

A close-up photograph of several green fern fronds. The fronds are long and feathery, with many small, pointed leaflets. They are set against a dark, blurred background, which makes the green color of the ferns stand out. The lighting is soft, highlighting the texture of the leaflets.

RICH MATHEMATICAL TASK BOOKLET

GEOMETRY

YEAR 2

Copy Masters

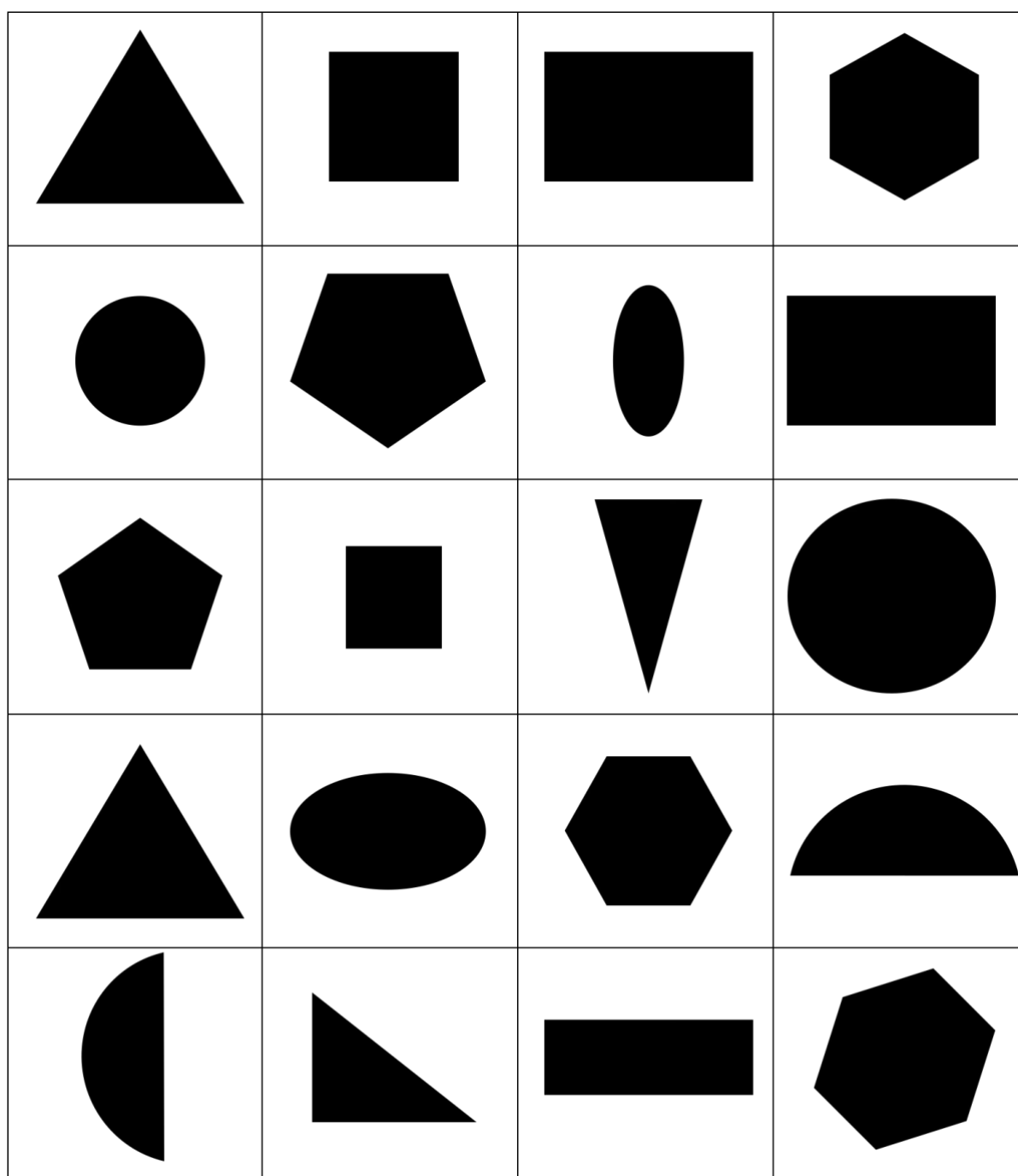
*Year 2 Geometry***Task 1**

Sort these shapes into different groups.

What do you notice?

How are the shapes the same?

How are the shapes different?

