

Geometry



My Name

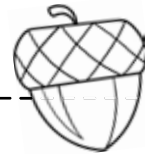


In this book

The Mathseeds program teaches children the core math and problem solving skills needed to be successful at school.

Each online lesson begins by introducing and modeling a mathematical concept. The child then completes a wide range of activities to practice the new skill. These activities present the content in many different ways, so children learn to use and apply each new skill in a variety of situations.

This book is designed to supplement the online program with more exercises in the core mathematical concepts. Each unit focuses on a topic within the main learning strand, presenting a series of pen and paper activities, word problems, puzzles, and games to practice their skills and understanding.



Contents

Topic 1: 2D shapes

Page	Date Completed
1 • Circles	/ /
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20 • Making new shapes	/ /
22 • Guess my shape (game)	/ /
23 • Straight and curved lines	/ /
26 • Doc's shapes (problem solving)	/ /
27 • Spin a shape (game)	/ /

Topic 2: 3D objects

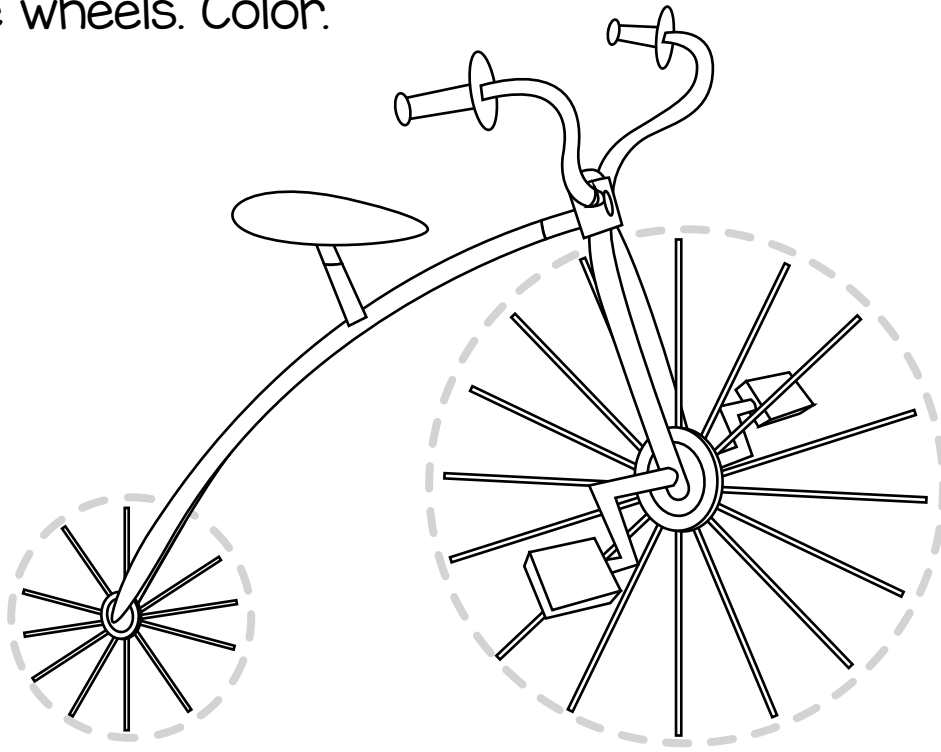
Page	Date Completed
28 • Cubes and spheres	/ /
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34 • Cones and cylinders	/ /
38 • Find it!	/ /
39 • Ruby's shapes (problem solving)	/ /
40 • In the bag (game)	/ /

Topic 3: Position

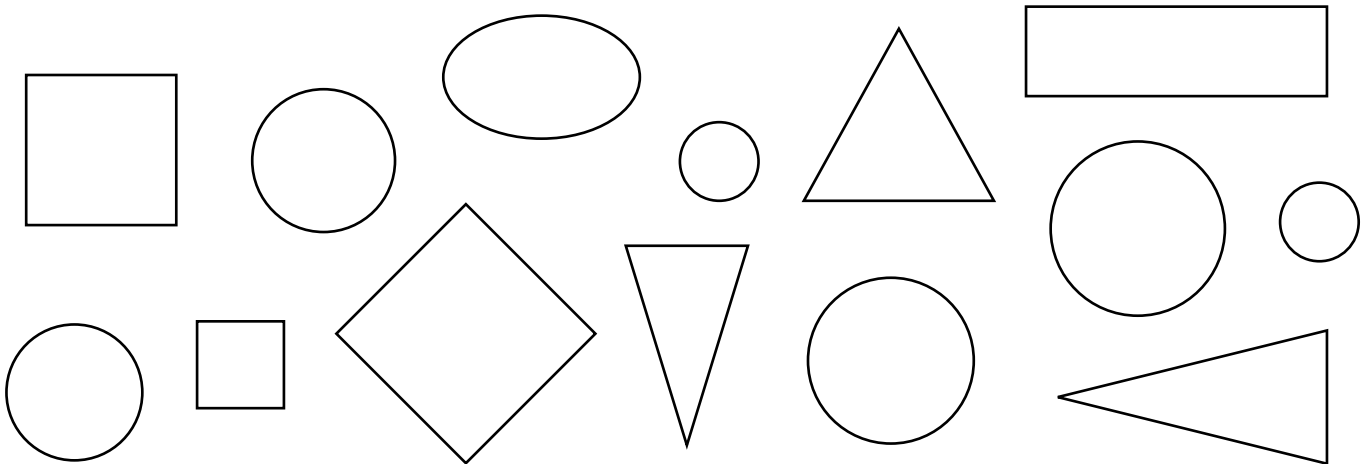
Page	Date Completed
41 • Position	/ /
46 • X marks the spot! (game)	/ /

Circles

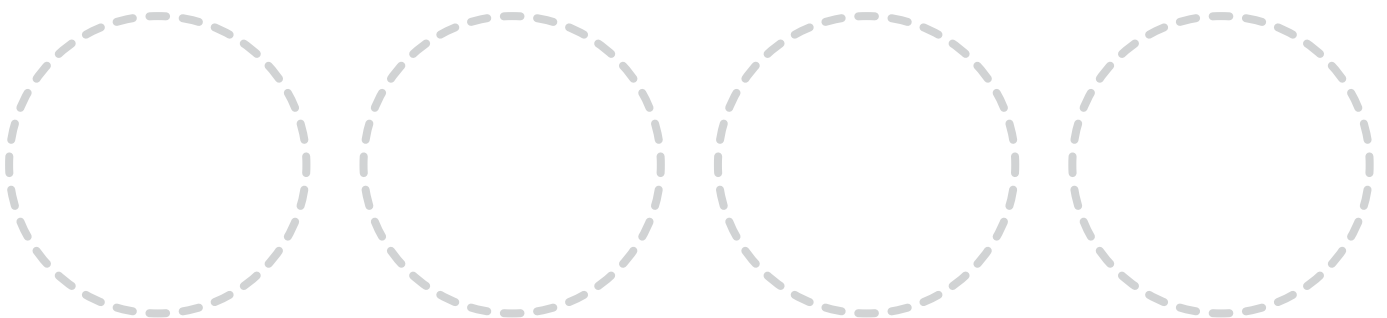
1 Finish the wheels. Color.



