Mathematics Task Centre

RECORDING SHEETS

Recording the Investigation

Some tasks require worksheets. These are also freely available at
http://www.mathematicscentre.com/taskcentre/docs.htm

DOMINO TRAILS

NAME(S): ....**CLASS:** ....
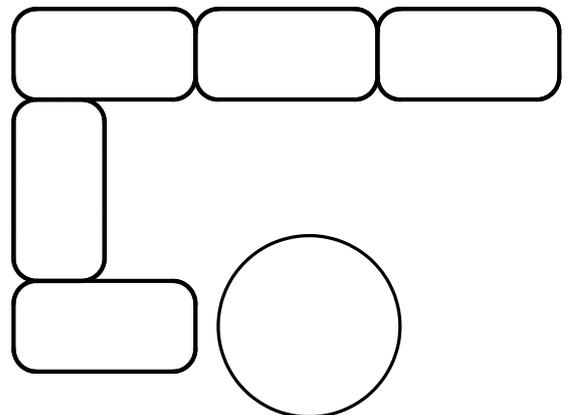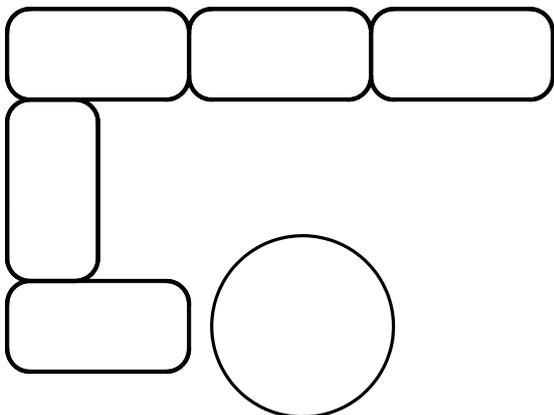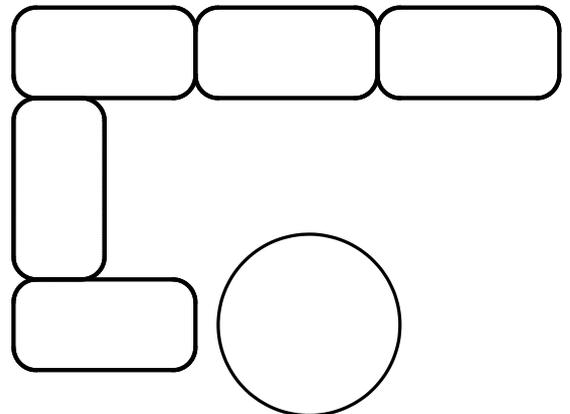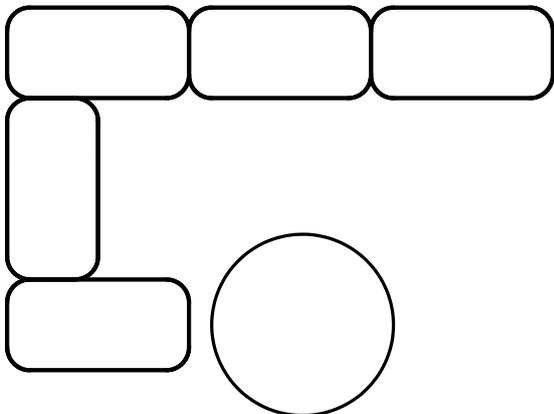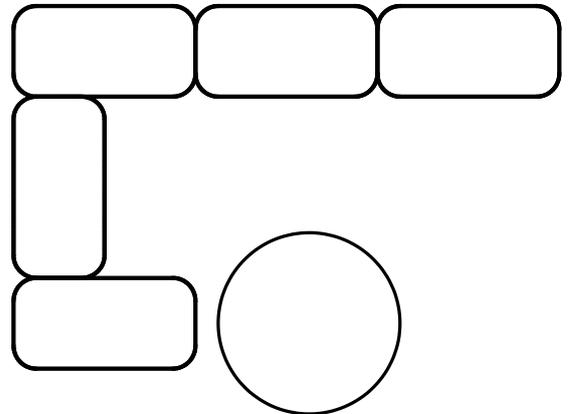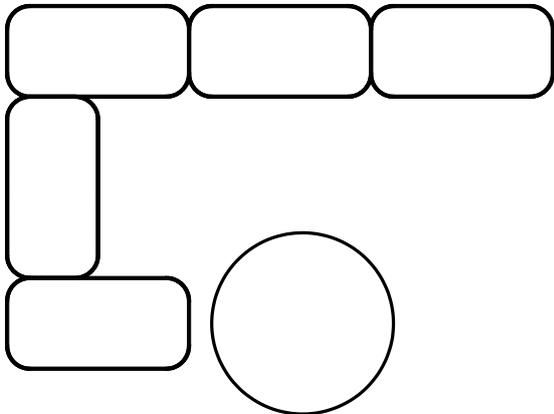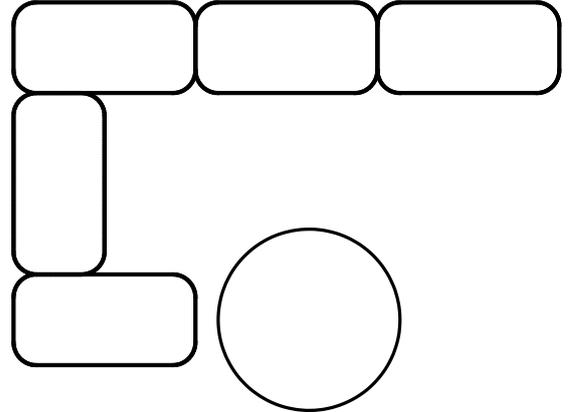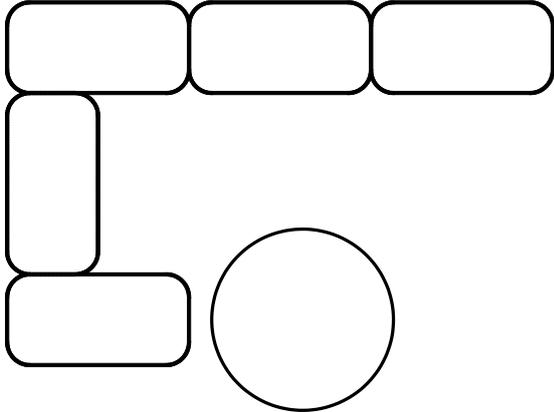
SQUARES AROUND SQUARES

NAME(S): ....**CLASS:** ....
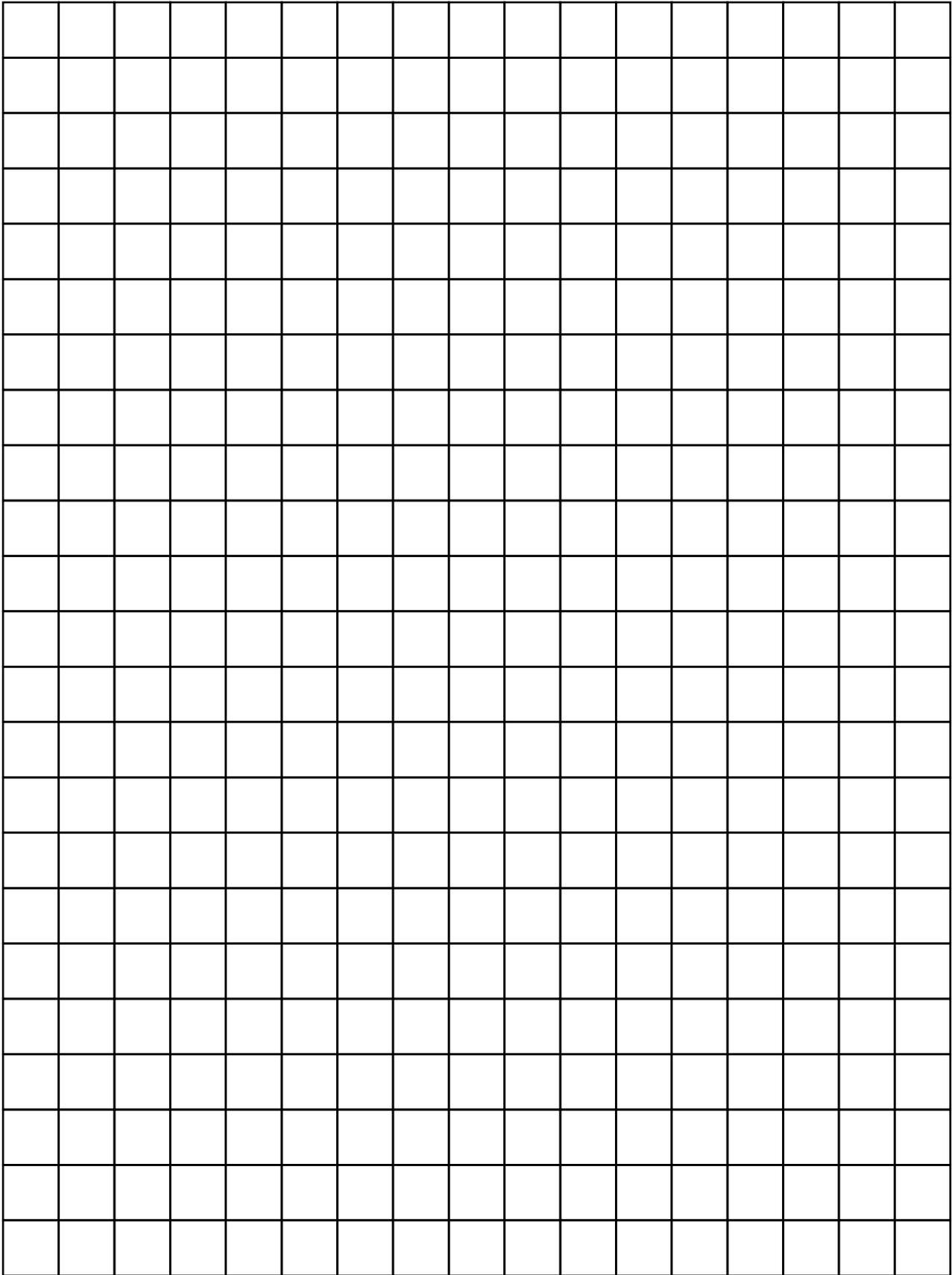
TRIANGLES AROUND TRIANGLES