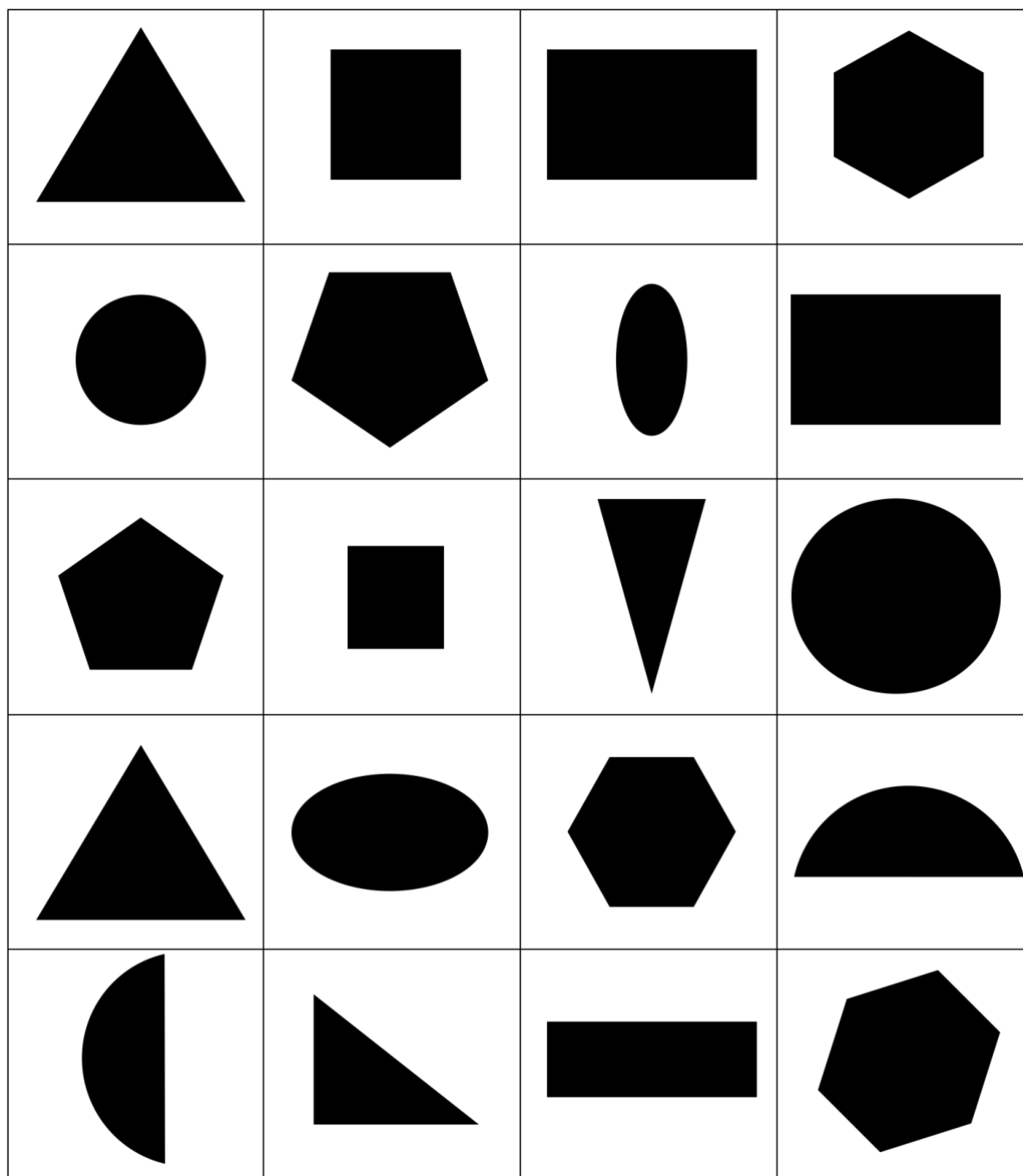


*Year 2 Geometry***Task 1 (independent)**

Find the matching shapes and name the shapes.

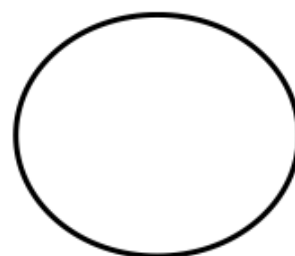
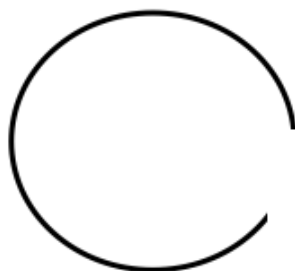
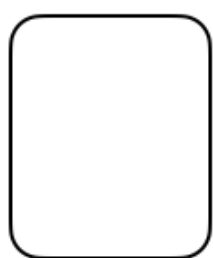
Triangle	Square	Rectangle	Circle
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Semi-Circle	Oval	Pentagon	Hexagon
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Task 2 – Starter Shapes

Starter shapes:



*Year 2 Geometry***Task 2**

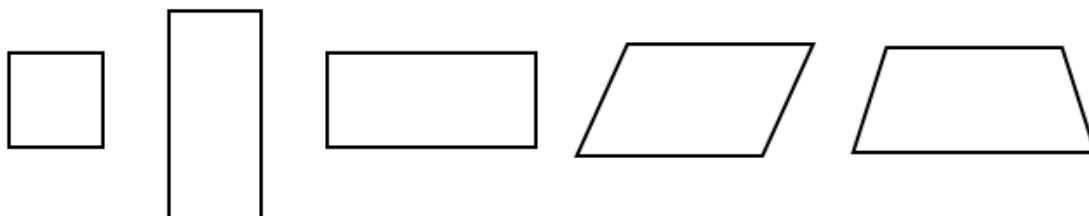
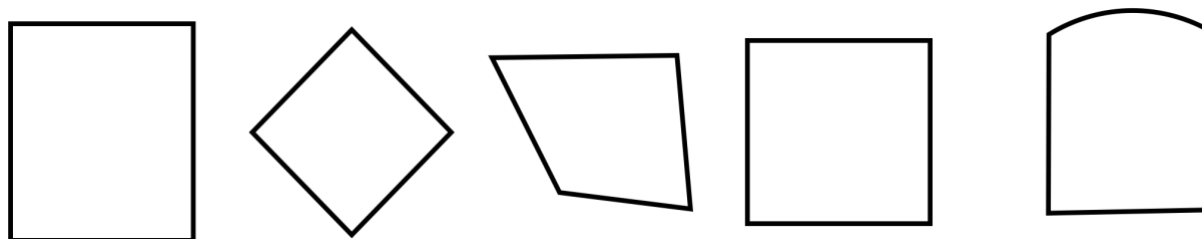
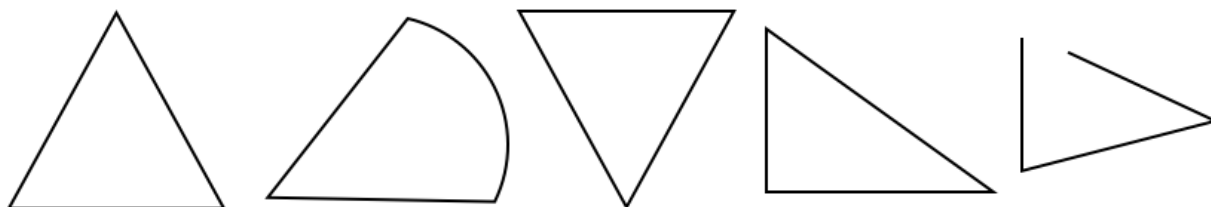
Is this shape a rectangle? Why, why not?

Is this shape a square? Why, why not?

Is this shape a triangle? Why, why not?