2 Color the circles.

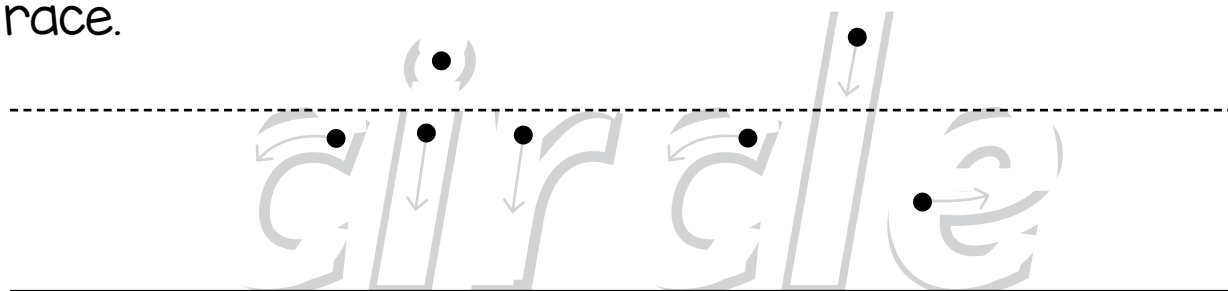


3 Trace the circles.

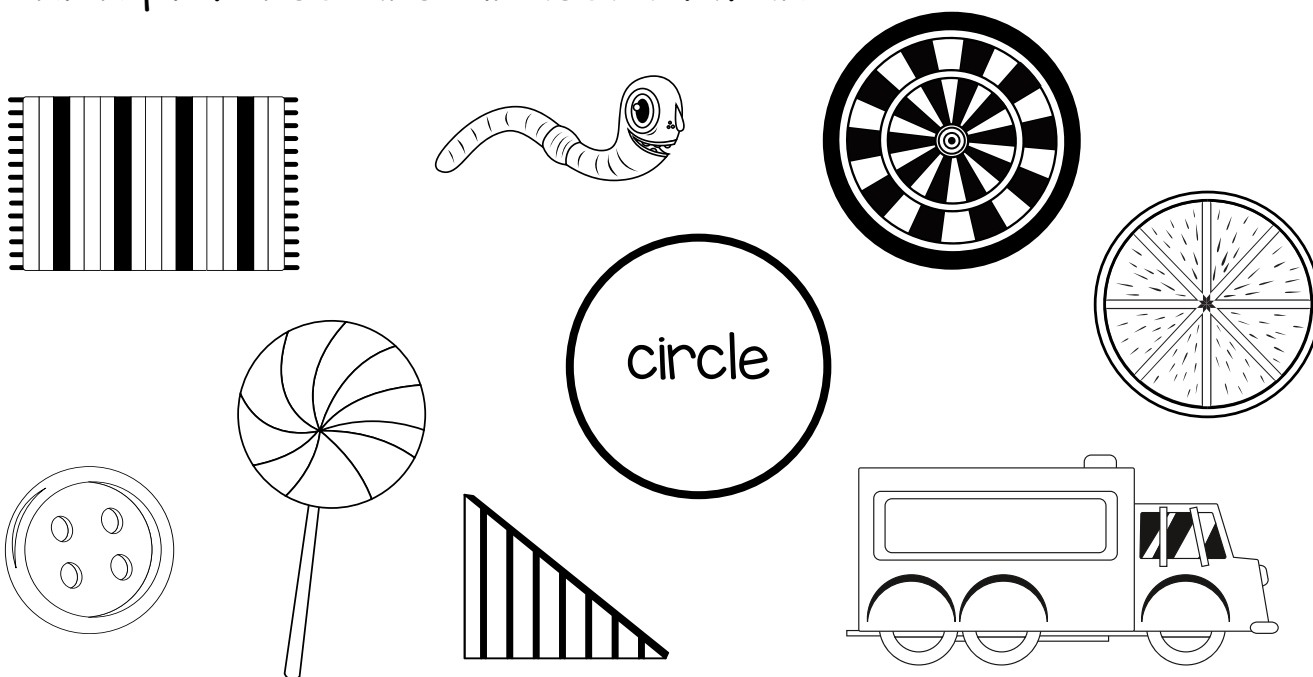


Circles

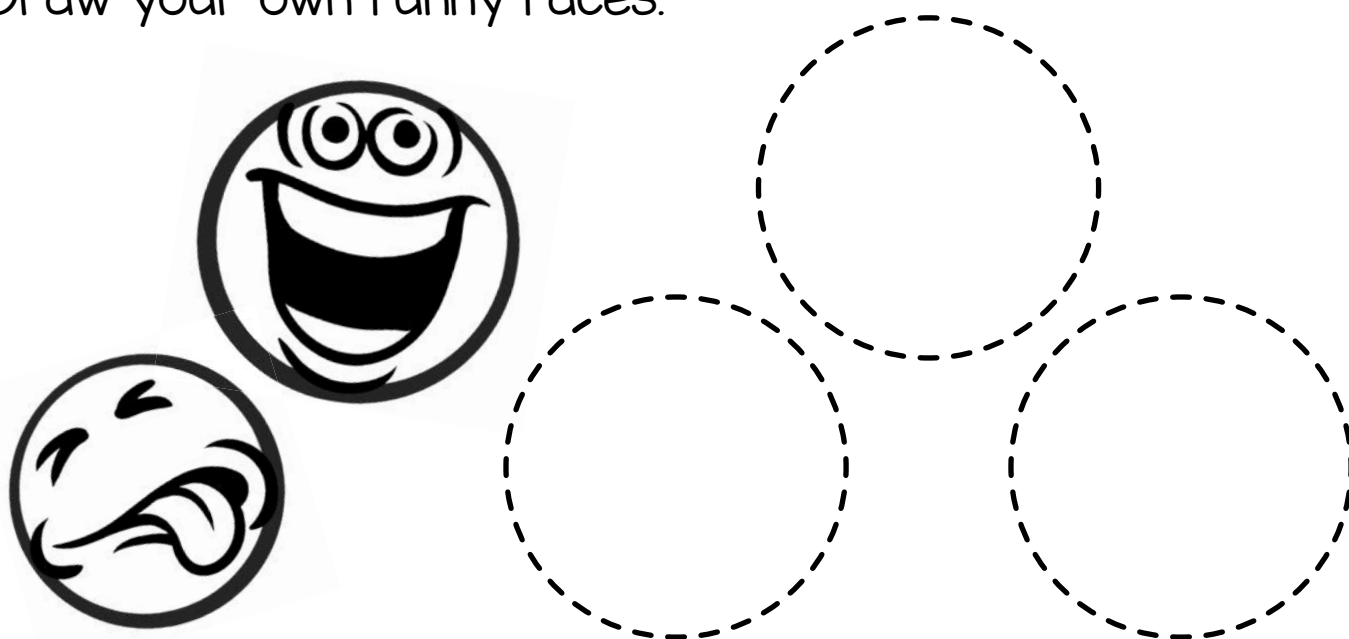
4 Trace.



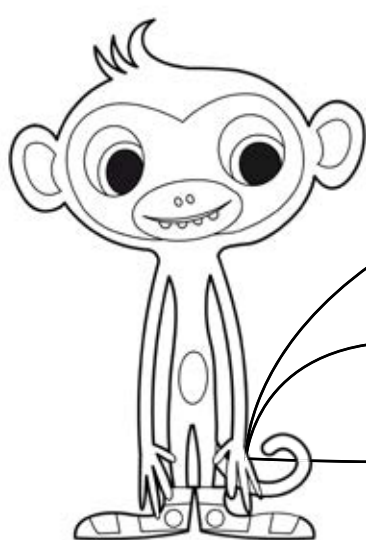
5 Which pictures are circles? Match.



6 Draw your own funny faces.



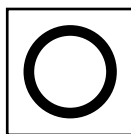
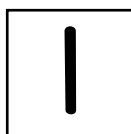
7 Finish Mango's balloons.



How many circles?