NAME(S): ....**CLASS:** ....
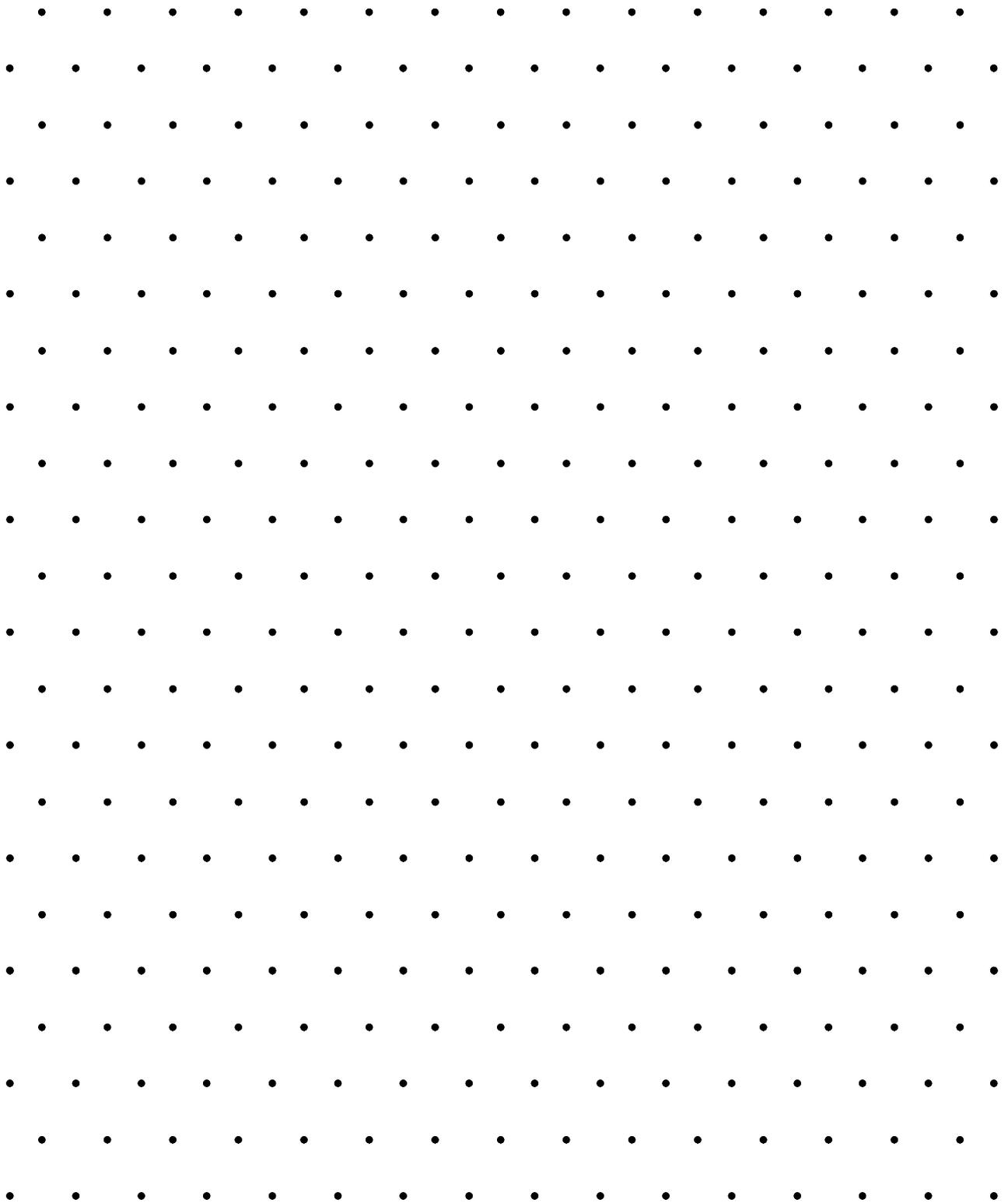
HOW MANY TRIANGLES?

NAME(S): ....**CLASS:** ....
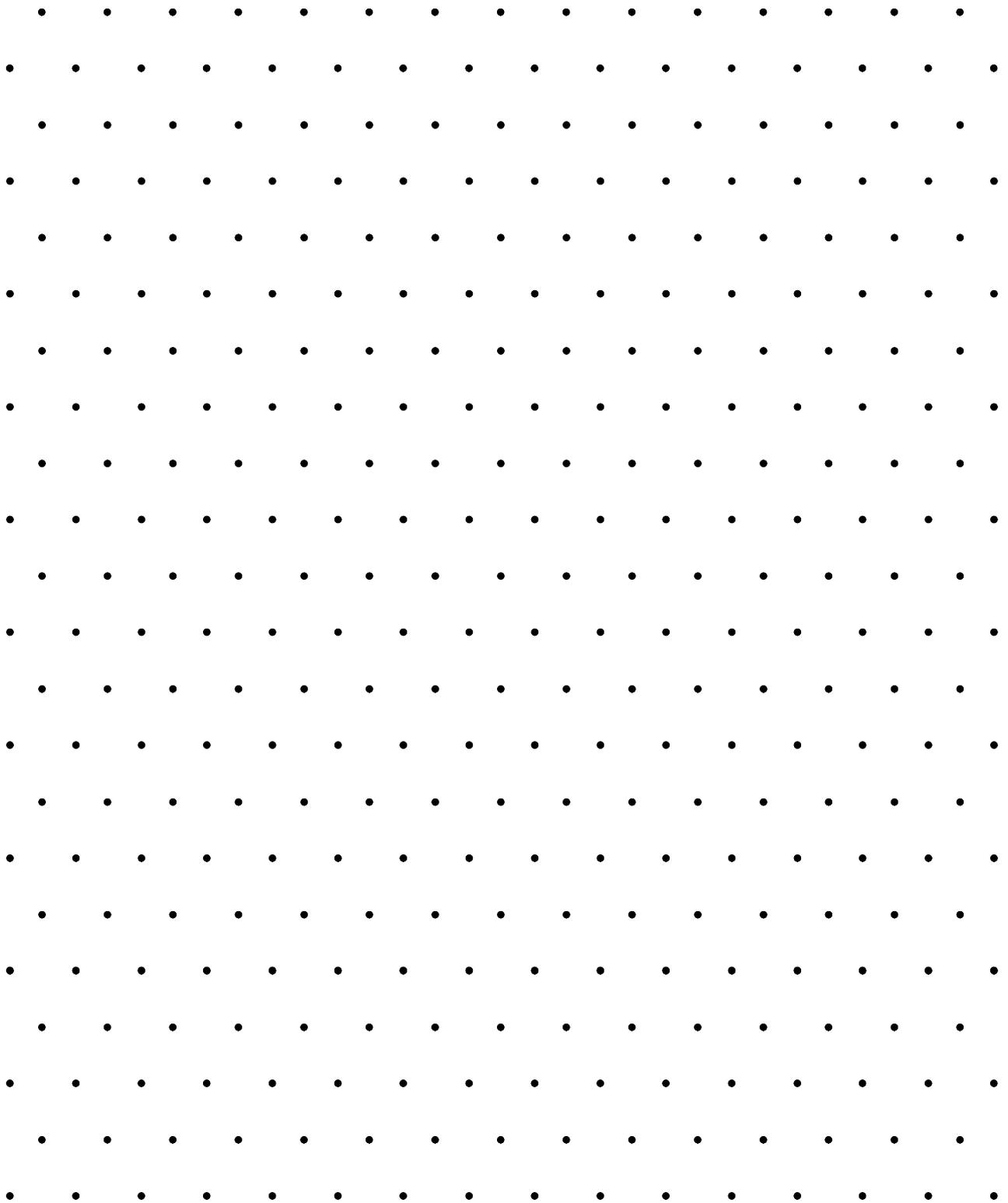
SHAPE ALGEBRA

NAME(S): ....**CLASS:** ....

Each square is the same size as the shape named *x*.
The sheet can help you work out the area of each shape.
You might trace the shapes and then remove them to work out the area.
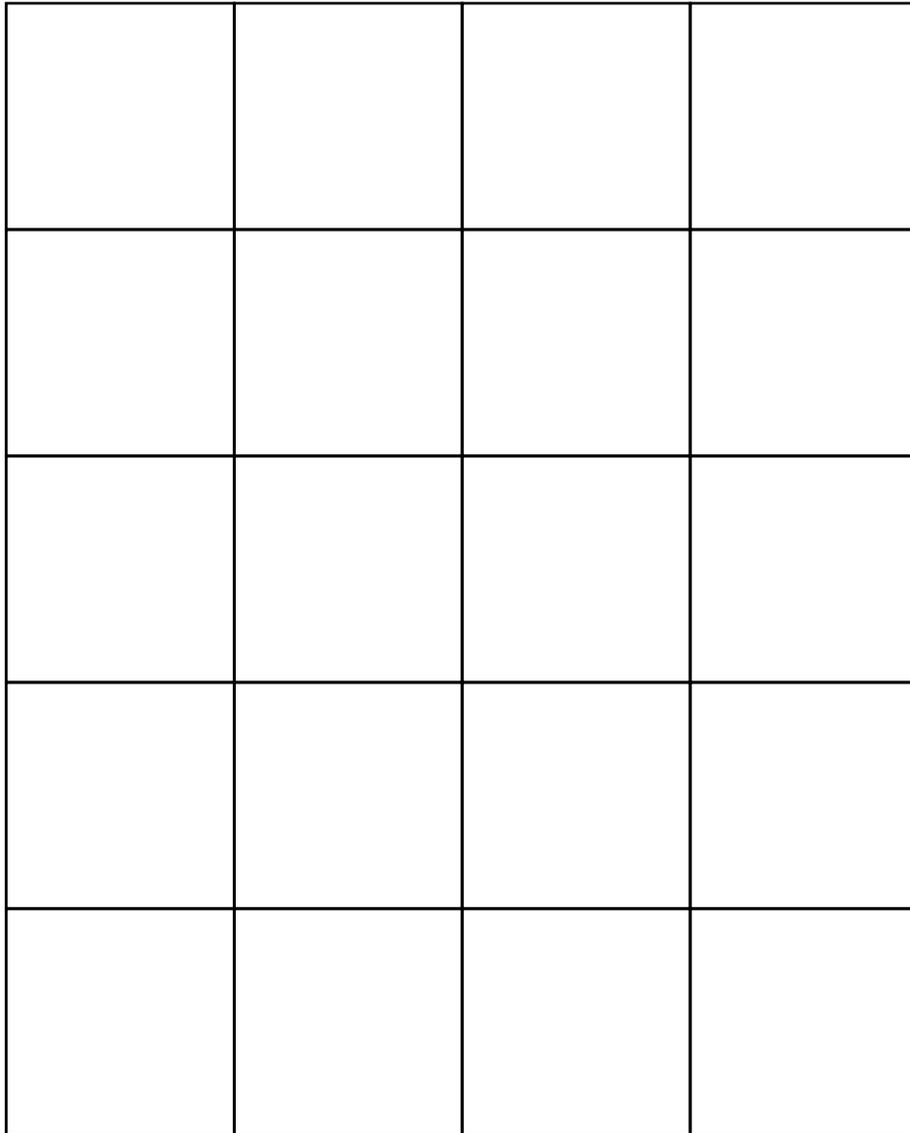
MAKING SOLIDS

NAME(S): ....**CLASS:** ....

TRICUBES

NAME(S): ....**CLASS:** ....

SYMMETRIC SHAPES

NAME(S): ....**CLASS:** ....

