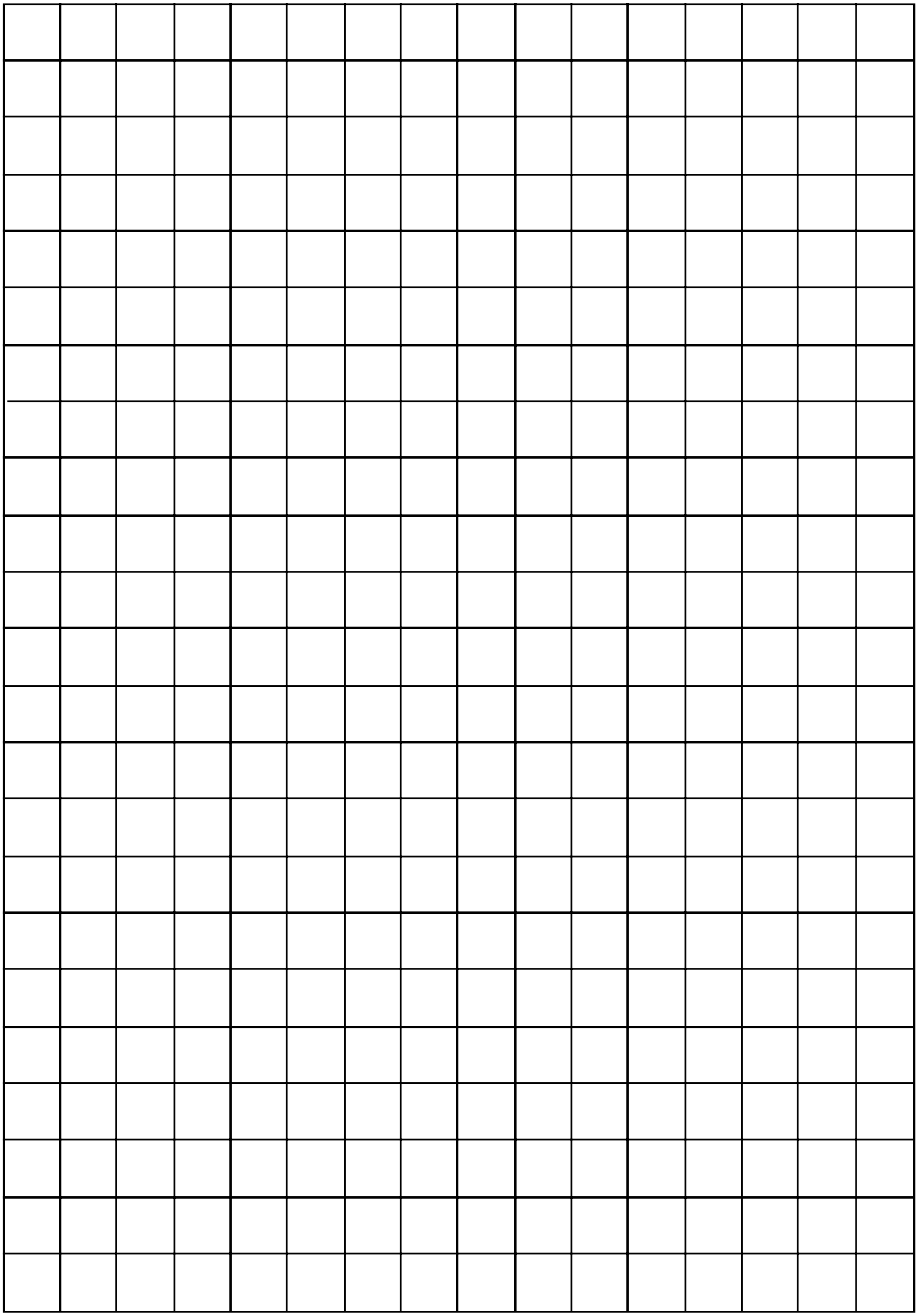
What is the code for your friends name? Try writing a secret message for a friend.

1 **East/West**	**1** **East/West**	**2** **East/West**	**2** **East/West**
3 **East/West**	**3** **East/West**	**3** **East/West**	**2** **East/West**

1 East/West	**4** East/West	**4** East/West	**4** East/West
1 North/South	**4** North/South	**4** North/South	**4** North/South

1 North/South	**1** North/South	**2** North/South	**2** North/South
3 North/South	**3** North/South	**3** North/South	**2** North/South

Name_____ Date_____



TANGRAM TALLY

Which shapes can you make with one set of tangram pieces? Sketch in each square the ones you are able to do. What can you say about the relationships the pieces have to each other?

Name_____ **Date**__/__/__

Can you make the shapes with this many pieces?

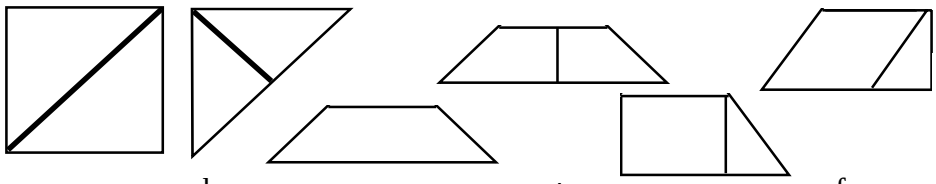
Try to make all of these shapes and fill in the grid.

	1	2	3	4	5	6	7
square							
rectangle (not a square)							
triangle							
trapezoid							
parallelogram							
pentagon							
rhombus							

TANGRAMS

Tangrams are puzzles, usually of seven pieces, that may be combined to form a square. The exact origin of tangrams is unknown, but scholars place their development hundreds of years ago in China. Tangrams lend themselves to spatial problem solving, discussions of properties of polygons; explorations of geometric concepts, and activities with area, perimeter, and fractions.