*Year 2 Geometry***Task 2 – shapes to show students**

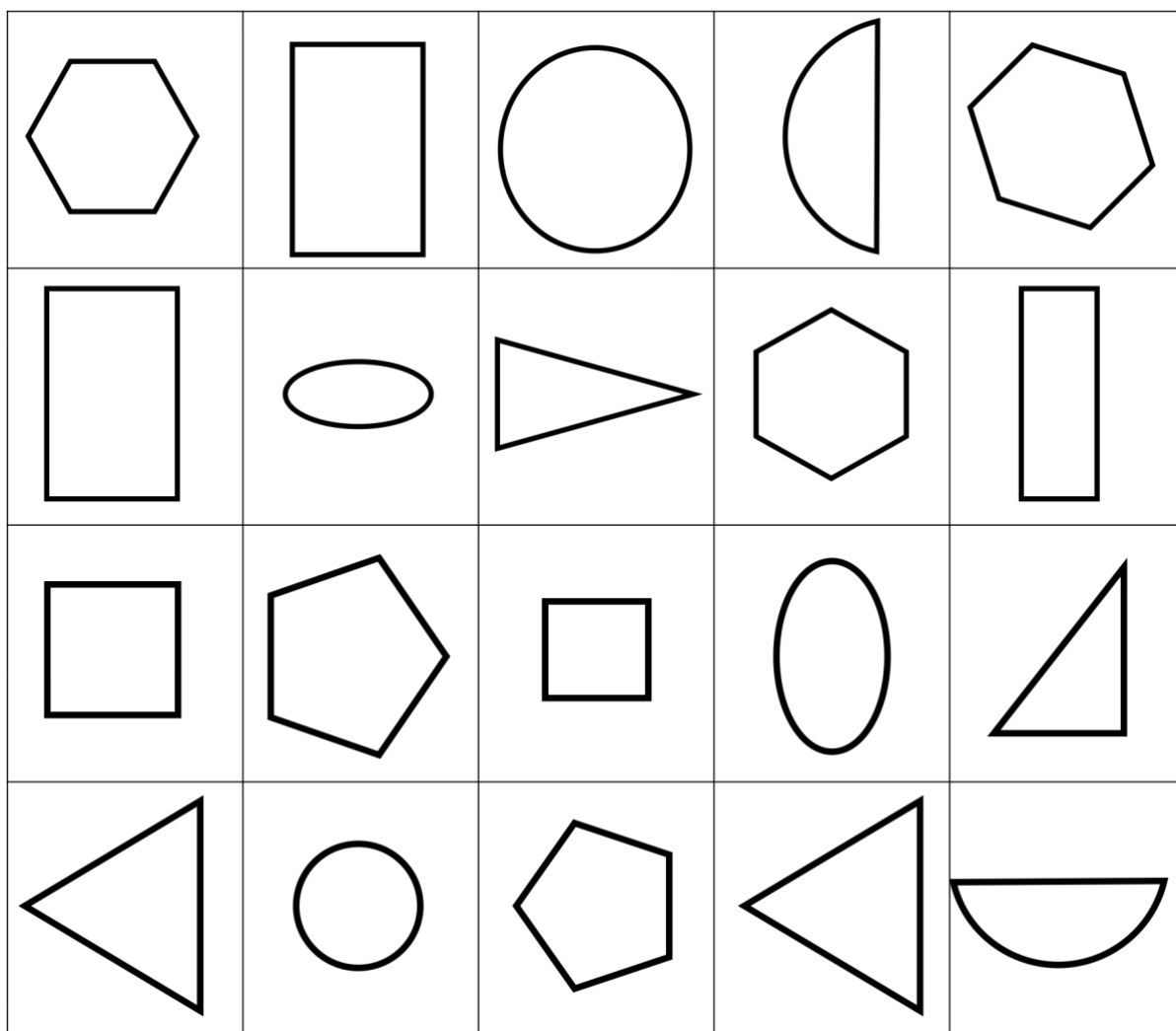
Note: discuss each shape one at a time.

Rectangles**Squares****Triangles**

Year 2 Geometry

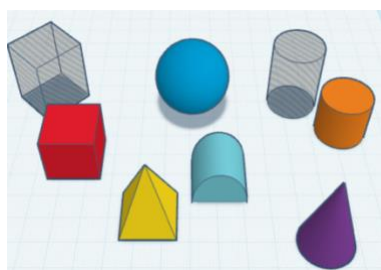
Task 2 (independent)

Match these shapes - what is the same what is different?



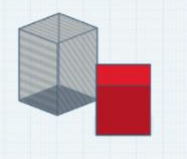
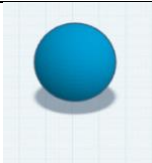
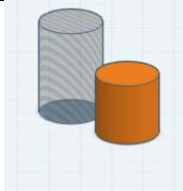


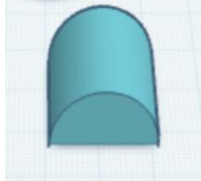
Year 2 Geometry

Task 3



Find these shapes in our classroom.

Find these shapes in our school.

	Classroom	School
		
		
		
		
		
		

*Year 2 Geometry***Task 3 (independent)**

Does it roll?

Test out these objects to see if these objects roll or stand still. What do you notice?

*Year 2 Geometry***Task 4**

What do you notice about the shape of these different things?

Sort them into groups which you think are the same.

Sort them into groups which you think are different.

*Year 2 Geometry***Task 4 (independent)**

Sort the objects into sets.

How are they the same?

How are they different?

Draw pictures of each different shape.

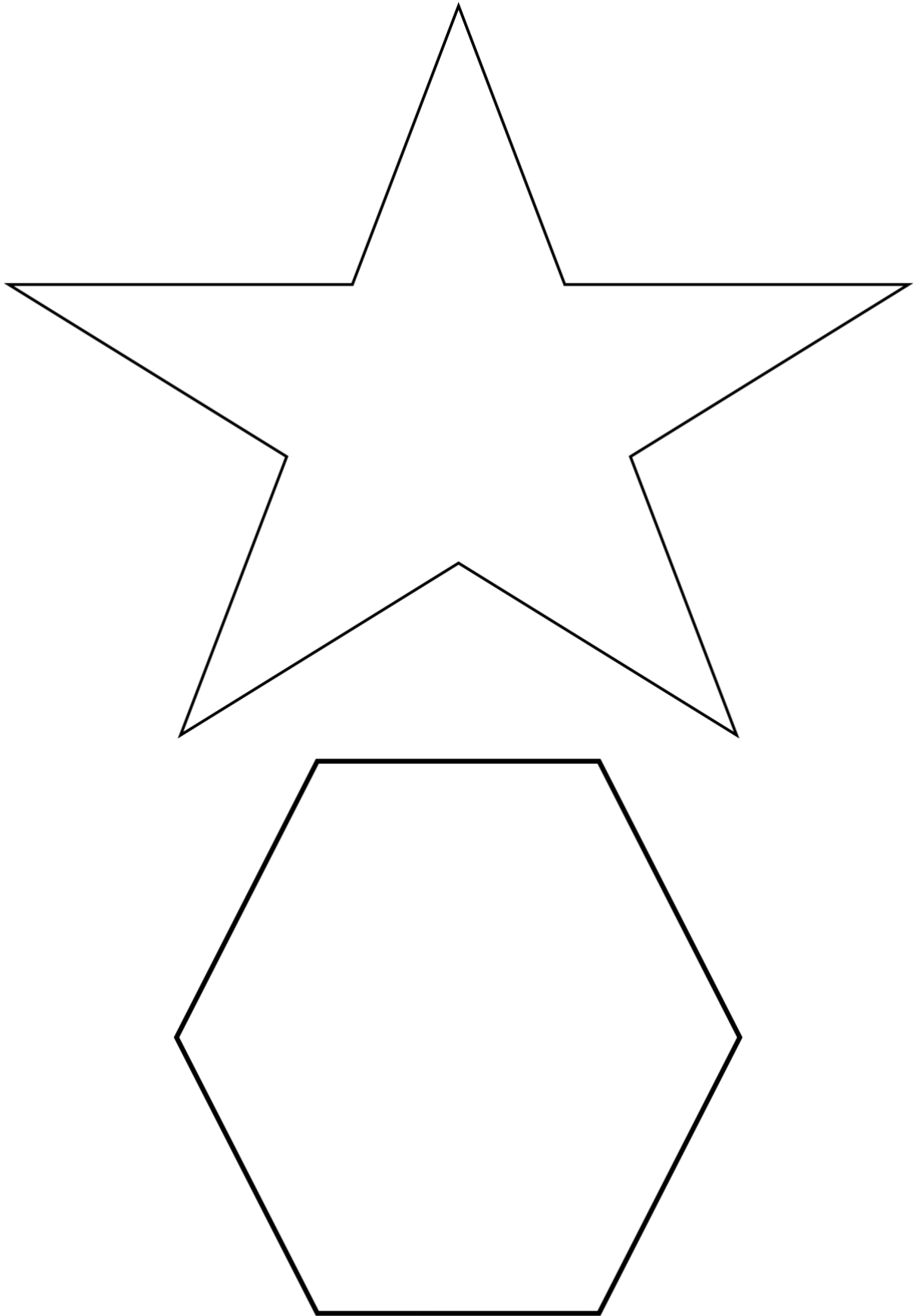
Choose a new set of objects and repeat the activity.