8 Trace the words and match to a symbol.

circle

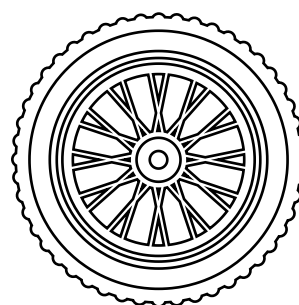
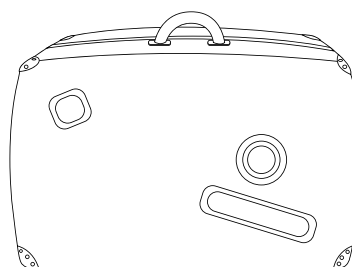
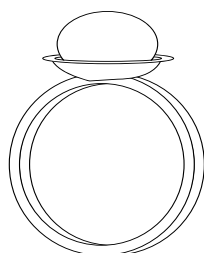
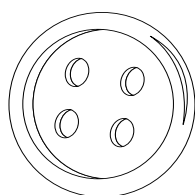


two

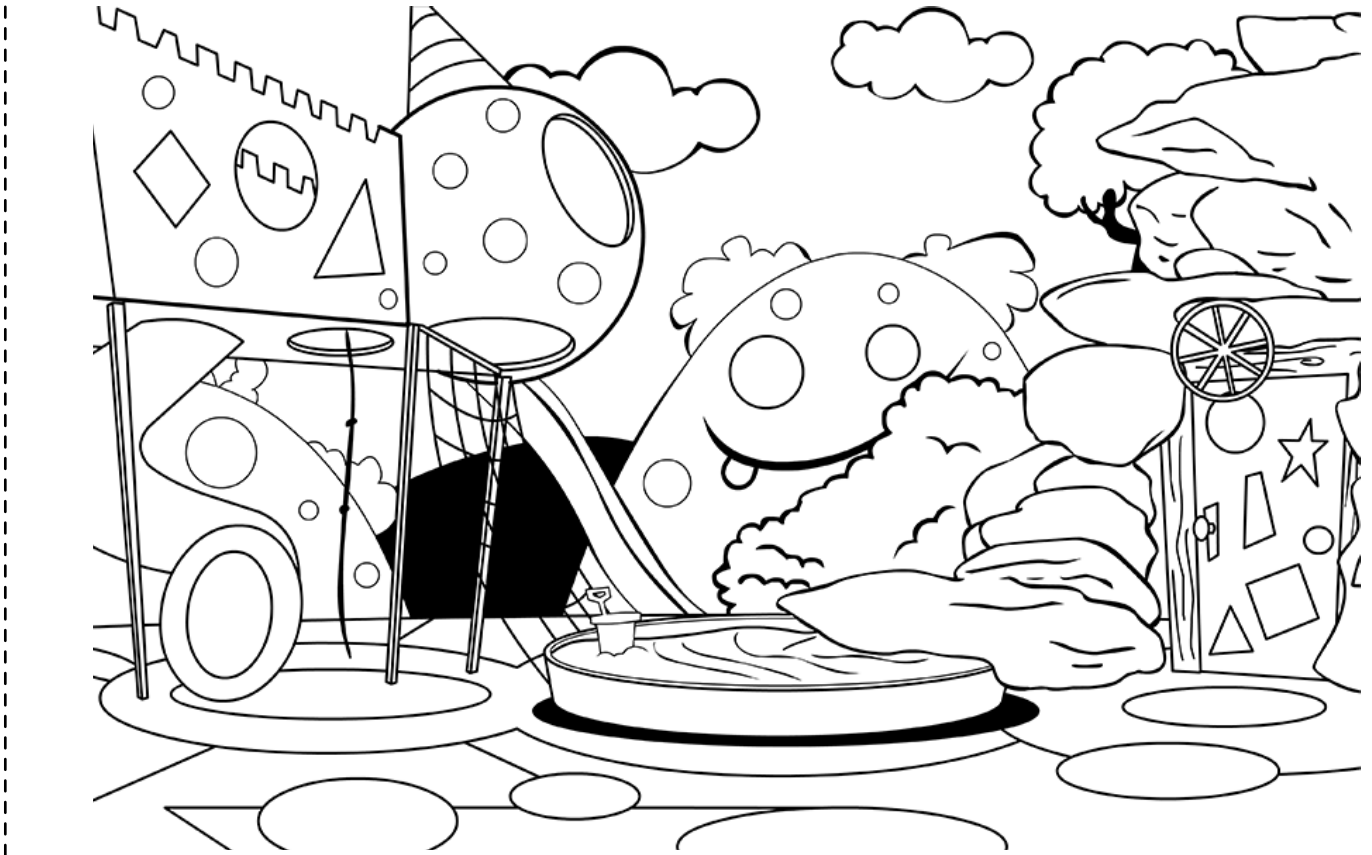
three

one



9 Color the odd one out.



10 Find all the circles. Color them in.



11 What is a circle? Circle the correct answers.

- a curved line 
- a straight line 
- 0 | 2 | 3 corners



12 Draw the shapes. Color the circles.



Comparing circles

Practical

You will need: a round glass , a glue stick ,
a roll of adhesive tape , and a nickel coin .

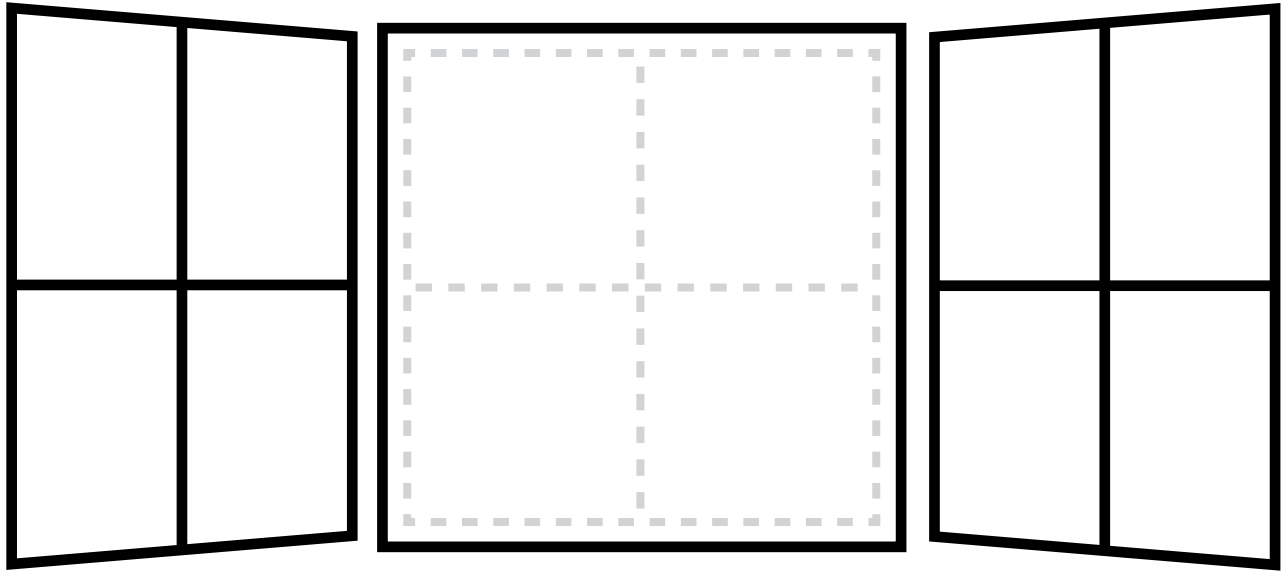
1 Draw around each object.