Provide various size pieces of paper for students to create thier own tangram sets through paper folding. Cut and fold as instructed below:



a. Fold square into two large congruent triangles. Cut apart on the fold.

b. Fold both large triangles into right triangles. Cut one of them on the fold and set these two pieces aside.

c. Fold the second large triangle so that right angle touches the midpoint of the base. Unfold and cut the triangle from the trapezoid. Set the triangle aside.

d. Cut the trapezoid in half (on the fold).

e. Fold one of the quadrilaterals into a square and a right triangle. Cut apart and set these pieces aside.

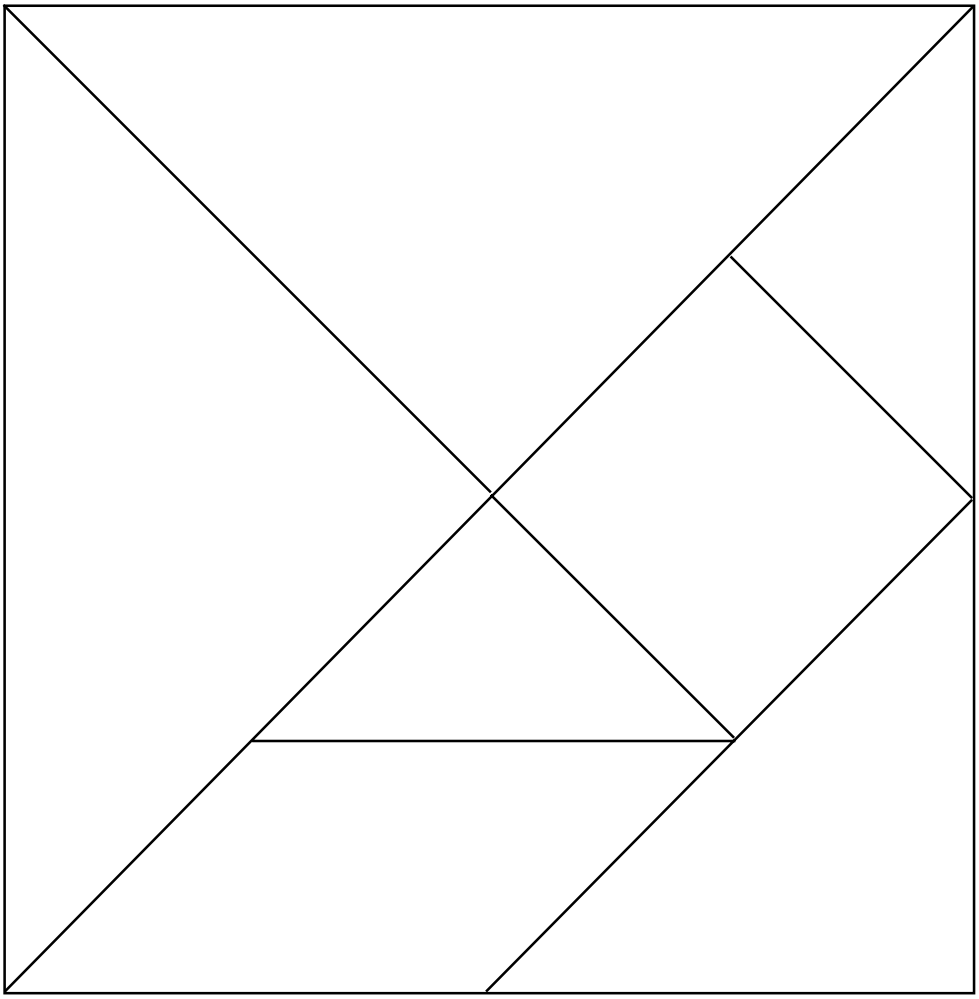
f, Fold the remaining quadrilateral into a parallelogram and a right triangle. Cut along the fold to complete the set.

Compare the sizes of the pieces. Note: if the tangrams are cut from larger paper, the relationships of the pieces to each other would remain the same.

Tasks: Cut your own tangram set by following these directions. With partners make a list of all the mathematical terms you could illustrate using your tangrams. Could you combine ideas and assignments with another group to create a tangram activity book for second graders? You might investigations such as these:

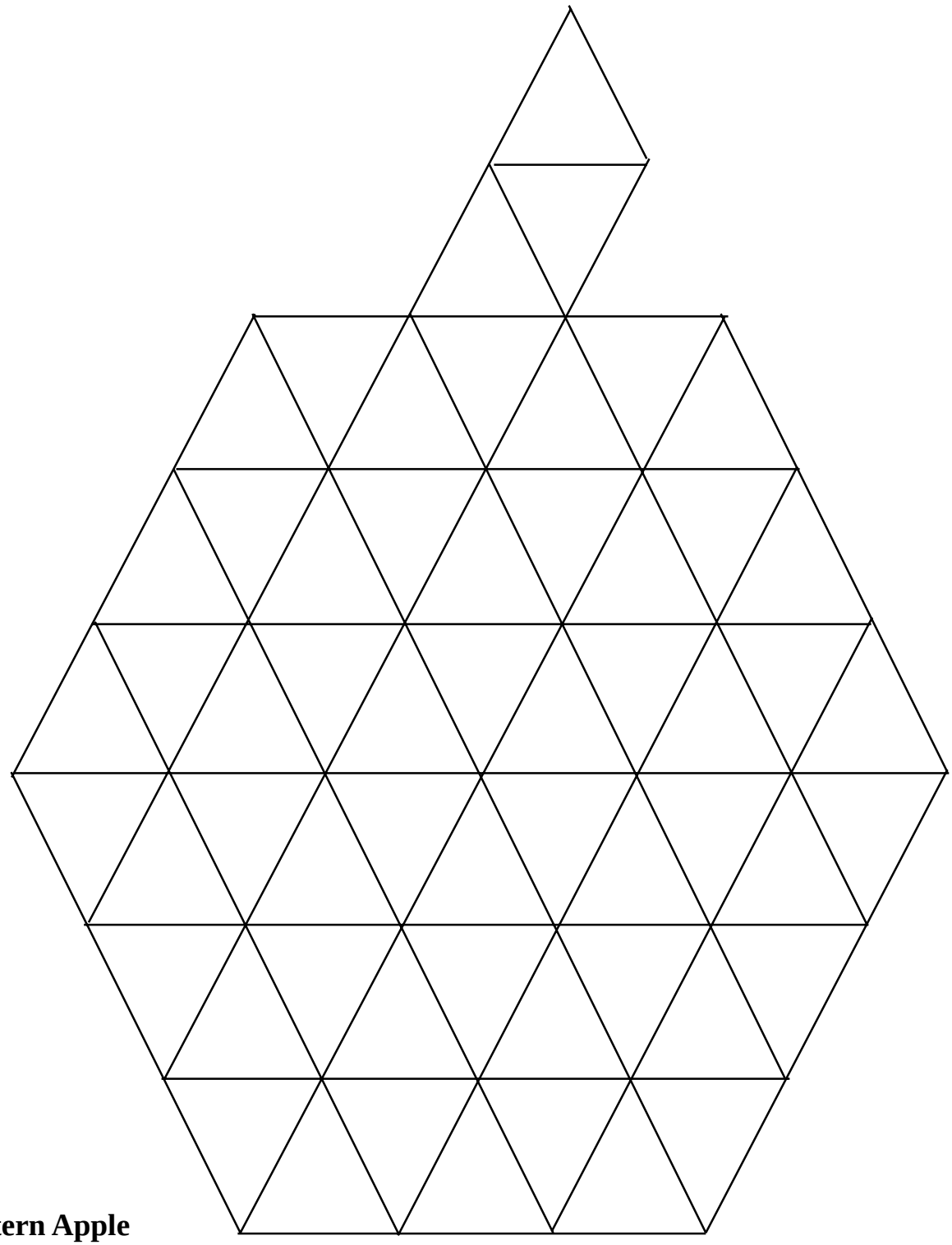
a. Using only the four pieces in figures **e** and **f** above, how many different shapes can you make?
b. Using all 7 pieces, how many different quadrilaterals can you make?

TANGRAM



“APPLE-LICIOUS”

Name_____ Date__/__/__

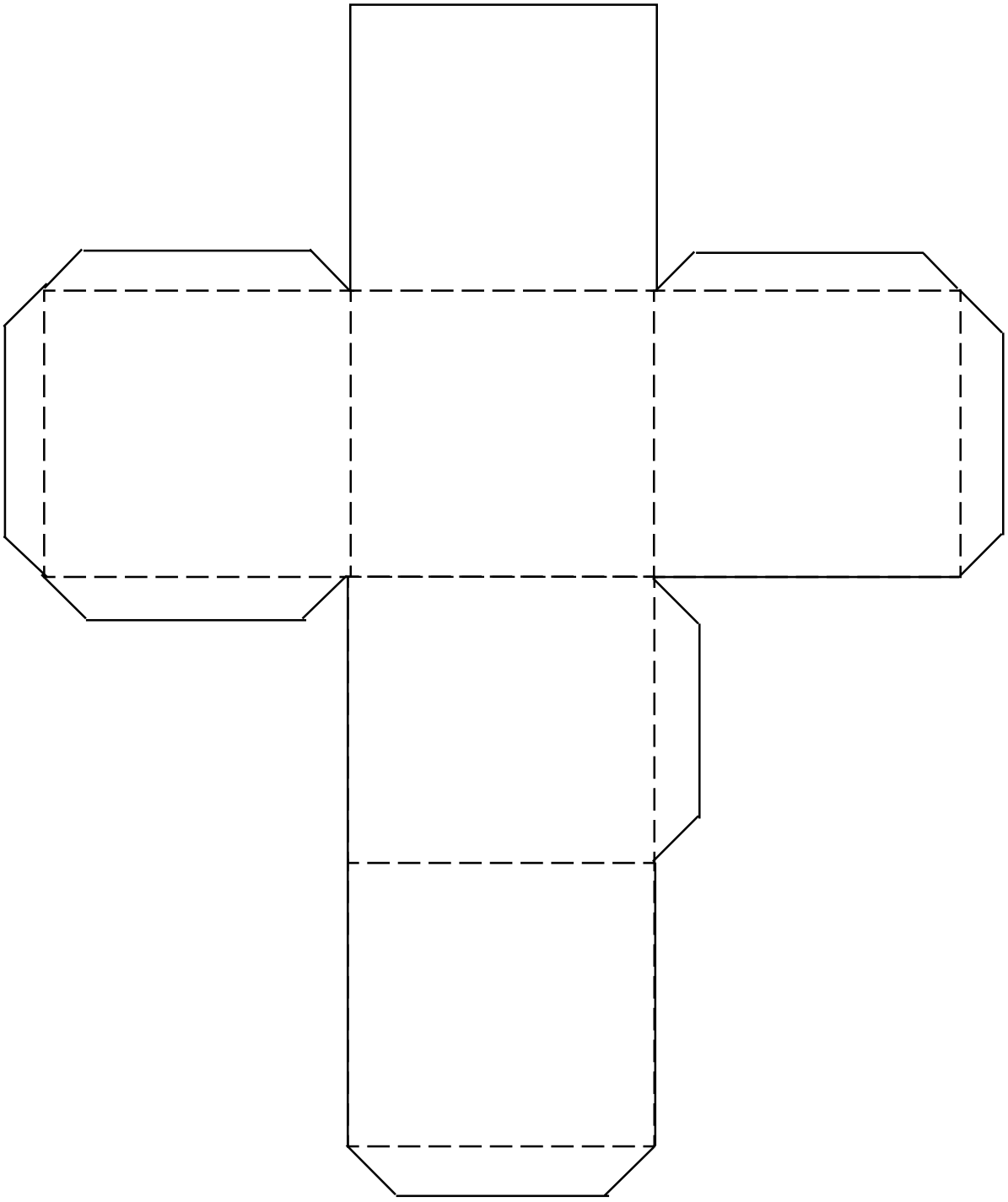


Pattern Apple

Materials: One sheet for each pair of students.
Pattern Blocks: Hexagons, Triangles, Trapezoids,Blue Parallelograms.