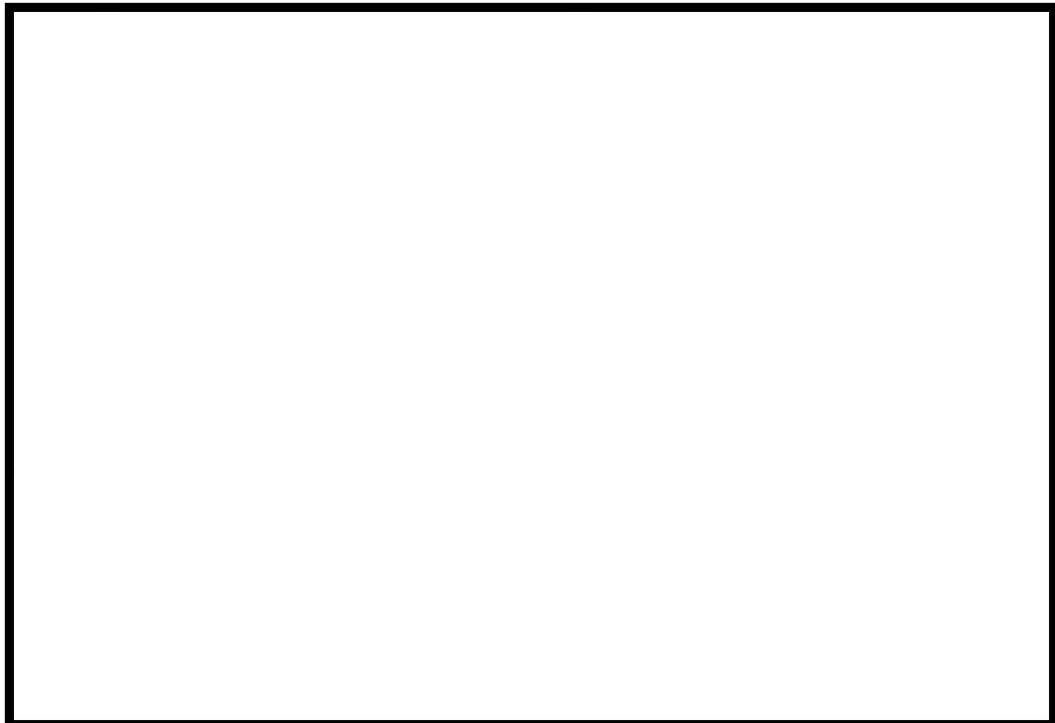
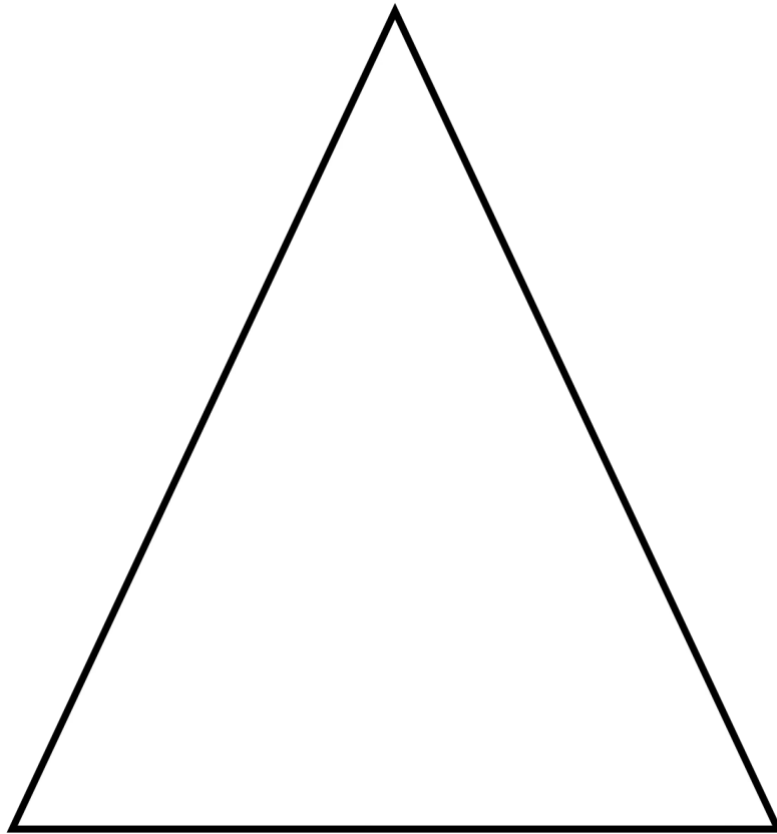
*Year 2 Geometry***Task 5**