2 Color the biggest ○ blue.

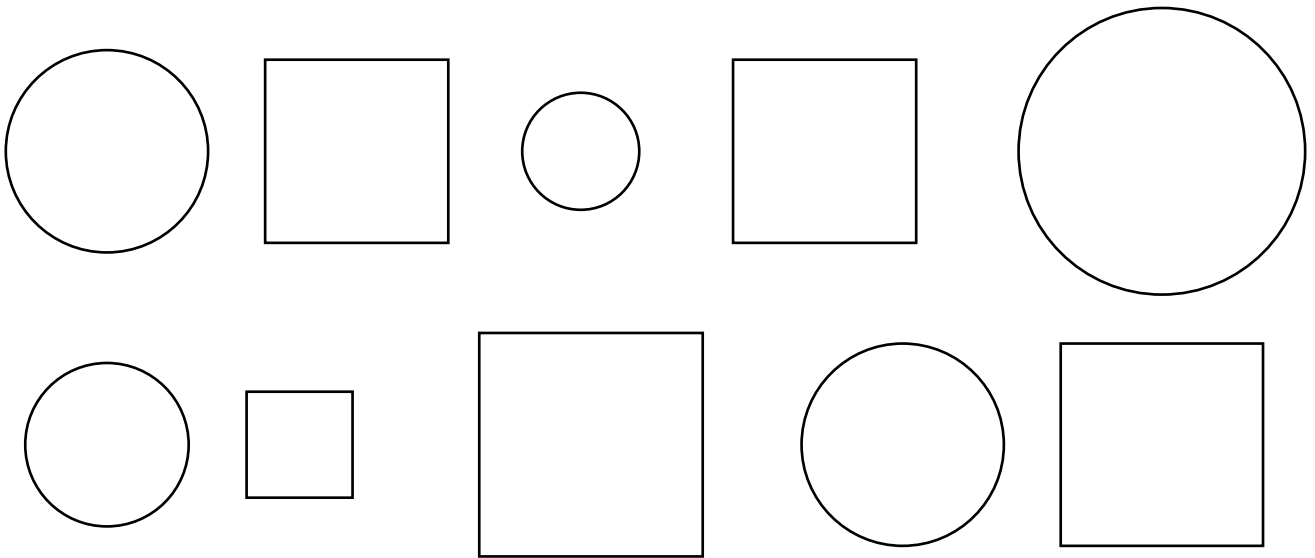
3 Color the smallest ○ yellow.

Squares

1 Finish the windows. Color.



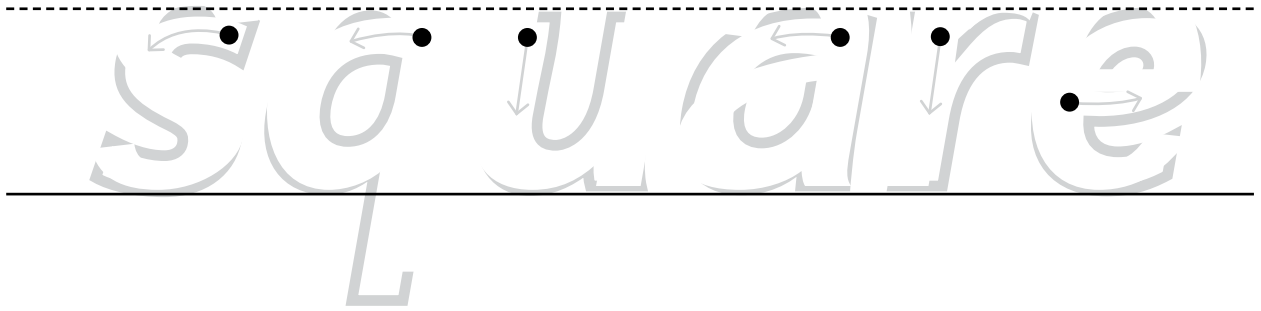
2 Color ☐ blue, ☐ yellow.



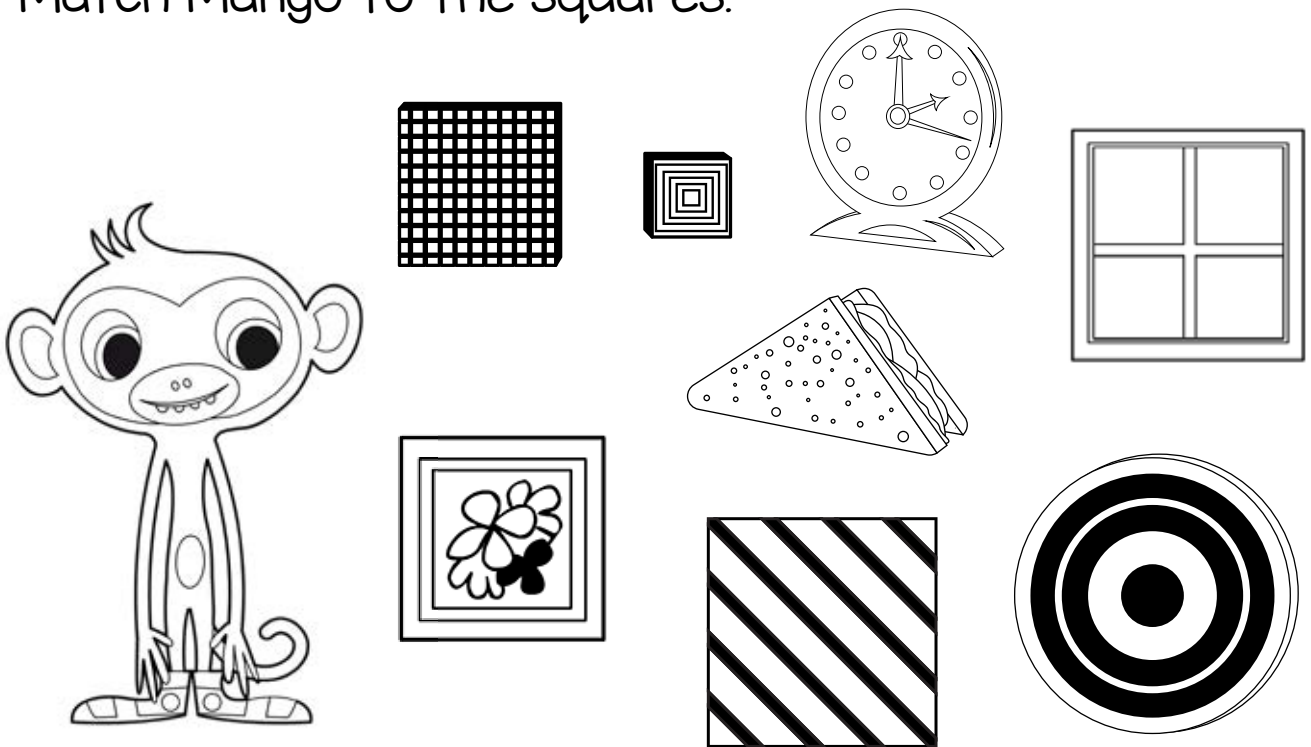
3 Trace.



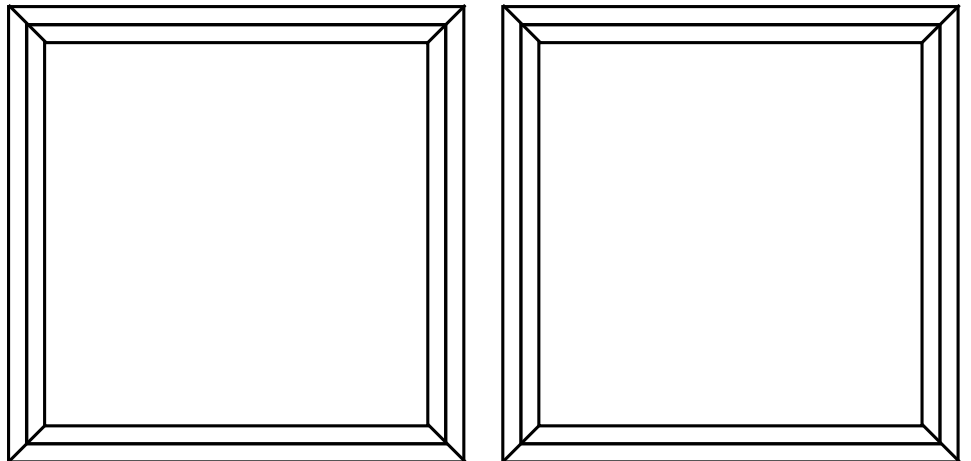
4 Trace.