The object is to take turns placing one pattern piece at a time until the apple is covered. The person placing the last piece is the winner!

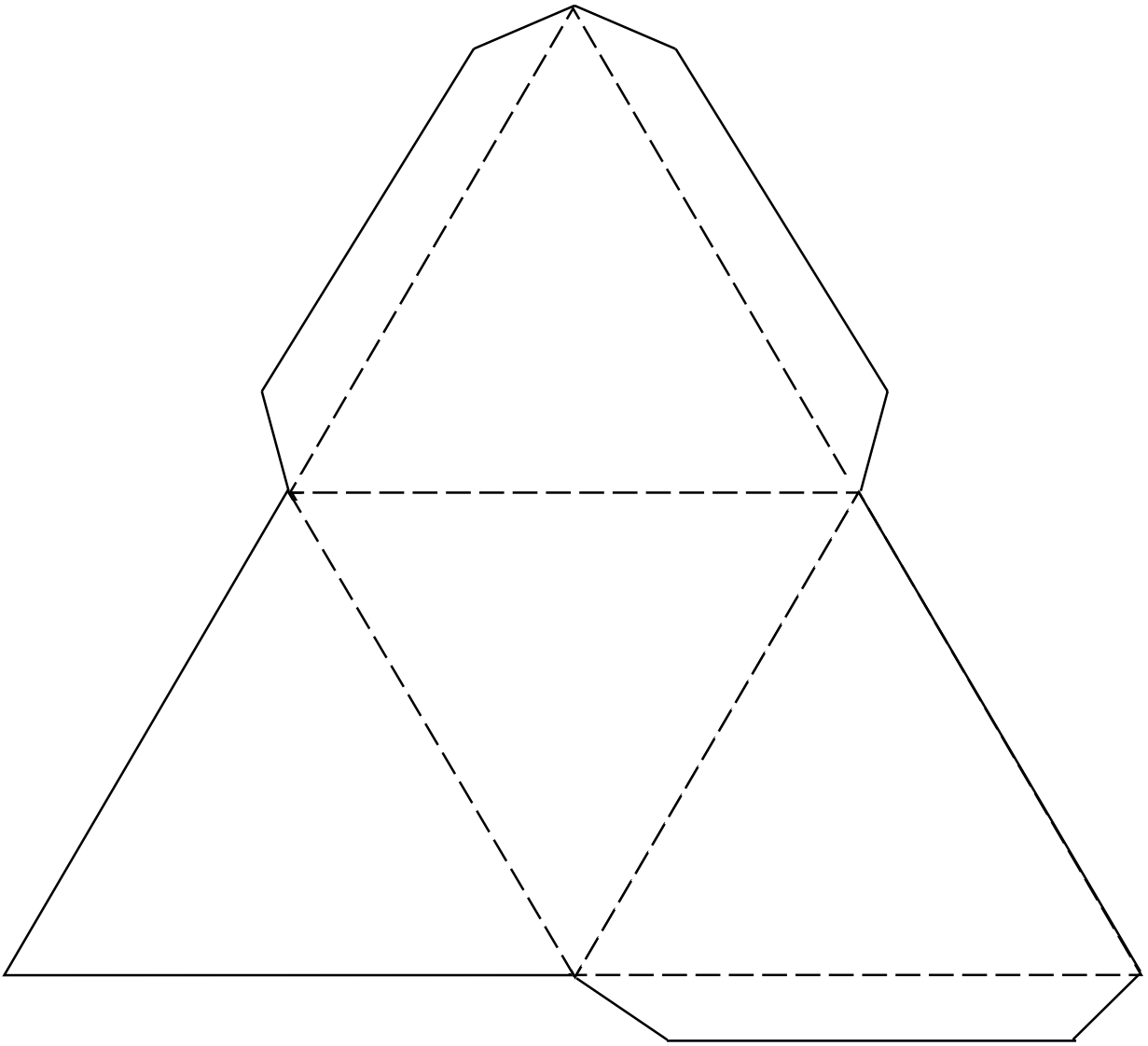
Variation: The person placing the last piece loses the game.