ALGEBRA THROUGH GEOMETRY

NAME(S): ....**CLASS:** ....
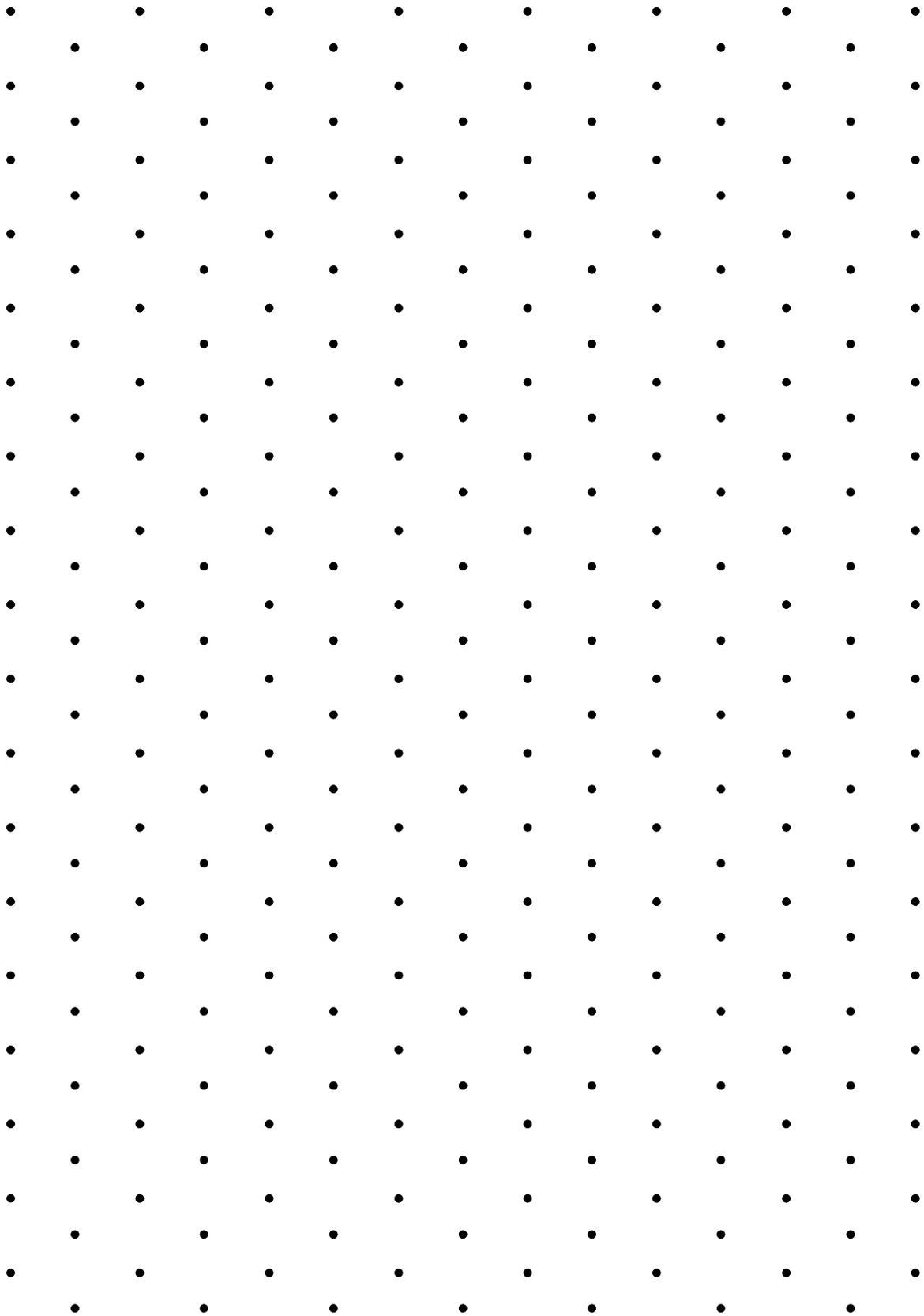
Each square is the same size as the shape named *x*.
The sheet can help you work out the area of each shape.
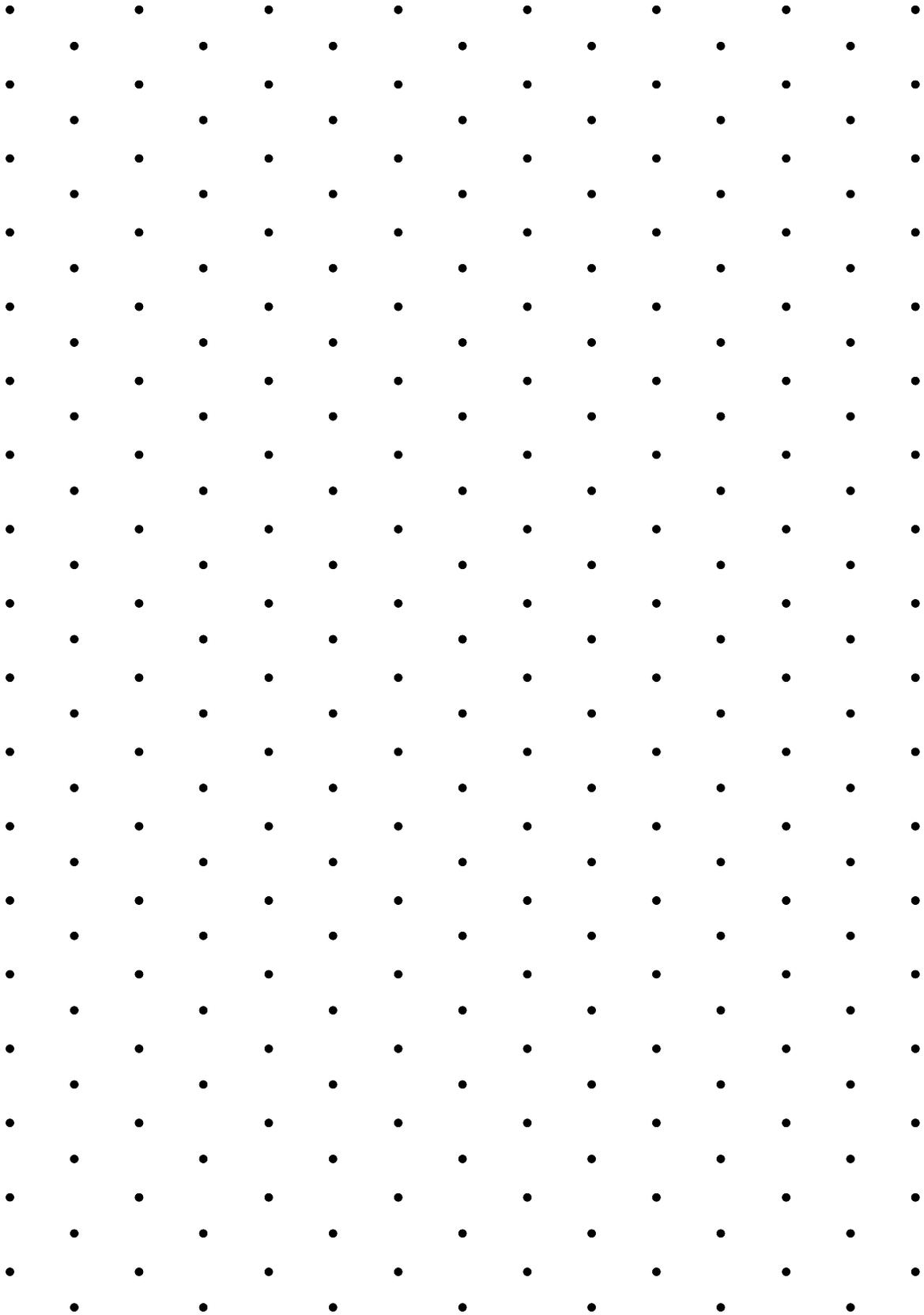You might trace the shapes and then remove them to work out the area.
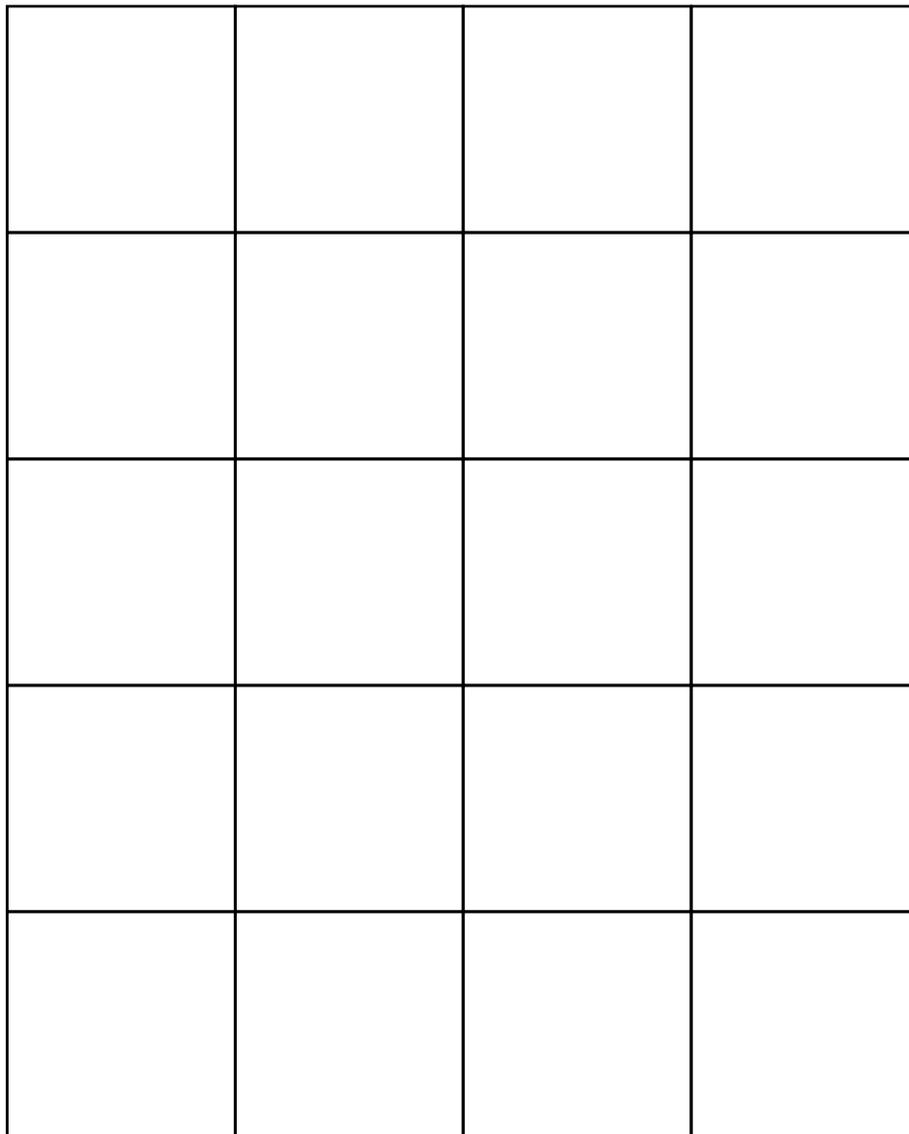
WHAT'S IT WORTH?