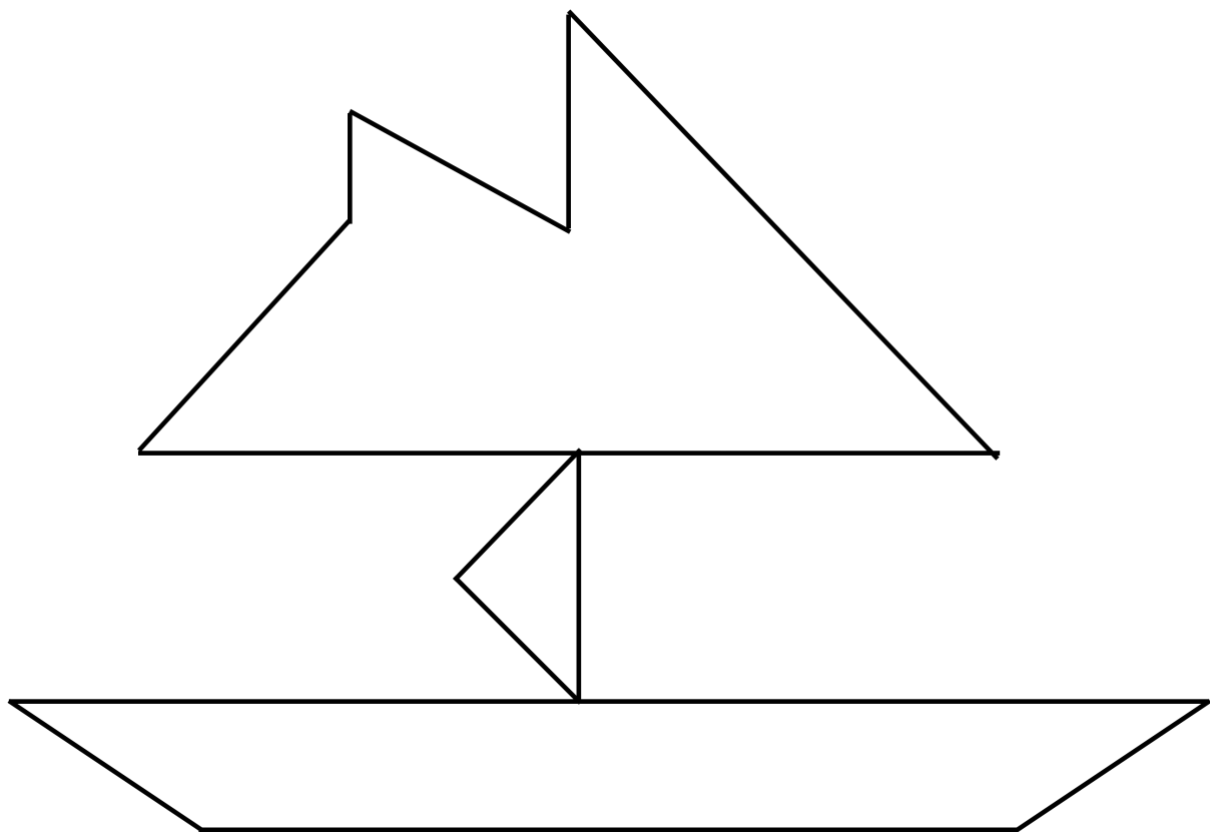
Choose a big shape.

What smaller shape will make the bigger shape?

Use the smaller shapes to check whether they will make the bigger shape.

Task 5 (and independent task 5 options)





*Year 2 Geometry***Task 5 (independent)**

Choose a big shape.

What smaller shape will make the bigger shape?

Use the smaller shapes to check whether they will make the bigger shape.

Task 6

Make a hexagon with the pattern blocks.

Copy the hexagon so that you have a pair.

Describe the shapes that you used for each part of the hexagon.

Draw the hexagon that you made with the pattern blocks.

Make a polygon with the pattern blocks.

Copy the polygon so that you have a pair.

Describe the shapes that you used for each part of the polygon.

Draw the polygon that you made with the pattern blocks.

Make a different shape with the pattern blocks.

Copy the shape so that you have a pair.

Describe the shapes that you used to make a different shape.

Draw the shape that you made with the pattern blocks.

*Year 2 Geometry***Task 6 (independent)**

Make a house with the pattern blocks.

Copy the house so that you have a pair.

Describe the shapes that you used for each part of the house.

Draw the house that you made with the pattern blocks.

Make a flower with the pattern blocks.

Copy the flower so that you have a pair.

Describe the shapes that you used for each part of the flower.

Draw the flower that you made with the pattern blocks.

Make a spaceship with the pattern blocks.

Copy the spaceship so that you have a pair.

Describe the shapes that you used for each part of the spaceship.

Draw the spaceship that you made with the pattern blocks.

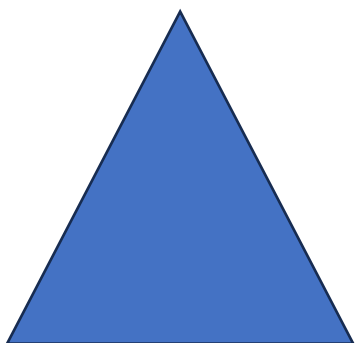
Task 7

With your buddy discuss and explore which pictures, letters and numbers have mirror symmetry?

Be ready to explain and justify their lines of symmetry.

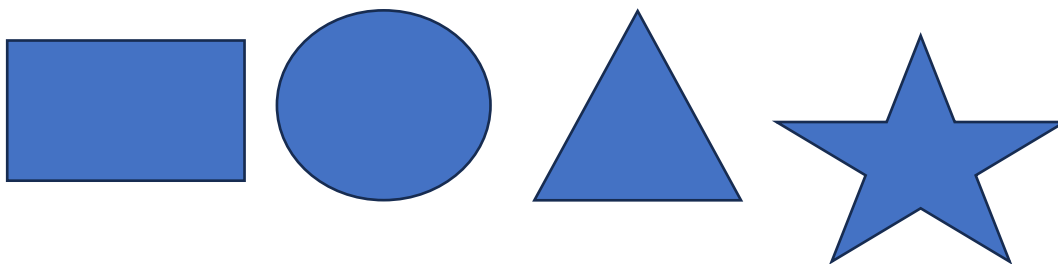
Think about which letters or numbers reverse, and which ones invert, and which ones stay the same? Be ready to explain why.

1	2	3	4
5	6	7	8
H	E	R	F
M	O	P	S

*Year 2 Geometry***Task 7 (launch shapes)**

*Year 2 Geometry***Task 7 (independent)**

Draw the lines of symmetry on these shapes



Sort the letters and numbers into these two different groups.

0 Lines of symmetry	1+ Lines of symmetry

Q	F	2	3	4
O	5	J	7	8
P	H	E	L	F

*Year 2 Geometry***Task 8**

Arrange the shapes into a picture.