CUBE PATTERN

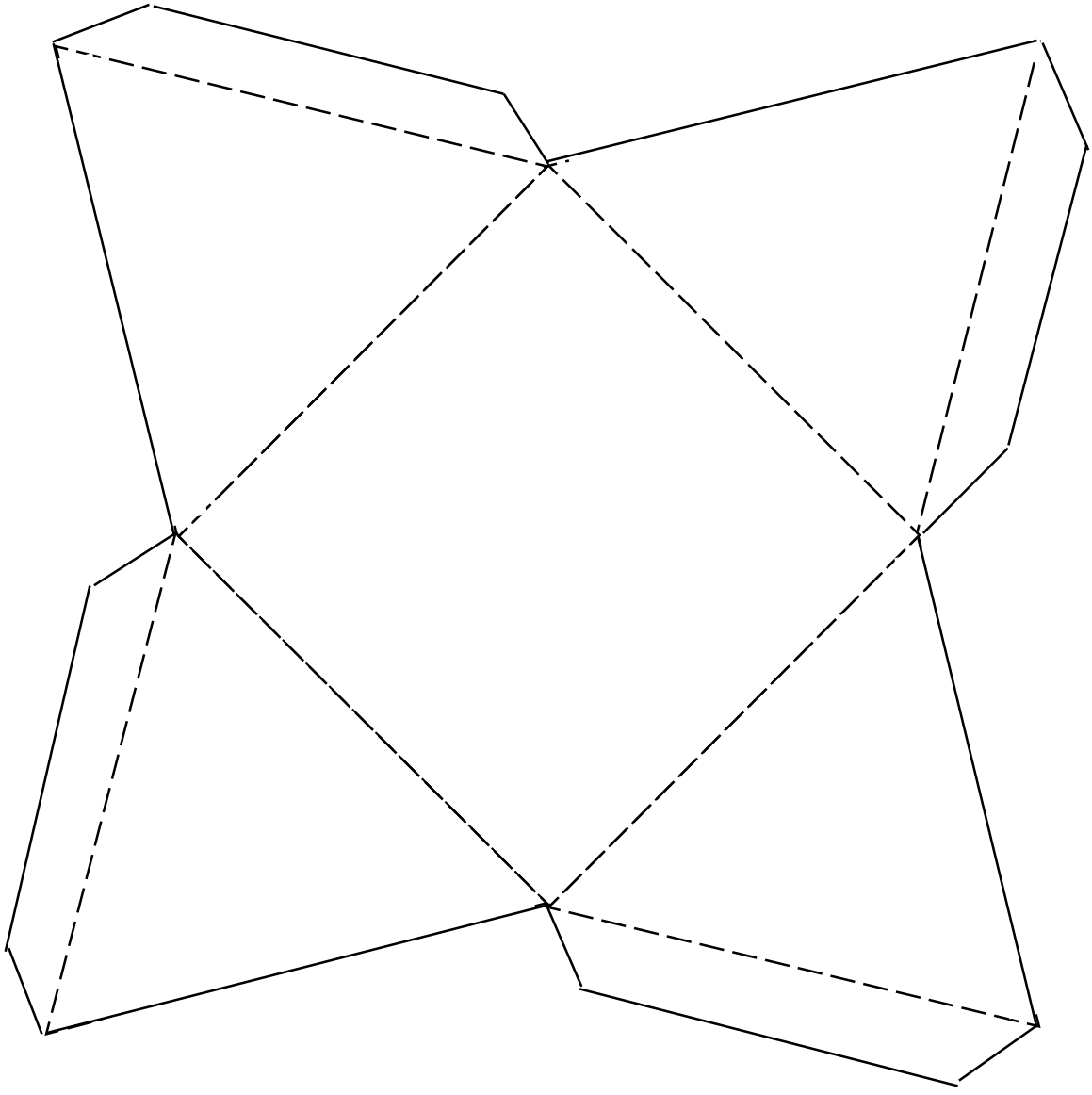
Directions: Cut on solid lines.
Fold on dotted lines

TETRAHEDRON PATTERN



Directions: Cut on solid lines.
Fold on dotted lines

SQUARE PYRAMID PATTERN

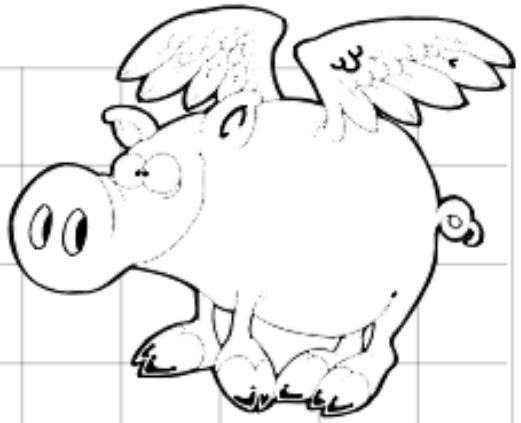


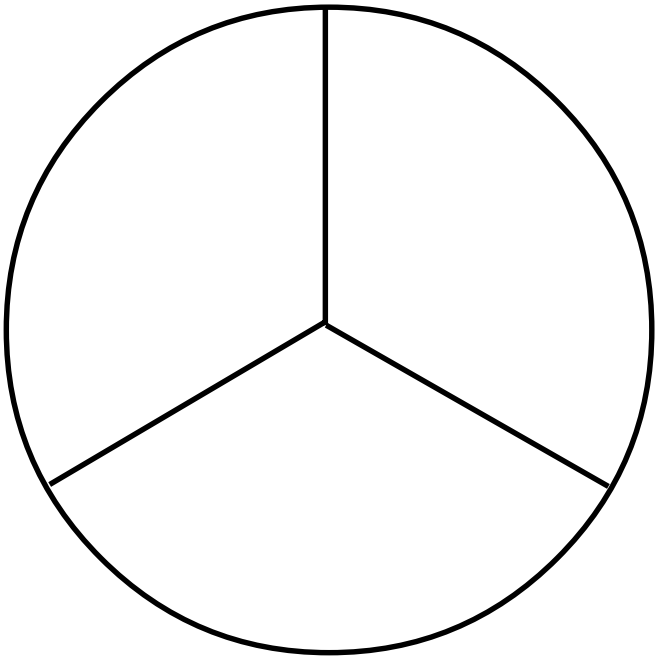
Directions: Cut on solid lines.
Fold on dotted lines