5 Match Mango to the squares.



6 Draw your own shape pictures in the frames.



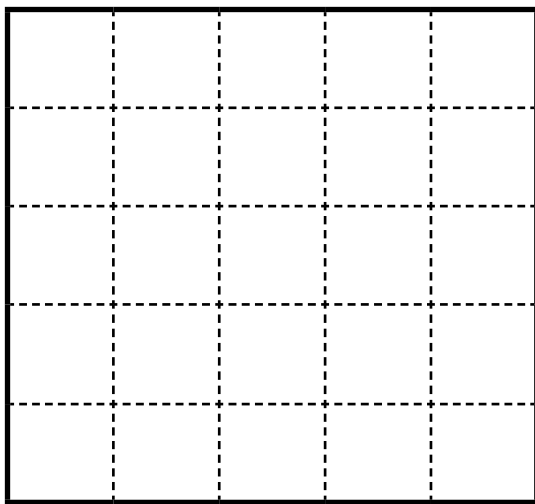
Squares

7 Write the word. Draw the shape.

square

circle

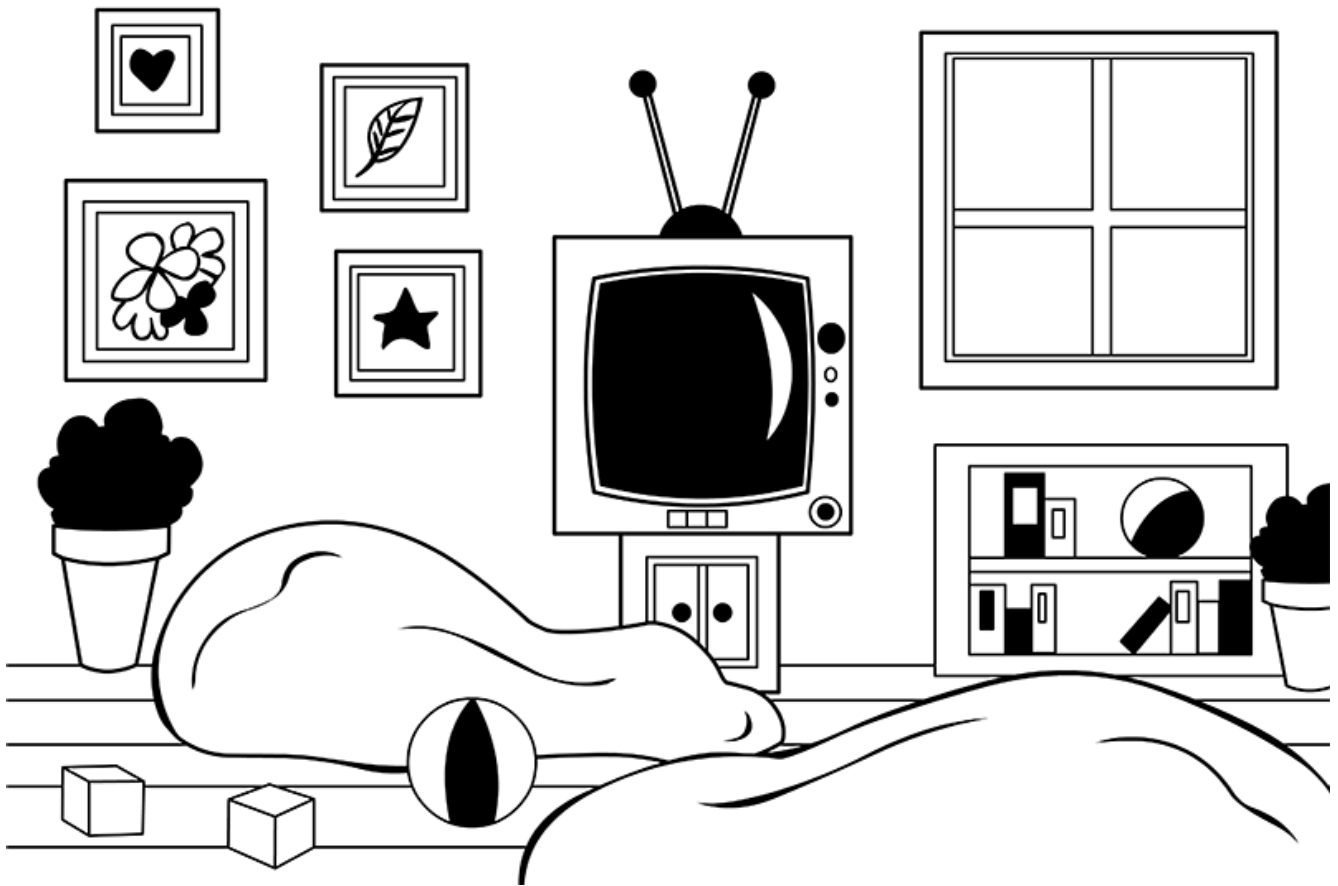
8 Trace the squares. Color Ruby's quilt.



9 Color the squares to make a pattern.





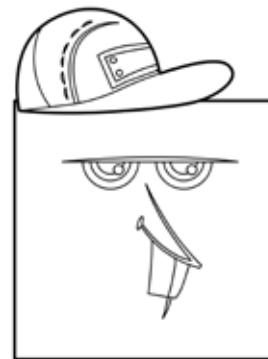
10 Find all the squares. Color them in.



11 What is a square? Circle the correct answers.

Squares have:

- curved sides 
- straight sides 
- 0 | 2 | 3 | 4 corners



12 Put a square frame around each picture.

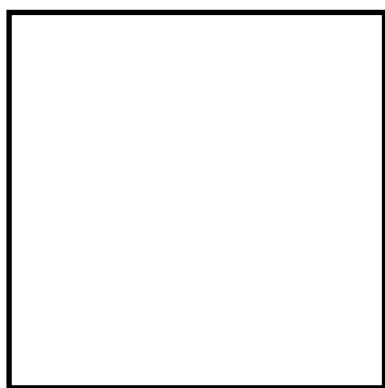


How many squares?

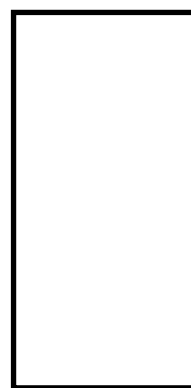
Practical

You will need some square pattern blocks .

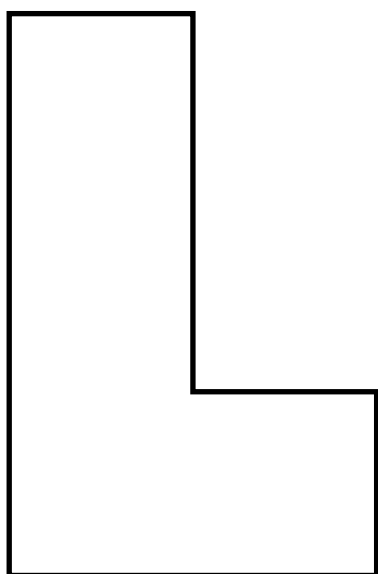
Make each shape with the blocks.