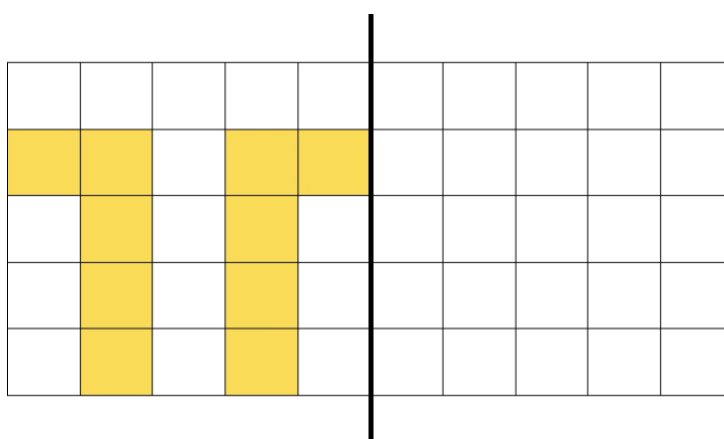
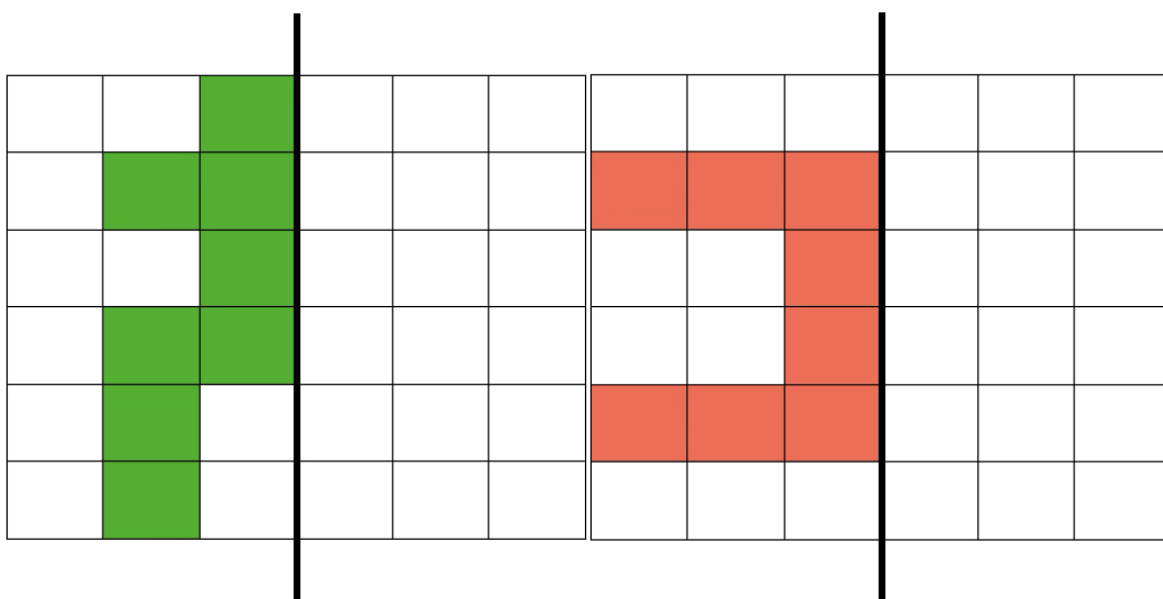
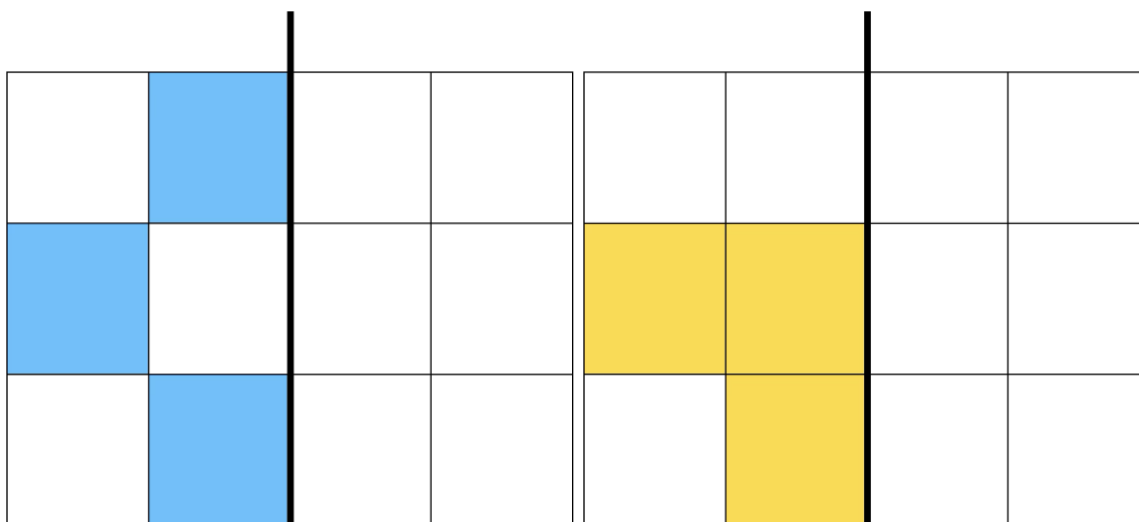
Place the string next to your shapes (like a mirror).

Arrange the shapes on the other side of the string.

What do you notice?

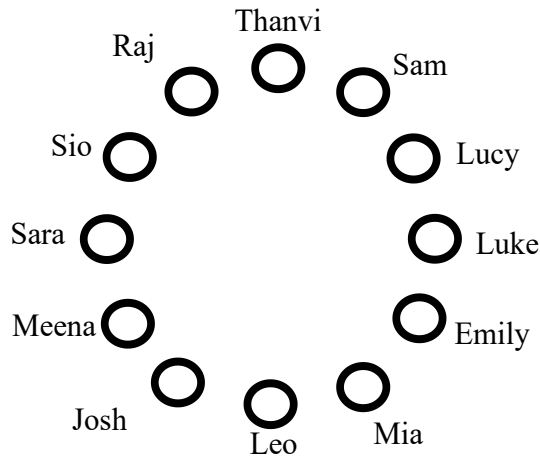
Task 8 (independent)

Complete the symmetrical patterns.



Task 9

The children are playing Duck, Duck, Goose in the playground.



Sam walks clockwise around the circle to the 3rd person. Who does he choose to chase him?

Meena walks anticlockwise around the circle to the 7th person. Who does she choose to chase her?

Luke stands and turns a quarter turn to the left. Who is he now facing?

Meena stands and turns a quarter turn to the right, who is she now facing?

Leo stands to face Mia and then turns a half turn - and walks to the 5th person. Who does he choose to chase him?

*Year 2 Geometry***Task 9 (independent)**

Draw a game of duck duck goose.

Draw 8 people in a circle and give them names.