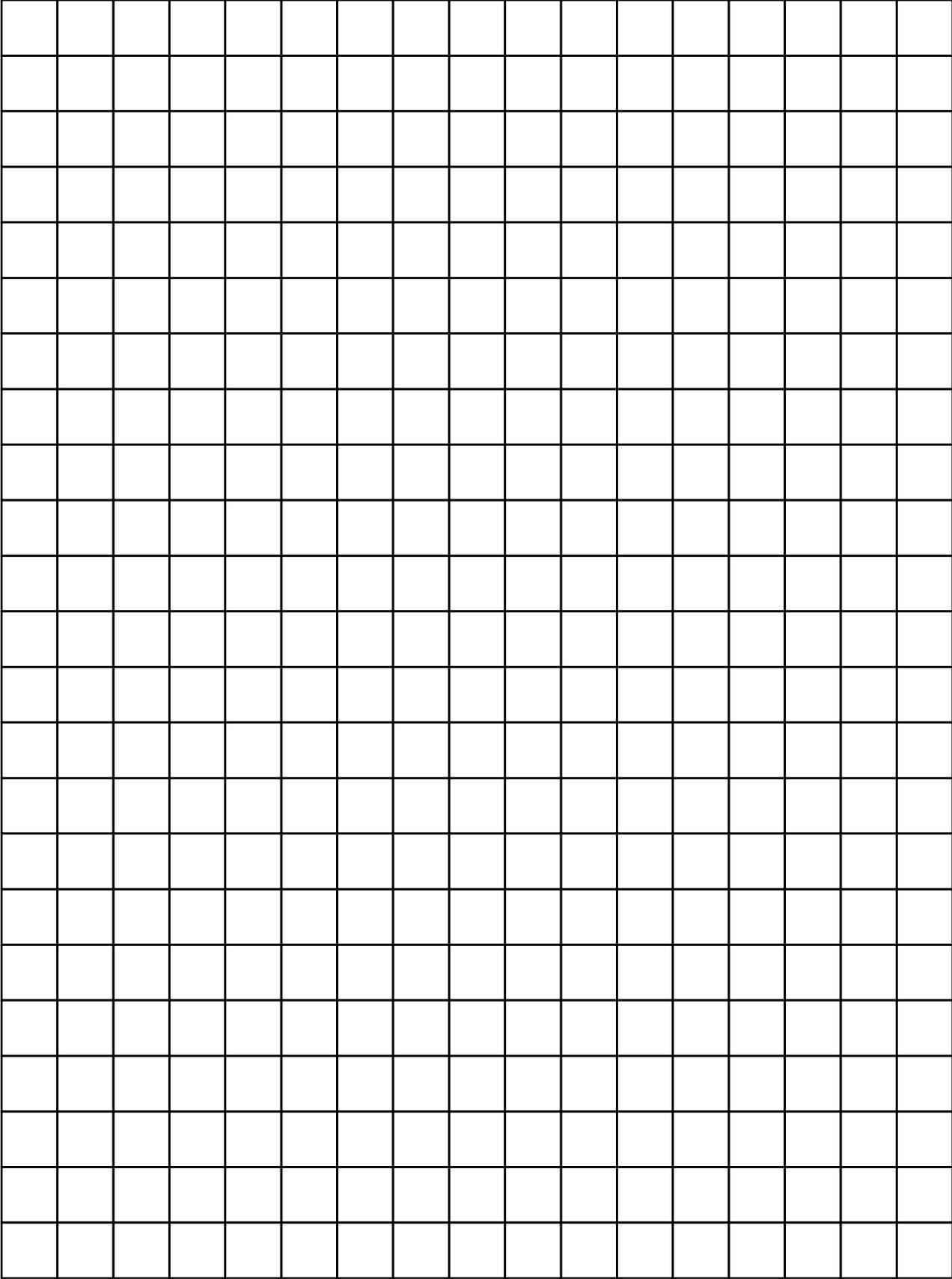**NAME(S):** ....**CLASS:** ....
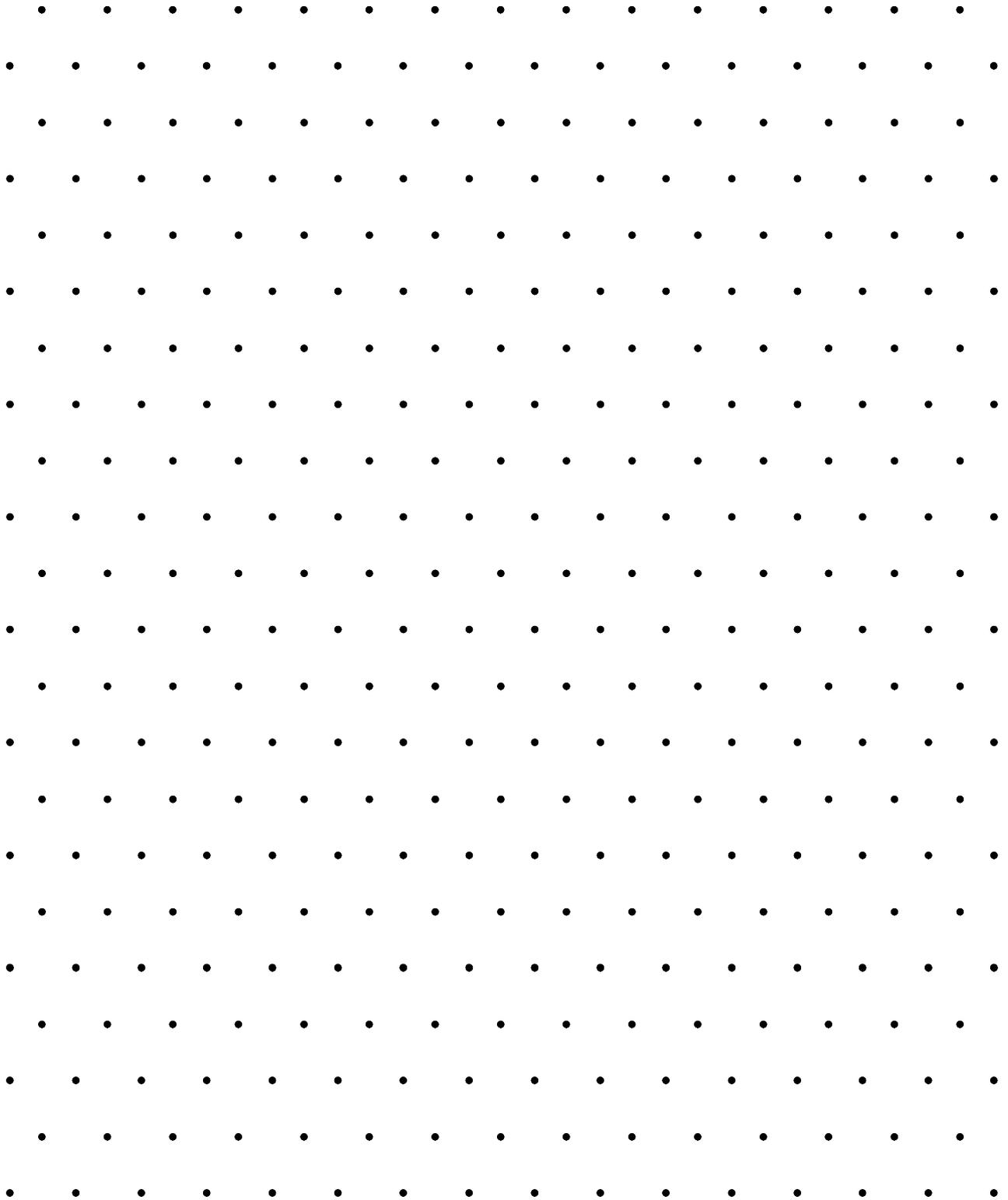
TRICUBE CONSTRUCTIONS A

NAME(S): ....**CLASS:** ....
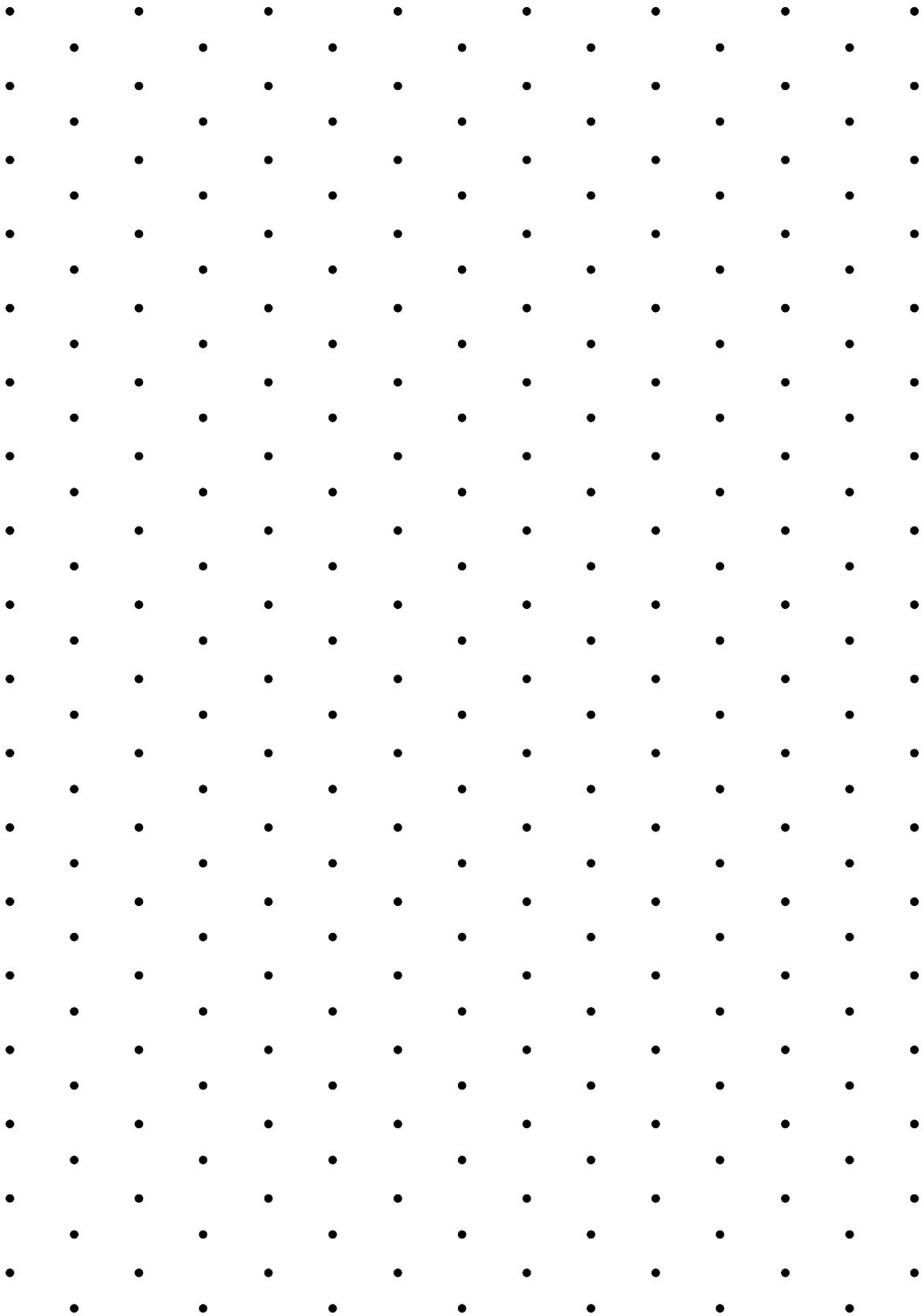
RACETRACK RESULTS

NAME(S): ....**CLASS:** ....