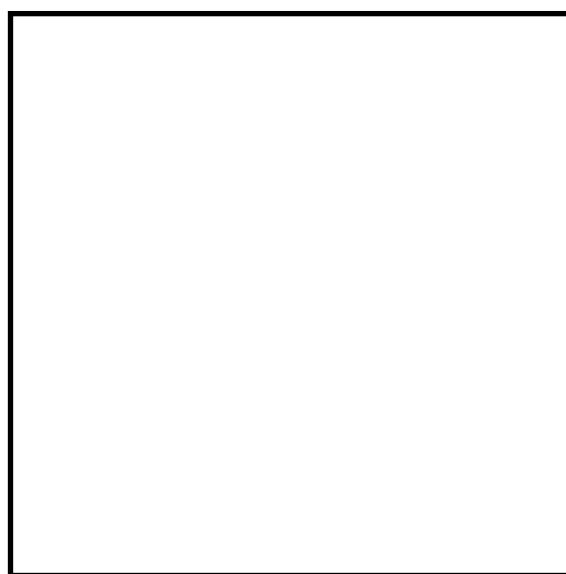
How many  blocks? _____



How many  blocks? _____



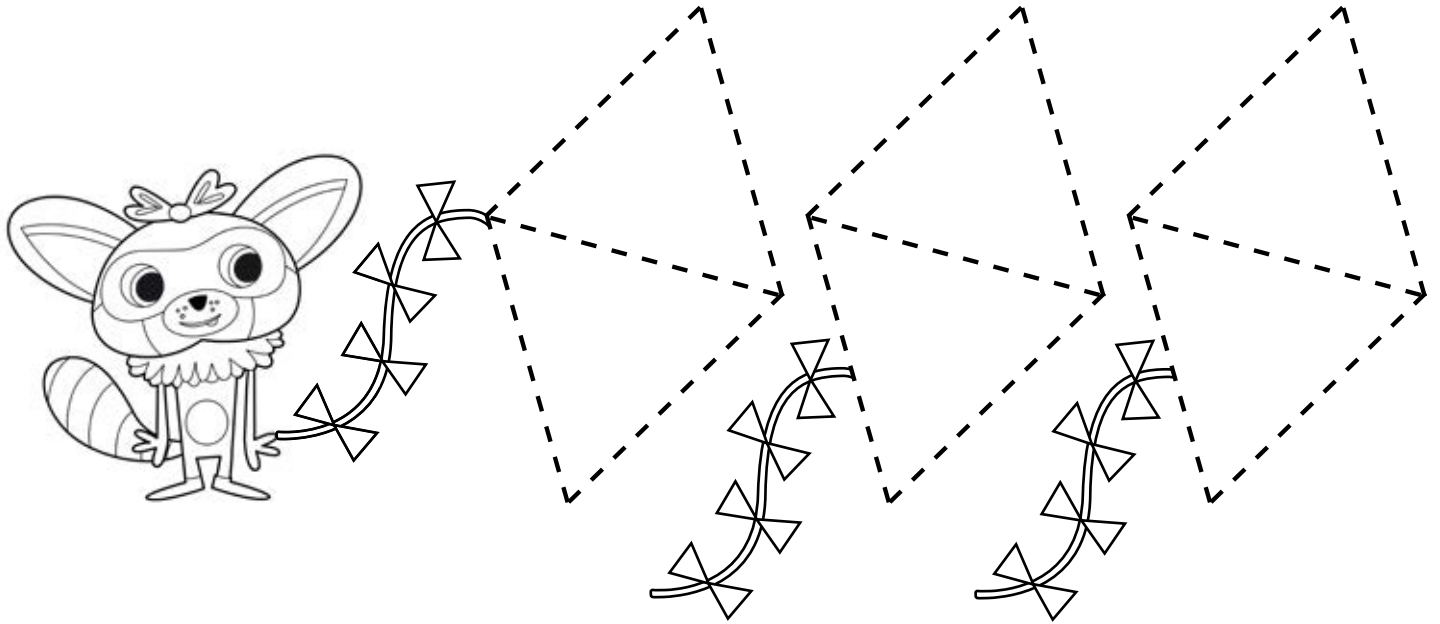
How many  blocks? _____



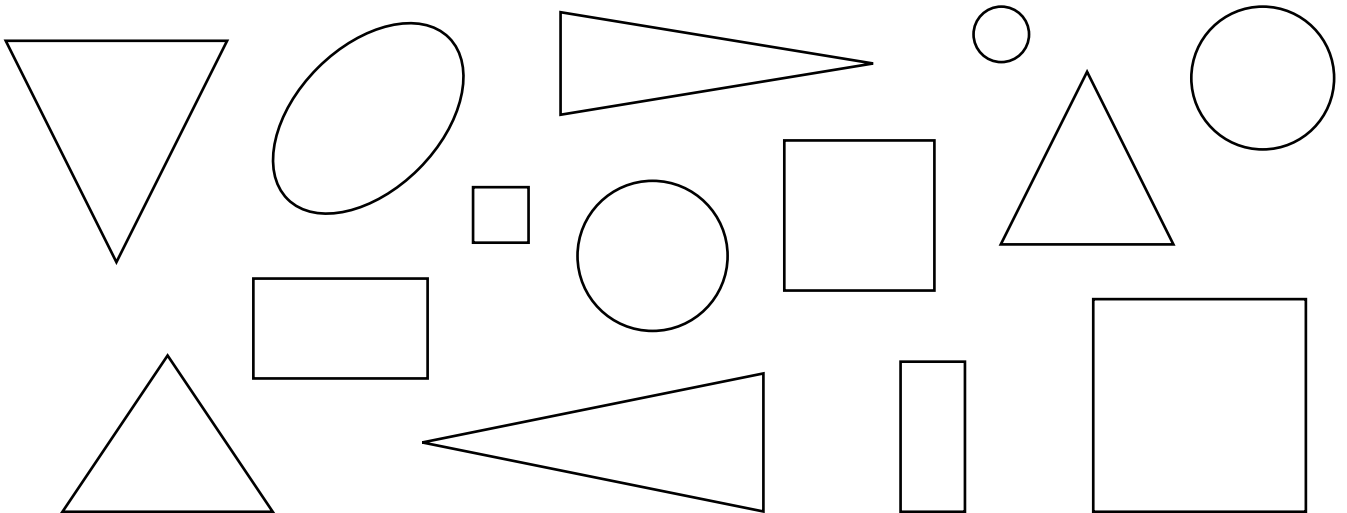
How many  blocks? _____

Triangles

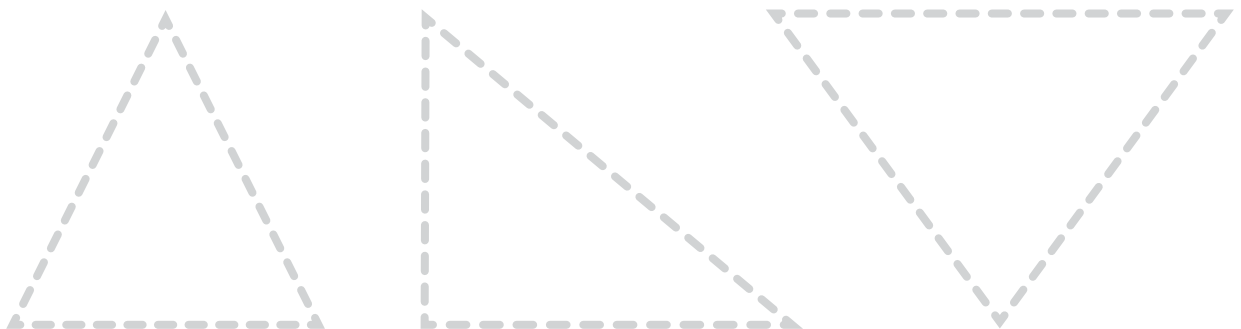
1 Finish Ruby's kites. Color.