Now with your buddy take turns giving directions of someone walking and picking someone to chase them in the game.

Year 2 Geometry

Task 10

Give your buddy instructions to move around the classroom.

Represent your pathway.

[illegible]

Task 10 (independent)

Work together with a buddy playing the robot game. Give directions to each other of turns you want them to make.

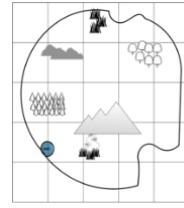
1. Walk 3 steps forward \longrightarrow and then 2 steps backwards \longleftarrow
2. Walk 1 step forward \longrightarrow and then 2 steps backwards \longleftarrow
3. Walk 3 steps backwards \longleftarrow and then 1 step forwards \longrightarrow
4. Walk 3 steps backwards \longleftarrow and then 4 steps forwards \longrightarrow
5. Walk 4 steps forwards \longrightarrow and then 4 steps backwards \longleftarrow

What do you notice?

*Year 2 Geometry***Task 11**

You are pirates!

Design your own Treasure Island - it may look like this:



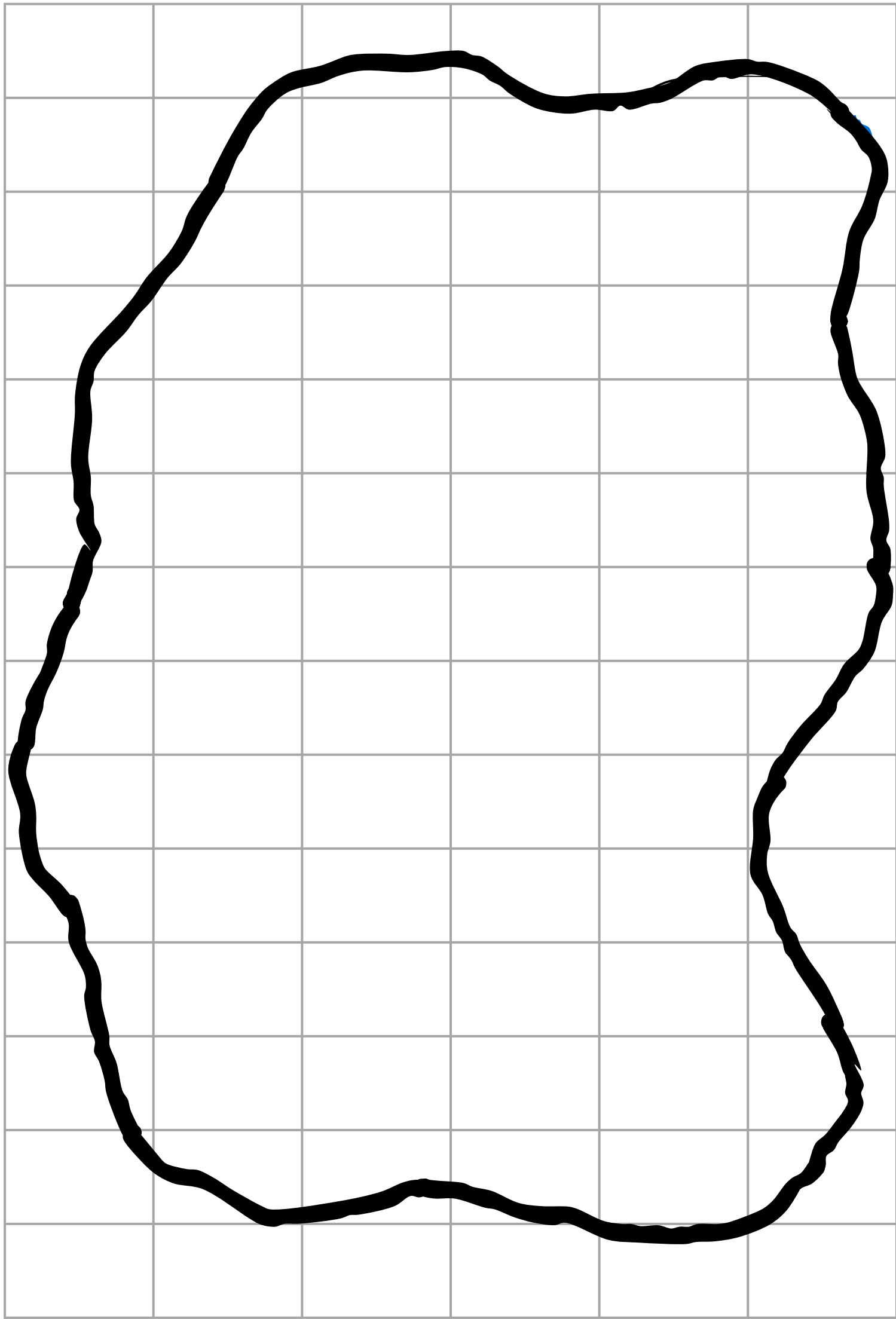
Your island needs to have hills, a swamp, trees and be surrounded by the sea. Pick a landing place on the edge of the island and mark it as your shipwreck.

Bury your treasure somewhere on the Island - but you need to write instructions for how you are going to find it again.

Give instructions for another pirate crew to find the treasure.