Racetrack One

	First Try	Second Try	Third Try
Jockey A			
Jockey B			

Racetrack Two

	First Try	Second Try	Third Try
Jockey A			
Jockey B			

Racetrack Three

	First Try	Second Try	Third Try
Jockey A			
Jockey B			

TRICUBE CONSTRUCTIONS B

NAME(S): ....**CLASS:** ....
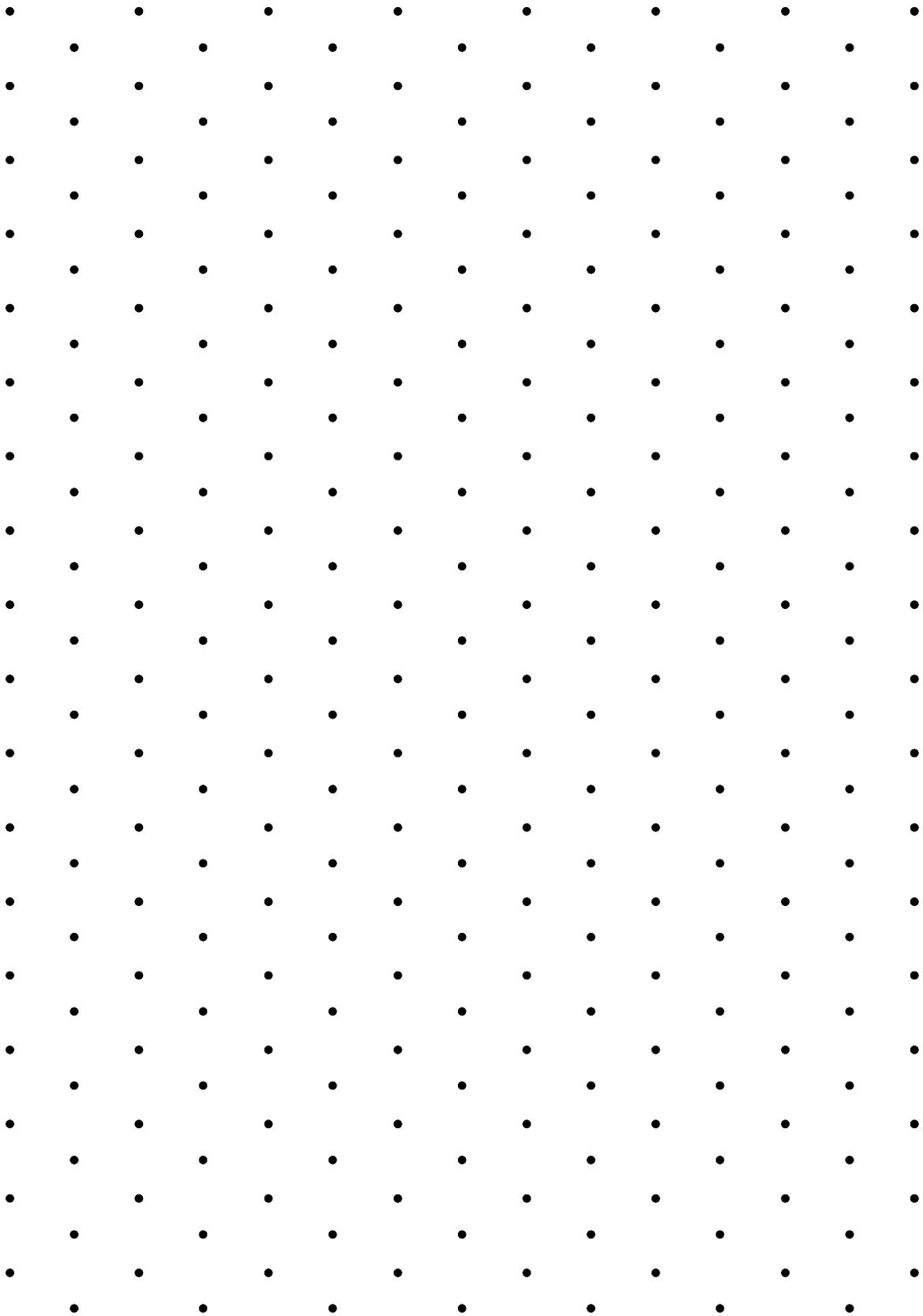
FOUR CUBE HOUSES

NAME(S): ....**CLASS:** ....

HOW MANY SQUARES?

NAME(S): ....**CLASS:** ....

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

HOW MANY SQUARES?

NAME(S): ....**CLASS:** ....

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

HOW MANY SQUARES?

NAME(S): ....**CLASS:** ....

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

HOW MANY SQUARES?

NAME(S): ....**CLASS:** ....

Size of square (S)	1 x 1	2 x 2	3 x 3	4 x 4	5 x 5	6 x 6
Number of tiles						
Number of squares formed (F)						

SQUARE NUMBERS

NAME(S): ....CLASS: ....

1. Colour the grid to show how the squares with areas from 1 to 25 fit inside this 36 square.
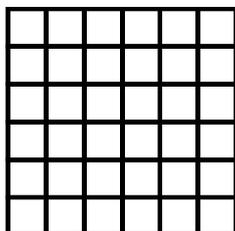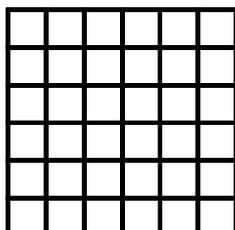
2. 36 = ...

3. The 20th Square Number would be: ....
   Explain your reasons here.

DIVIDING SHAPES

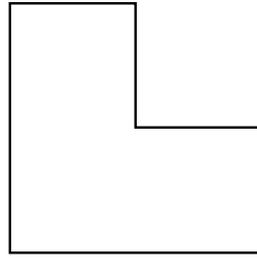**NAME(S):** ....**CLASS:** ....
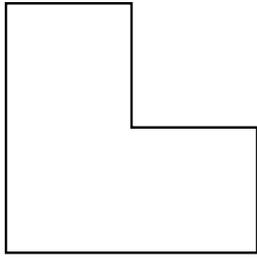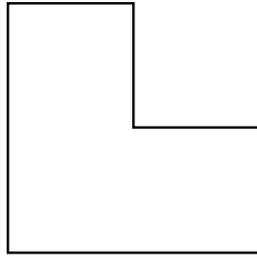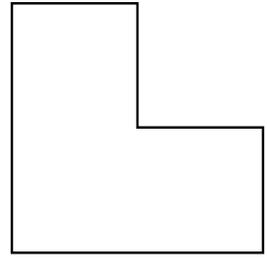
3 identical shapes   2 identical shapes   6 identical shapes   4 identical shapes

DIVIDING SHAPES

NAME(S): ....**CLASS:** ....

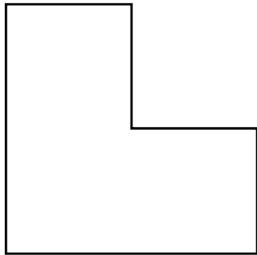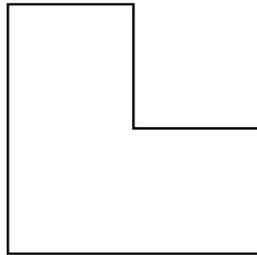3 identical shapes   2 identical shapes   6 identical shapes   4 identical shapes

DIVIDING SHAPES

NAME(S): ....**CLASS:** ....
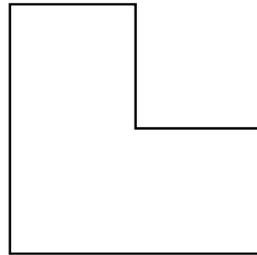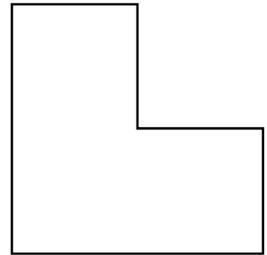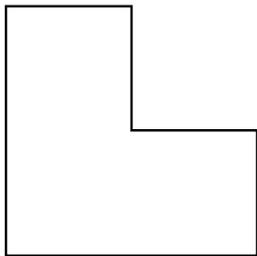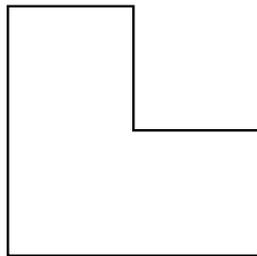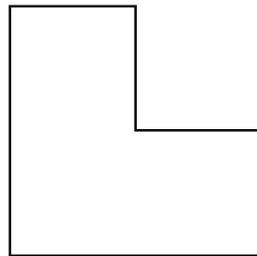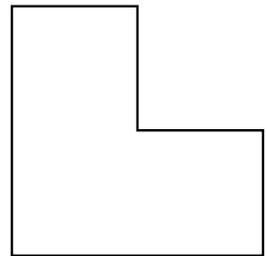
3 identical shapes   2 identical shapes   6 identical shapes   4 identical shapes

WIN AT THE FAIR

Sheet Number ......

NAME(S): ....**CLASS:** ....

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	$1	$2	$3	$4	$5
Tally for							
Your Totals							
Totals So Far							

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	$1	$2	$3	$4	$5
Tally for							
Your Totals							
Totals So Far							

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	$1	$2	$3	$4	$5
Tally for							
Your Totals							
Totals So Far							

One row per pair. Enter your initials in the 'Tally for...' box.

	20¢	50¢	$1	$2	$3	$4	$5
Tally for							
Your Totals							
Totals So Far							

FAMOUS MATHEMATICIANS

NAME(S): ....**CLASS:** ....