2 Color the triangles.

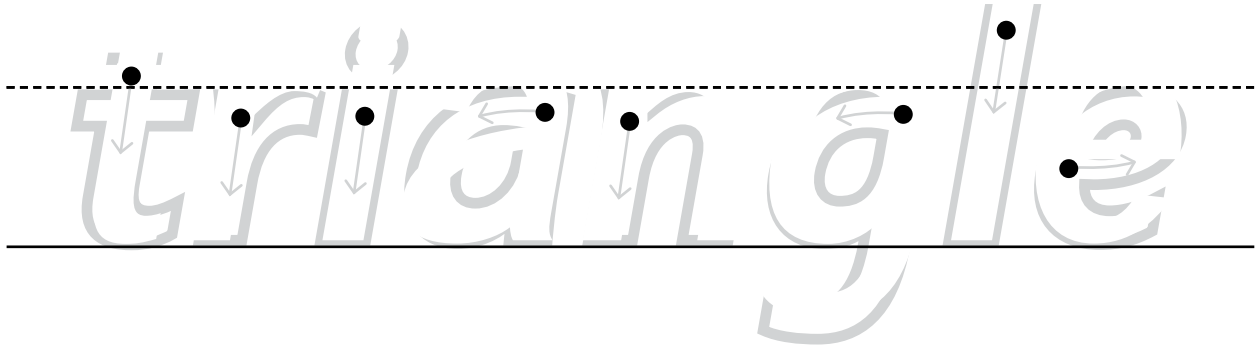


3 Trace.

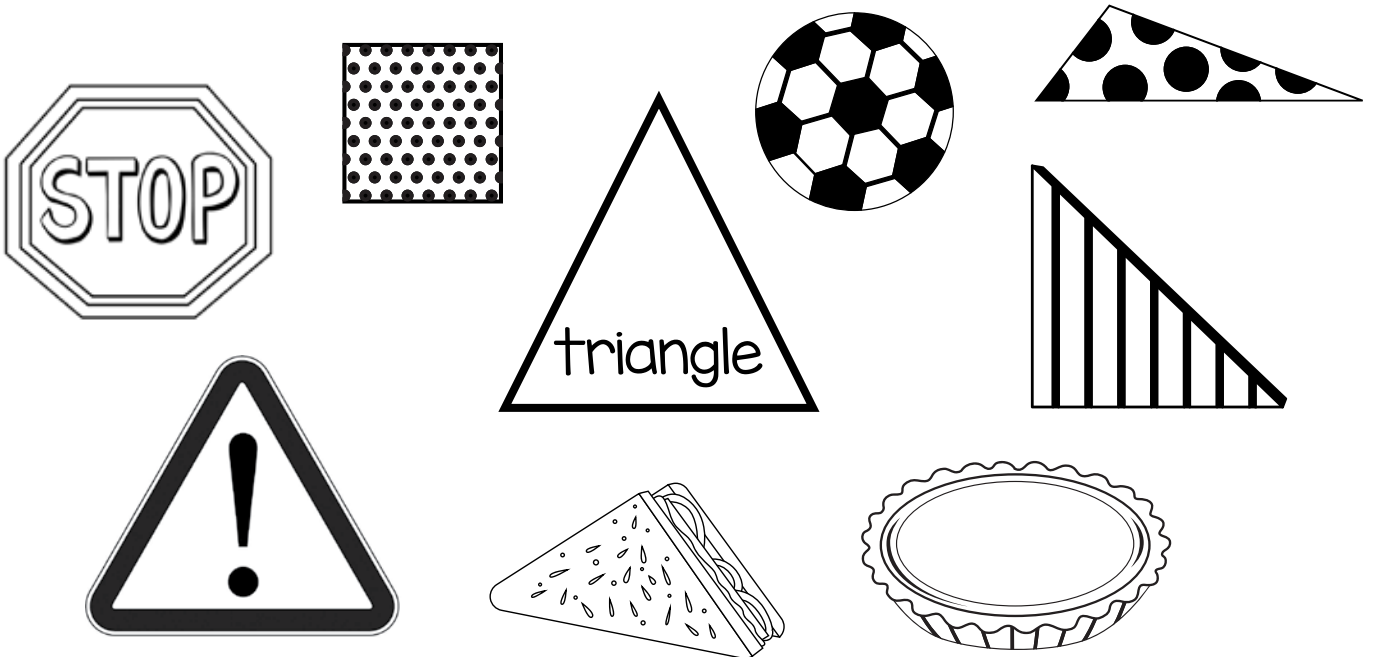


Triangles

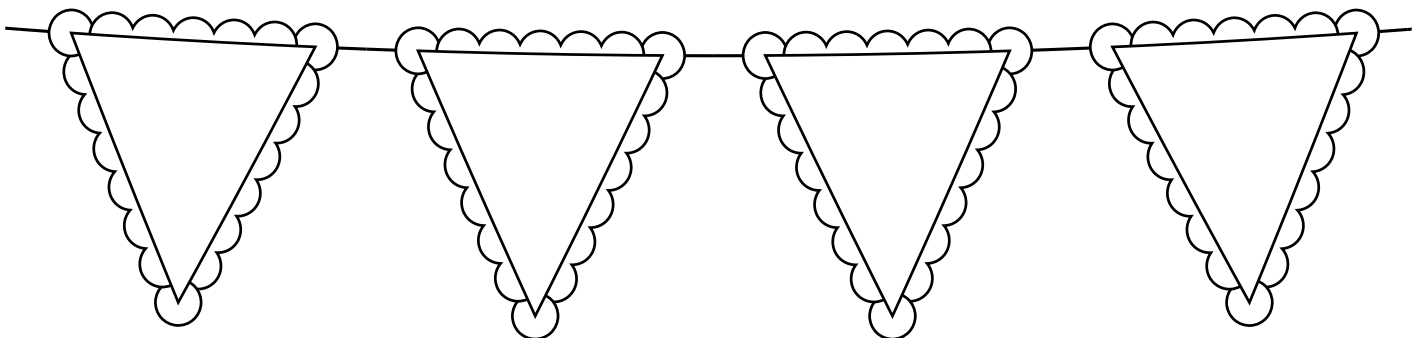
4 Trace.