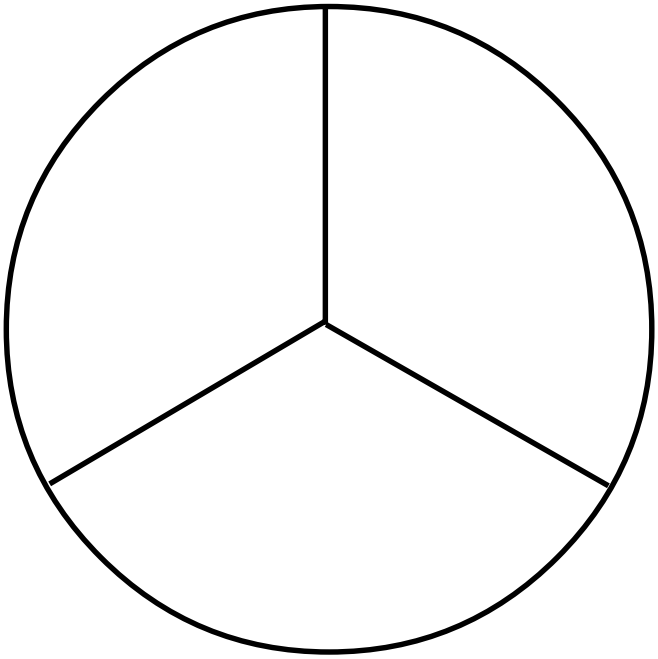
Place The Point

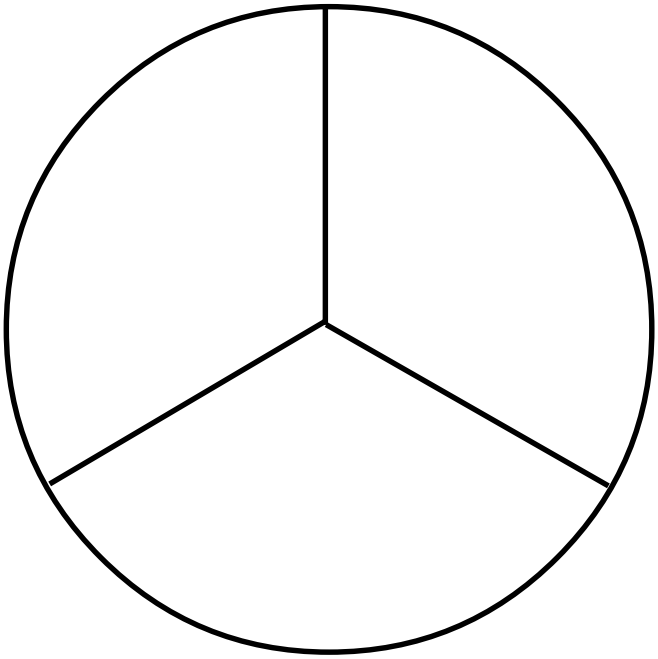
Materials: Game markers for each player, 2 dice or spinner

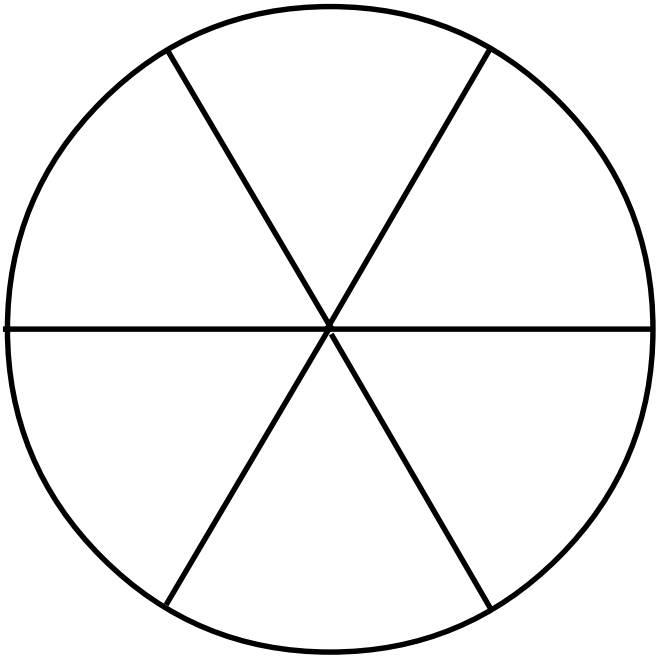
Directions: On your turn roll the dice. Place your marker on that intersection. Example, if you roll 1 and 6, you can capture (6,1), or (1,6). The winner must have four in a row vertically, horizontally or diagonally.