LOOK FOR THESE FAMOUS NAMES IN THE PUZZLE

AGNESI, Maria Gaetana	1718 - 1799	HYPATIA	c. 370 - 415A.D.
DEDEKIND, Richard	1831 - 1916	KOVALEVSKAYA, Sonya	1850 - 1891
DESCARTES, Rene	1596 - 1650	LOVELACE, Ada Byron	1815 - 1852
DU CHATELET, Emilie	1706 - 1749	NEWTON, Isaac	1642 - 1727
EUCLID	c. 300 B. C.	NOETHER, Emmy	1882 - 1935
EULER, Leonhard	1707 - 1783	PASCAL, Blaise	1623 - 1662
FERMAT, Pierre de	1601 - 1665	REIMANN, Georg	1826 - 1866
GAUSS, Karl F.	1777 - 1855	SOMERVILLE, Mary	1780 - 1872
GERMAIN, Sophie	1776 - 1831	YOUNG, Grace Chisholm	1868 - 1944

The list contains the names of ......women and ...... men?

Three interesting facts I found out about .... are:

1. _____

_____

2. _____

_____

3. _____

SQUOUND

NAME(S): ....**CLASS:** ....

Total counters (T)	Counters in Square (S)	Counters in Circle (C)	Counters in Squound (Q)	1. I think the rule for finding the number of counters in the SQUOUND could be:
12	8	9		
12				_____
12				_____
12				_____
12				_____

1. Write your rule as an equation which uses these symbols:
    - the total number of counters used is called **T**
    - the number of counters in the square is called **S**
    - the number of counters in the circle is called **C**
   - the number of counters in the SQUOUND is called **Q**

SQUOUND

NAME(S): ....**CLASS:** ....

Total counters (T)	Counters in Square (S)	Counters in Circle (C)	Counters in Squound (Q)	1. I think the rule for finding the number of counters in the SQUOUND could be:
12	8	9		
12				_____
12				_____
12				_____
12				_____

2. Write your rule as an equation which uses these symbols:
    - the total number of counters used is called **T**
    - the number of counters in the square is called **S**
    - the number of counters in the circle is called **C**
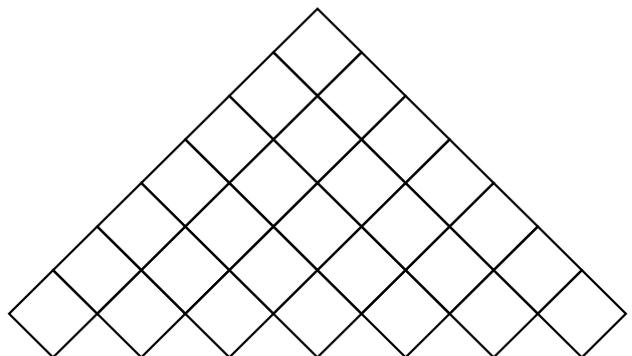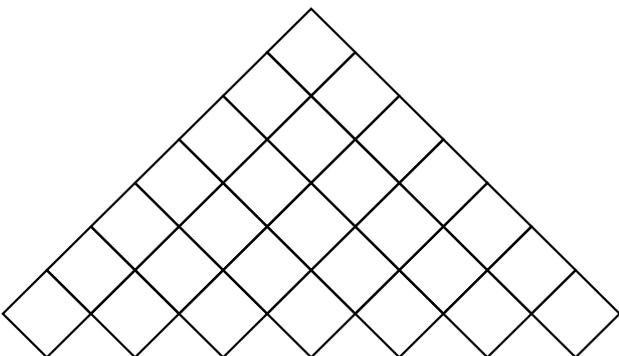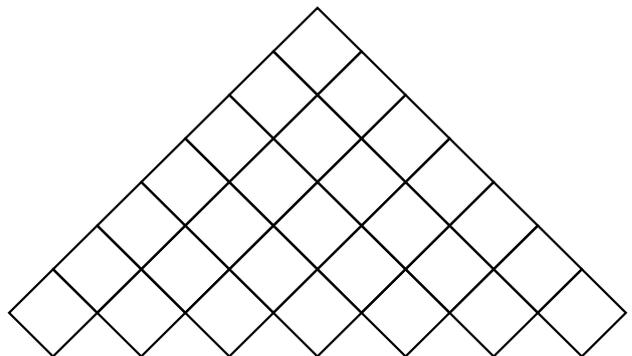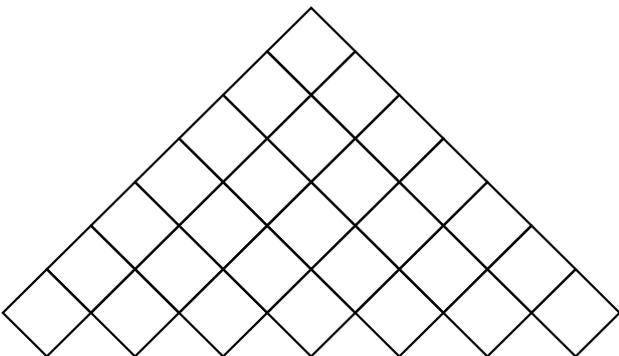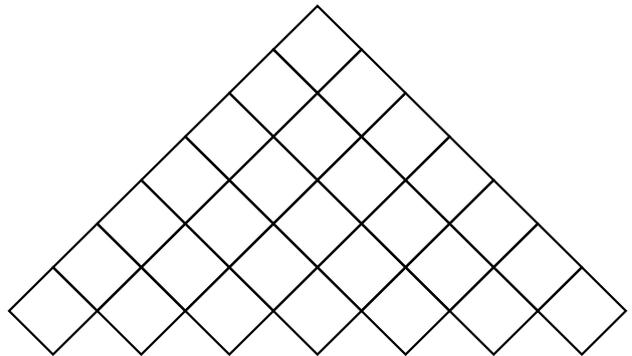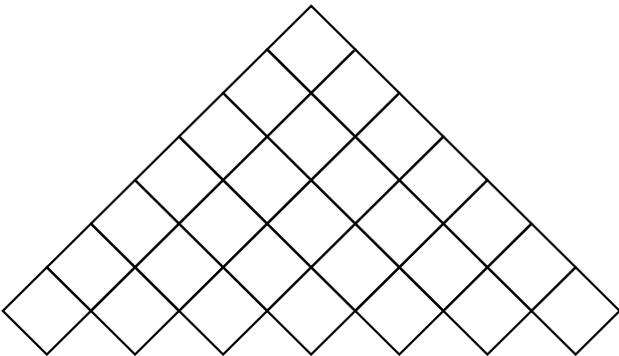   - the number of counters in the SQUOUND is called **Q**

PASCAL'S TRIANGLE IN ASIA

NAME(S): ....**CLASS:** ....
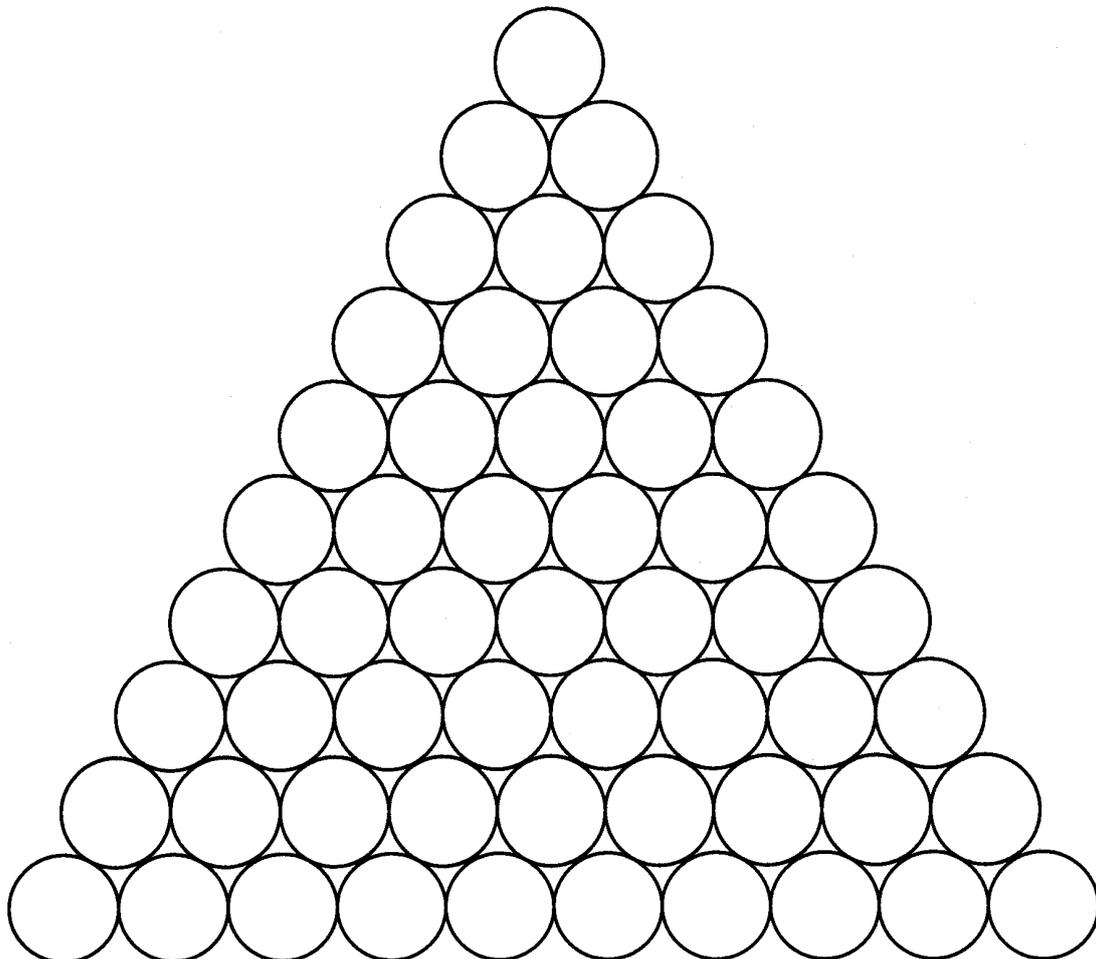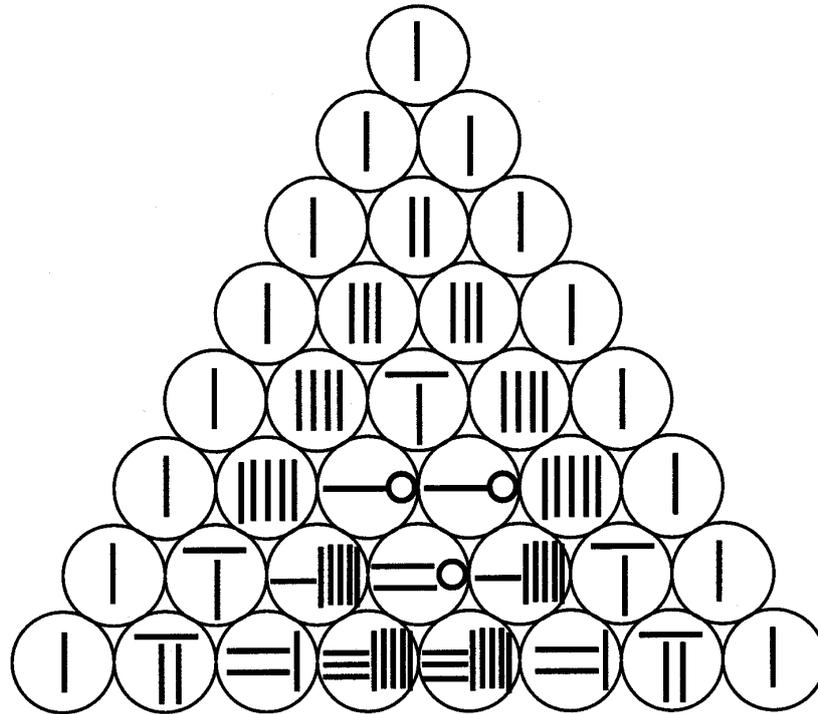
SYMMETRIC TILES

NAME(S): ....**CLASS:** ....