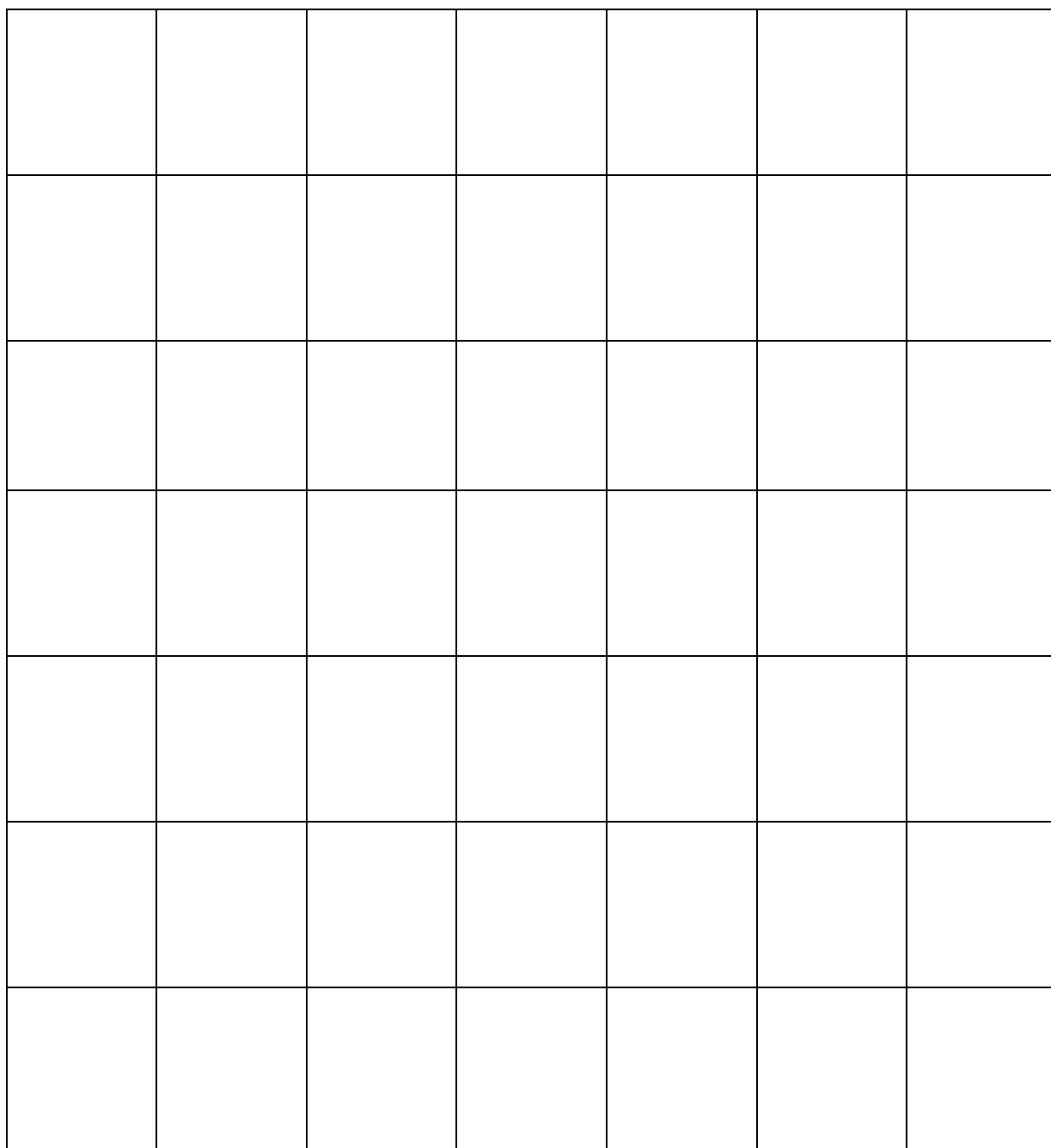
Task 11 Empty Grid or use blank Treasure Map on next page

[illegible]



Task 11 (Independent Task)

Design a treasure map and write instructions for someone to follow.



*Year 2 Geometry***Task 12**

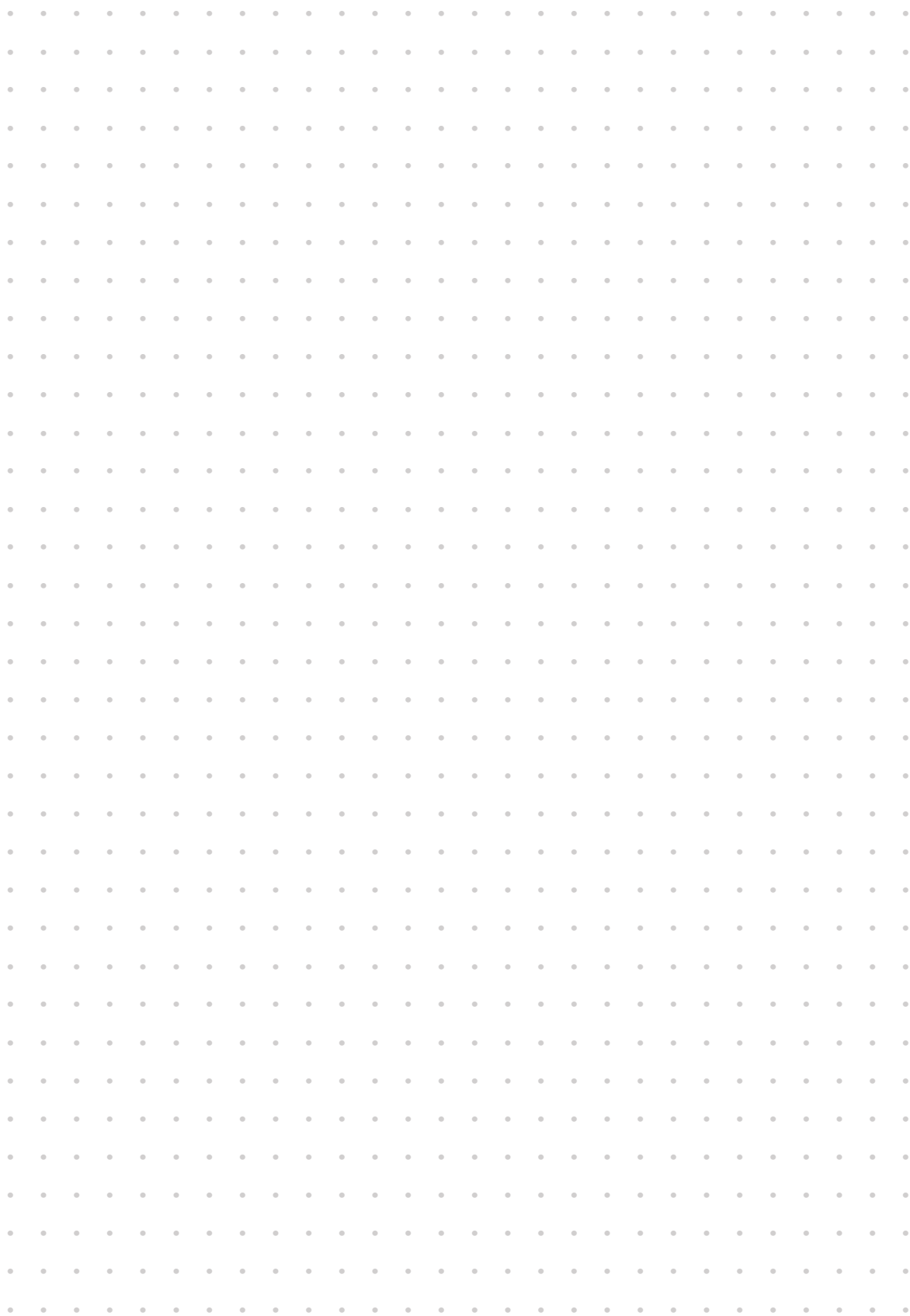
Look at the map of your school.

What do you notice? Find our classroom.

Explain where our classroom is.

Give instructions to move from your class to the office.

Give instructions to move from your class to the playground.

Dotty Paper

Squared Paper