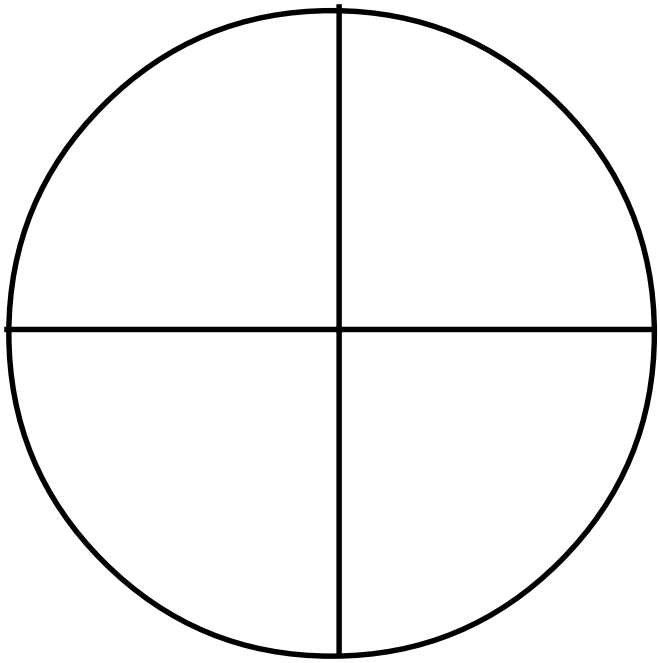


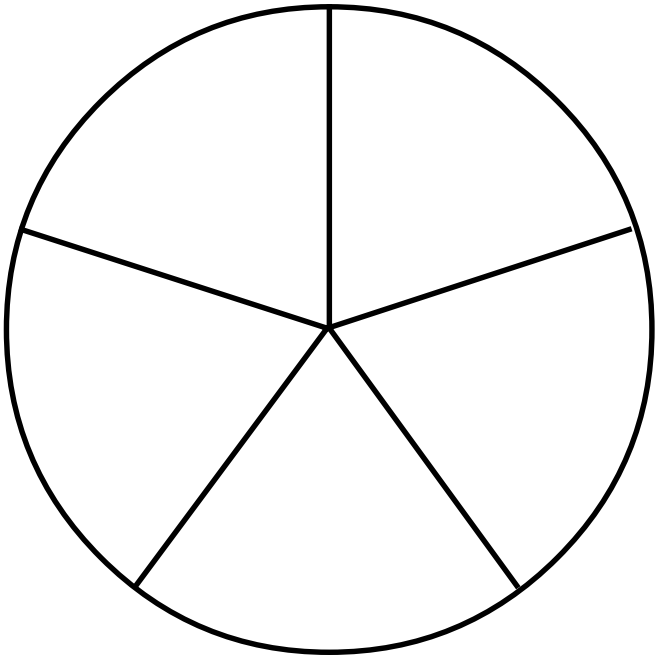


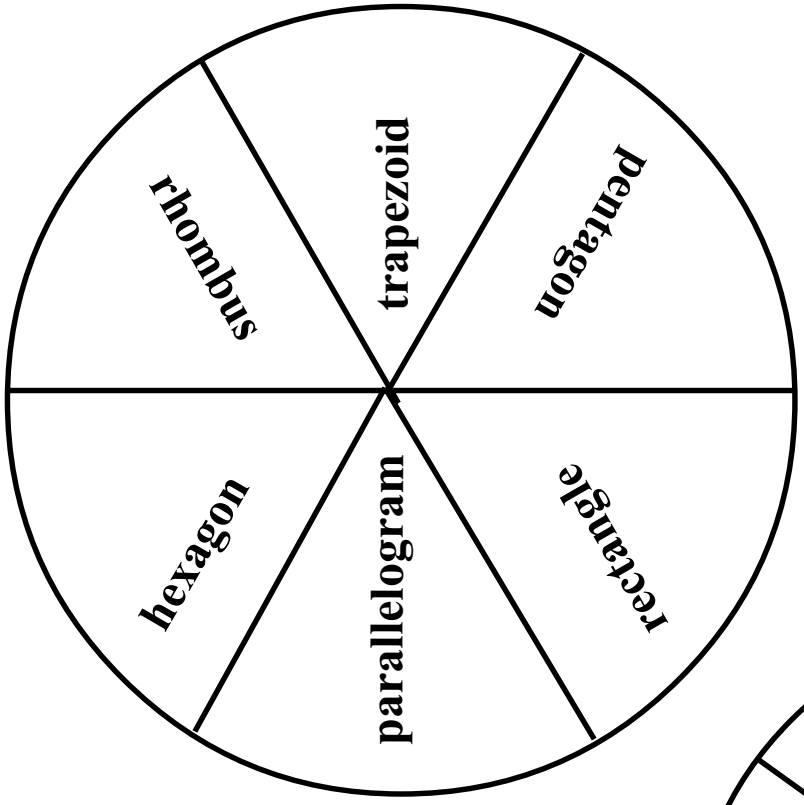


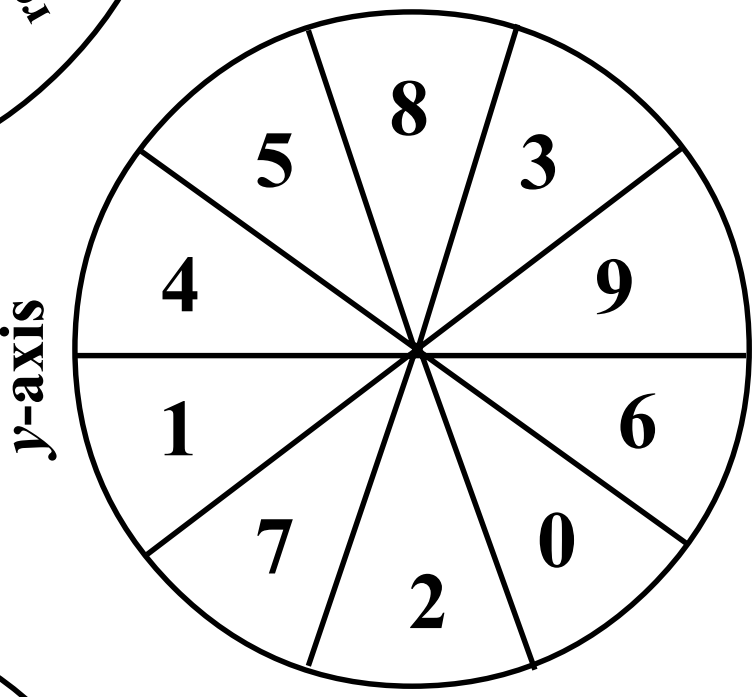




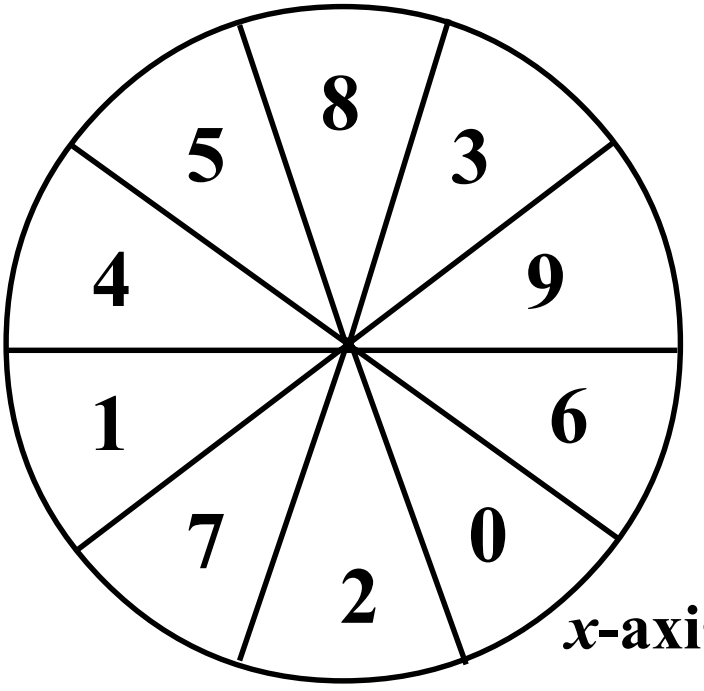





rhombus
trapezoid
pentagon
hexagon
parallelogram
rectangle


5
8
3
4
9
1
6
7
0
2

y-axis


5
8
3
4
9
1
6
7
0
2

x-axis

STUDENT CENSUS

Name_____
First Middle Last

Date of Birth_____ **Age**_____
month day year

What country were you born in ? _____

Address _____
Street

_____
City State Zip Code

Telephone Number_____

Number of people who live at this address _____

Number of brothers _____ **Number of sisters** _____

Hair color _____ **Eye color**_____

Check one: ☐ **right-handed** ☐ **left-handed**

Circle the grades attended at this school K 1 2 3

How do you usually come to school? (Check one)