MIRROR PATTERNS 3
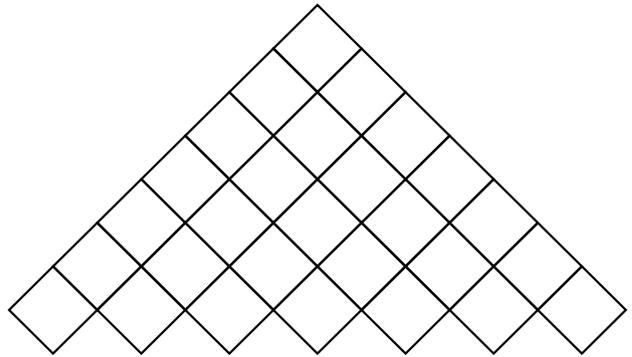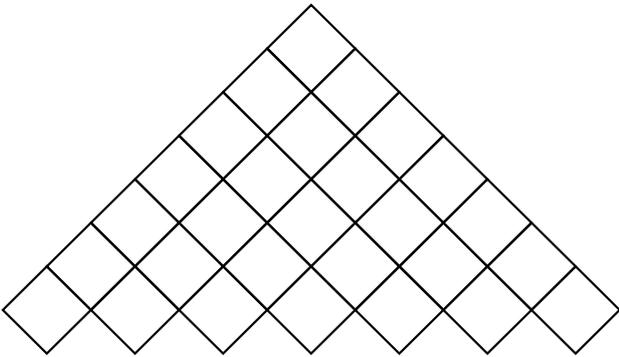
NAME(S): ....**CLASS:** ....

MATCH TRIANGLES

NAME(S): ....**CLASS:** ....
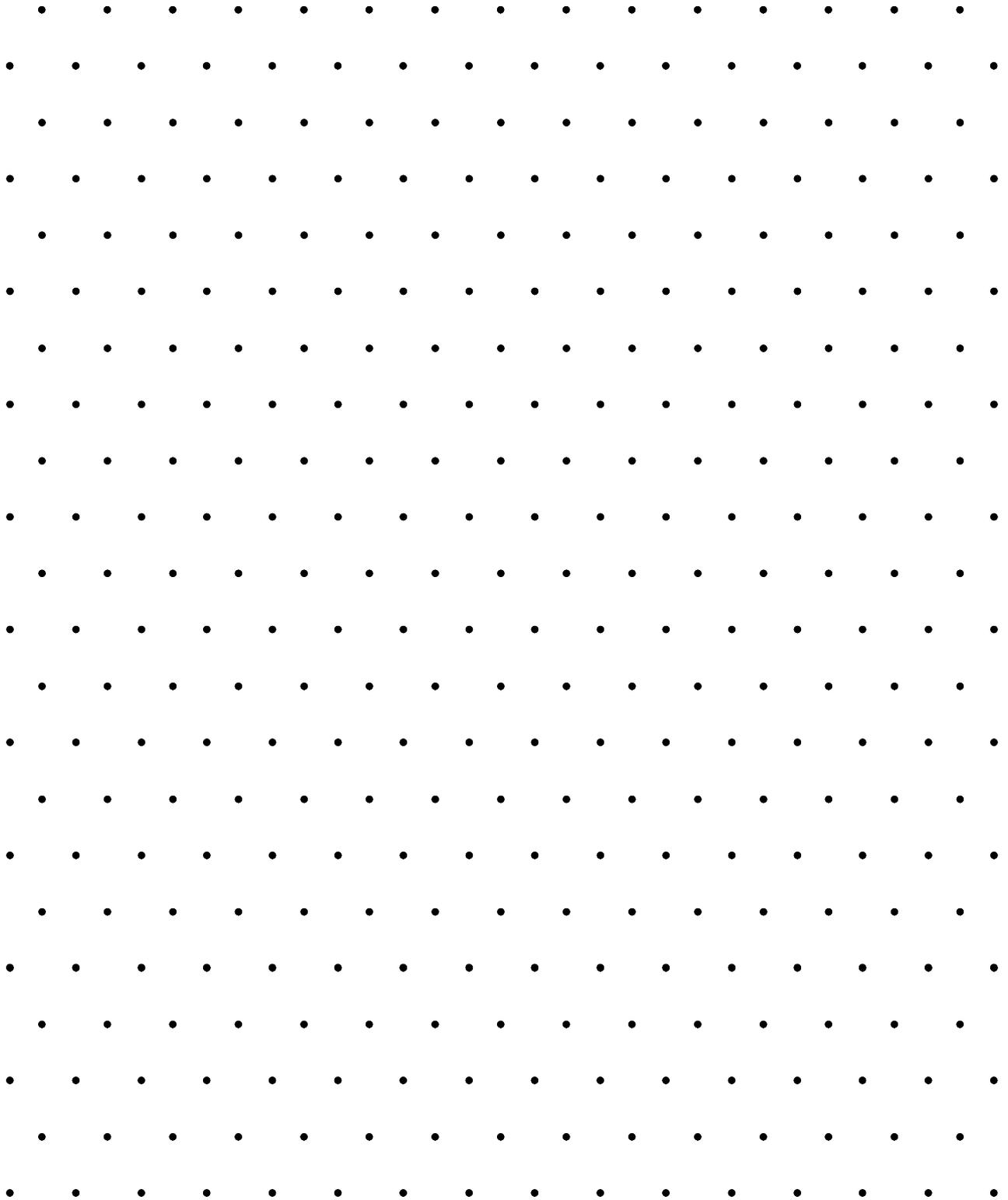
UNSEEN TRIANGLES

NAME(S): ....**CLASS:** ....
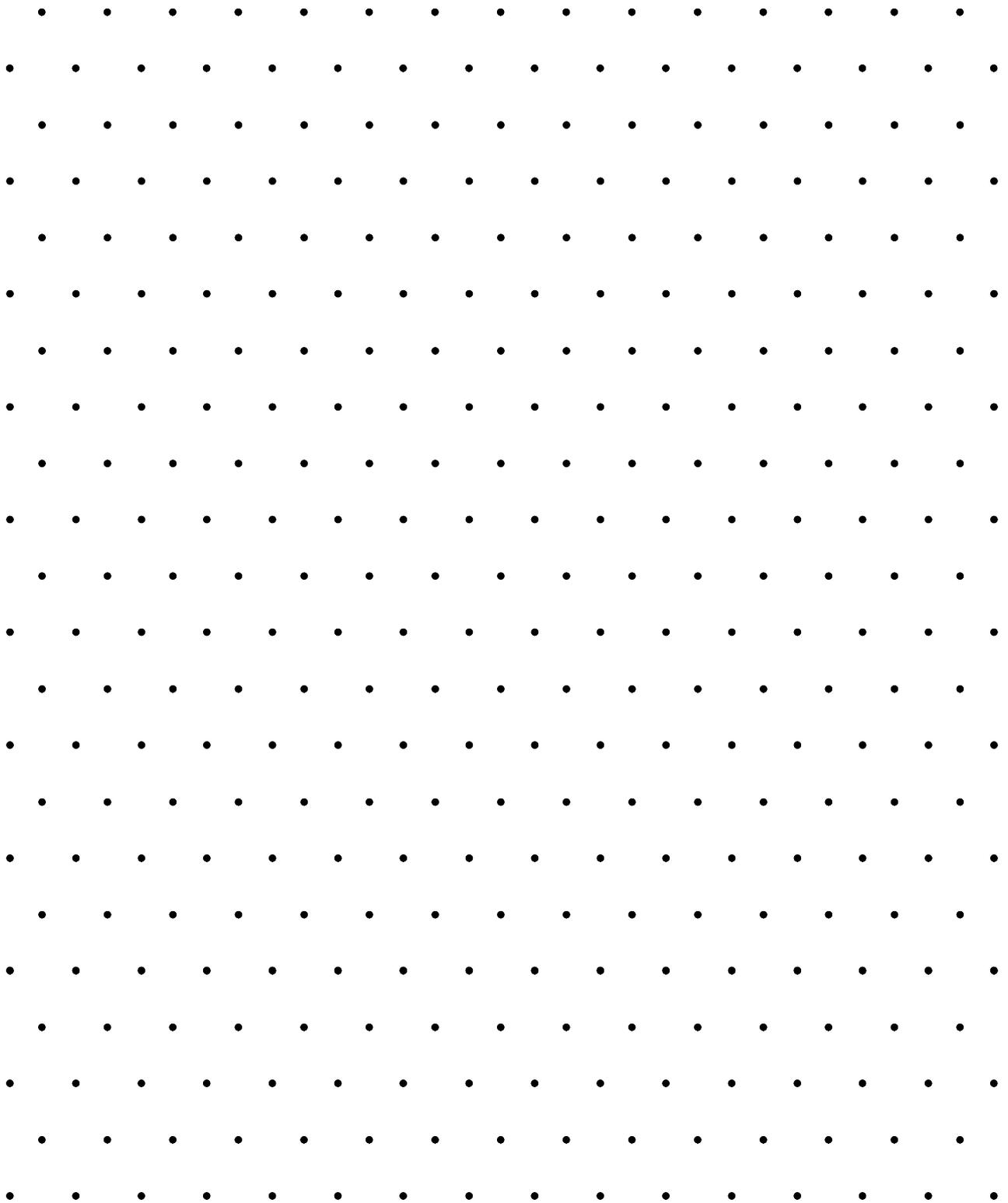
MAKING MONUMENTS