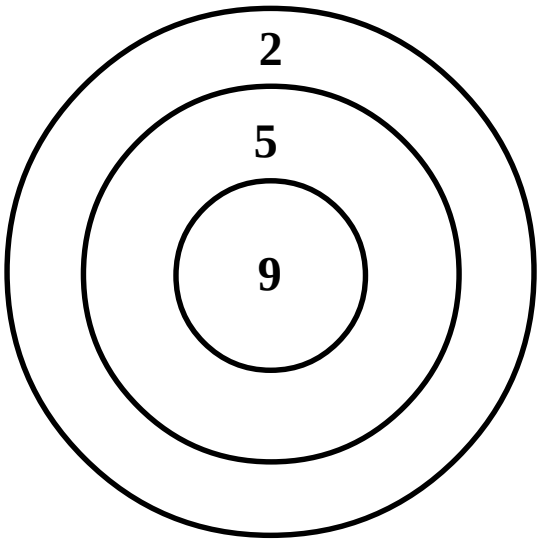
☐ **car** ☐ **bus** ☐ **walk** ☐ **bicycle** ☐ **other**_____

Circle your favorite subject. reading math science social studies

What is your favorite activity? (Check one)

☐ **playing** ☐ **watching TV** ☐ **reading** ☐ **other**_____

Name_____**Date**___/___/___



1st dart	2nd dart	3rd dart	Total	1st dart	2nd dart	3rd dart	Total

Friday the 13th Mathematics

On Friday the 13th (or a day you designate , since some years do not have a Friday the 13th) spend the day doing activities involving the number 13. Here are some suggestions for activities

- Have students research, "Is there a Friday the 13th this year?"
- Survey to see how many students have brothers and sisters 13 years old.
- Who has 13 in his/her address?
- Who has 13 in his/her phone number?
- Discuss a Baker's Dozen. Can you find any "real-life" examples?
- Research why 13 is considered unlucky.
- Research other superstitions.
- Do hotels and other tall buildings have a floor numbered 13?
- Find 13-letter words in the dictionary.
- Find words worth 13 points if a=1, b=2, c=3, etc.
- Is a size 13 shoe 13 inches long?
- What can you do in 13 seconds? Make a list.
- Write what you would do with 13 wishes.
- Play a nim game with 13.
- How many bikes or trikes could you make with 13 wheels? Make a list.
- Play Black Jack with 13 instead of 21.
- Design a giant animal 13 feet tall (or long) on a long piece of paper.
- Write sentences with 13 words.
- What are all the ways to make 13¢?
- How many is 13 groups of 13?
- Make polygons on a geoboard with 13 sides.
- What if there were 13 hours in a day? Write a story.
- Is 13 cups greater than or less than a gallon?
- Write the equation to show how old you will be in 13 years.
- What year will it be in 13 years?
- List 13 math words that you can explain.
- Write a story that this number sentence explains: 13 + 13 – 13 = 13.
- What could you use to model 13 kilograms?
- Suppose there were 13 months in each year. What would be different?
- Make a list of 13 ways to help the environment.
- What are the 13 words used most frequently in your math book?
- How many students could get a glass if you had 13 liters of milk?
- How many legs on 13 cows and chickens? Make a list.
- Use the *Guinness Book of World Records* to find ways 13 can be lucky when people set records with 13 in them.

Friday the 13th NIM Games

- This is a game for two people and one calculator.
- Enter 100 into the calculator.
- Take turns subtracting single-digit numbers, greater than zero.
- The object of the game is to make 13 be the number in the display!
- Play again. The winner is the person to get 13 the most times out of 13 games.

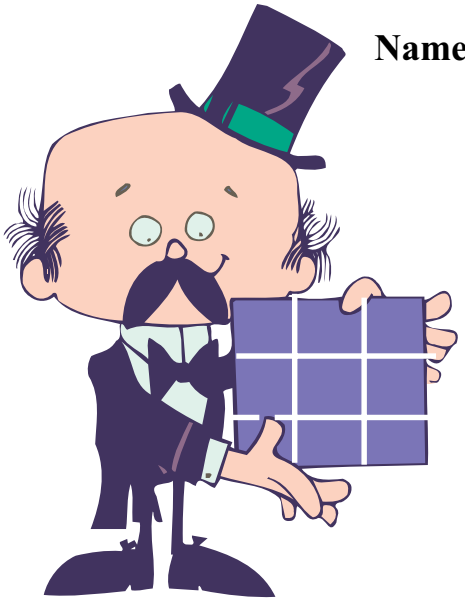
Make *ghostly* counters by painting scary eyes on large lima beans.

- This is a game for two people and 13 *ghostly* counters.
- Place 13 counters on the table and have players take turns removing one or two counters in each turn.
- The last counter is very *unlucky.* If you are faced with it at your turn you lose!

Have a tournament. Who can win 13 games without losing?

Mathematics is based on patterns.

Find winning patterns for each of these games.



Name_____Date___/___/___

Magic Squares!

	1	
3	5	
4		

Create your own:

6	1	
7	5	

Websites with more information about Magic Squares:

http://www.gomath.com/htdocs/game/magic/
http://www.mathcats.com/explore/puzzles/magicsquare4x4.html
http://www.jcu.edu/math/vignettes/magic