NAME(S): ....**CLASS:** ....
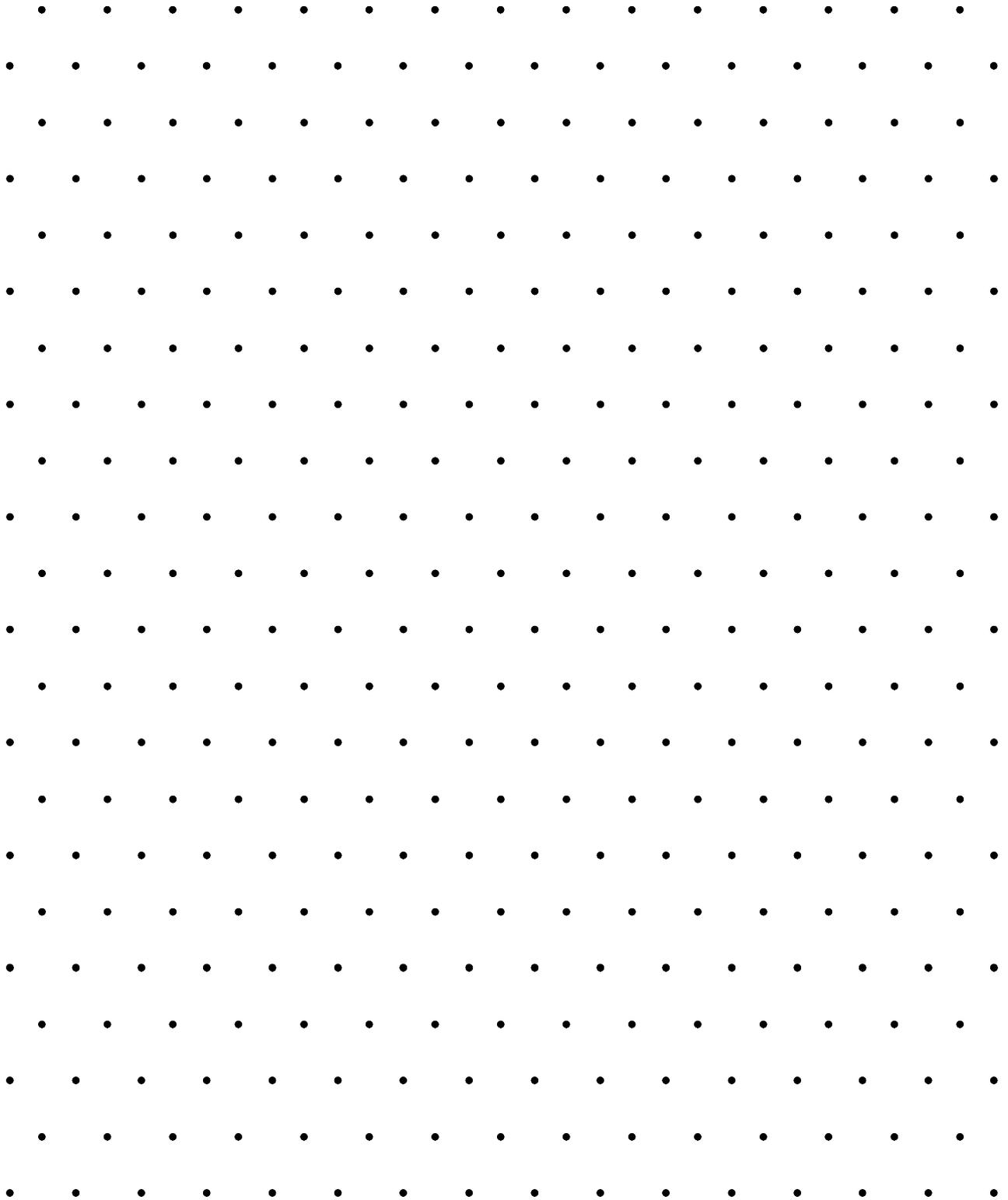
POINTY FENCES

NAME(S): ....**CLASS:** ....
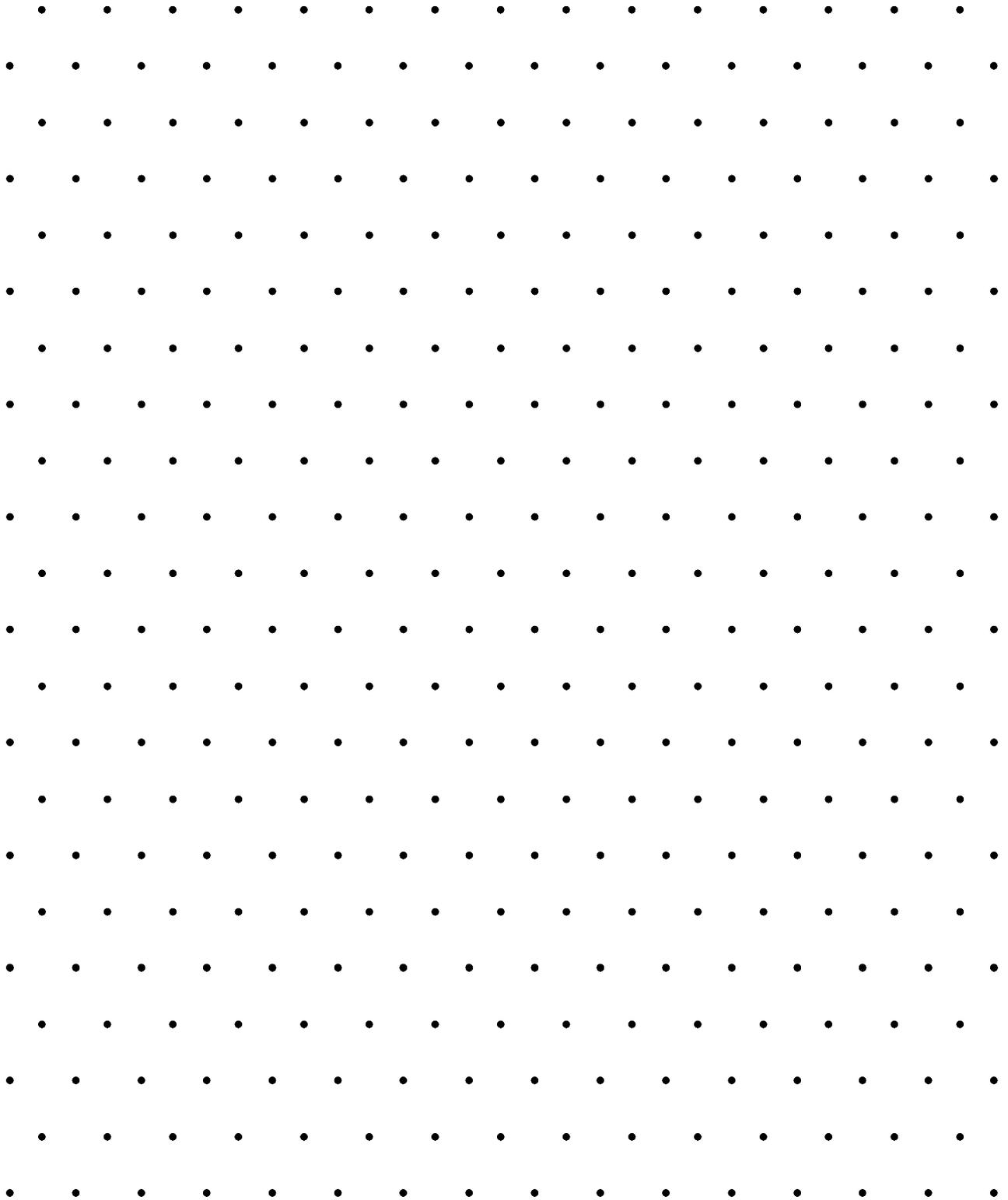
TETRAHEDRON TRIANGLES

NAME(S): ....**CLASS:** ....

CROSS & SQUARE
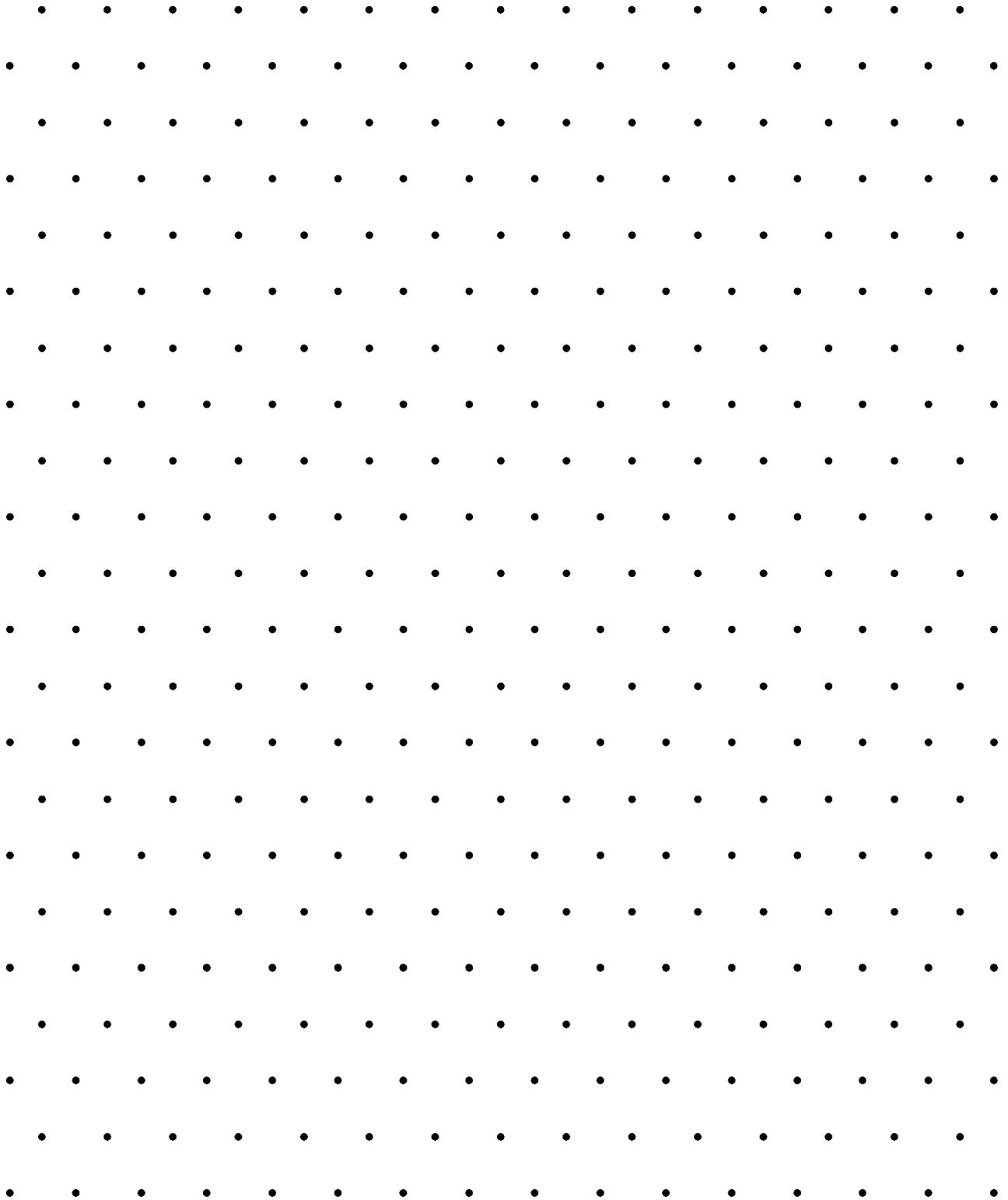
NAME(S): ....**CLASS:** ....

GROWING TRICUBES

NAME(S): ....**CLASS:** ....

TRISQUARES

NAME(S): ....**CLASS:** ....