5 Which pictures are triangles? Match.



6 Color the flags. How many triangles?



7 Trace the words and match to a shape.

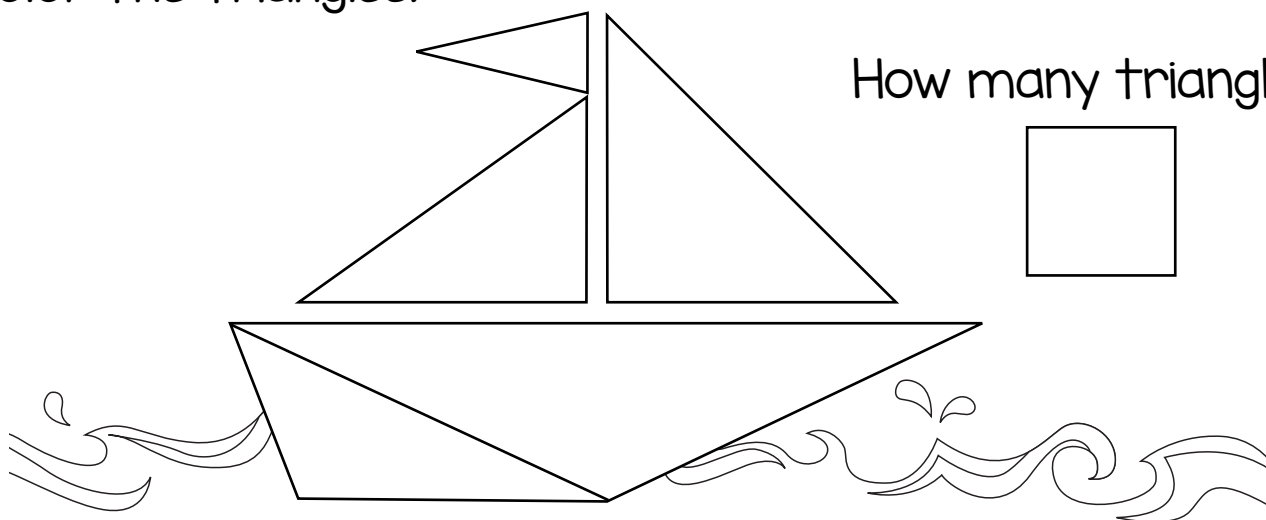
triangle

circle

square

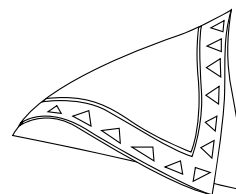
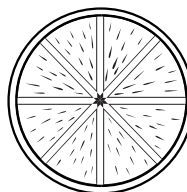
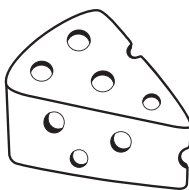
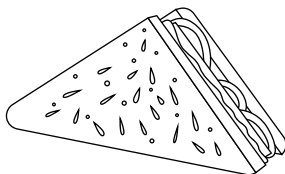


8 Color the triangles.



How many triangles?

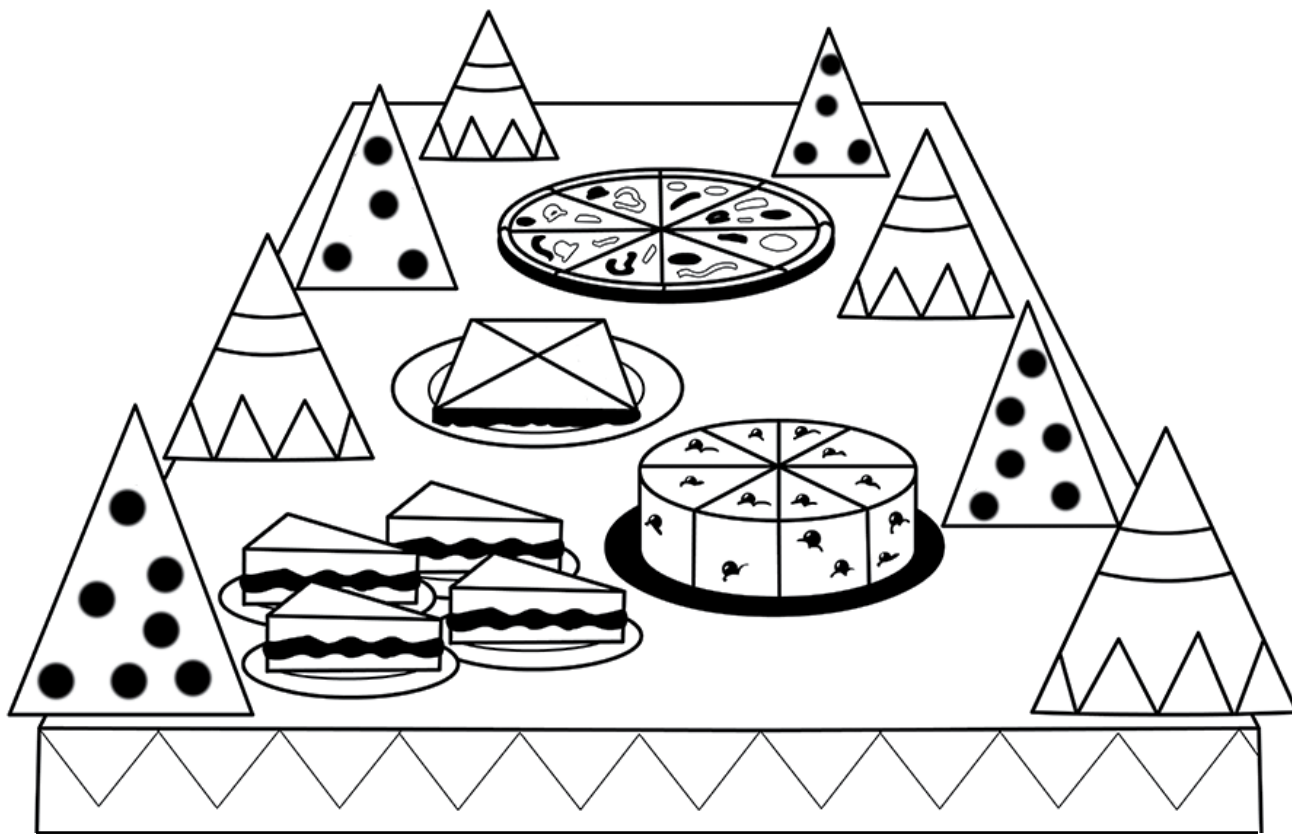
9 Circle the odd one out.



How many triangles?



How many circles?

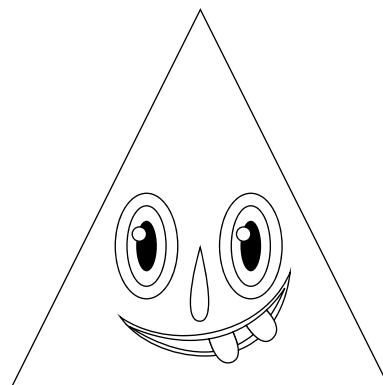
10 Find all the triangles. Color them in.



11 Circle the correct answers.

Triangles have:

- curved sides 
- straight sides 
- 0 | 2 | 3 | 4 corners



12 Draw the triangles. Color them.



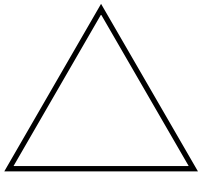
How many triangles?

Practical

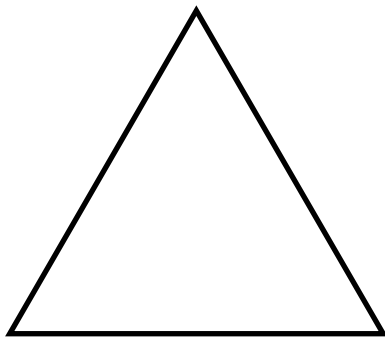
You will need some triangle pattern blocks .

1 Make each shape with the  blocks.

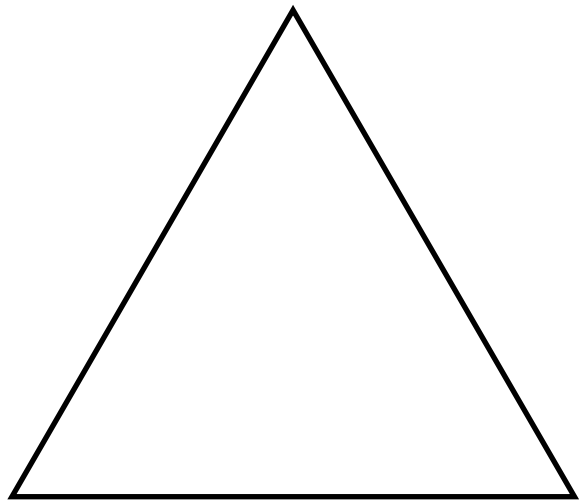
Write the number of blocks for each shape.



_____ blocks



_____ blocks



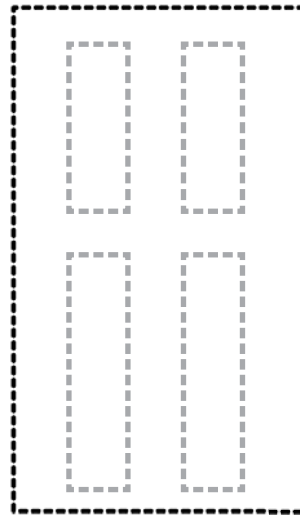
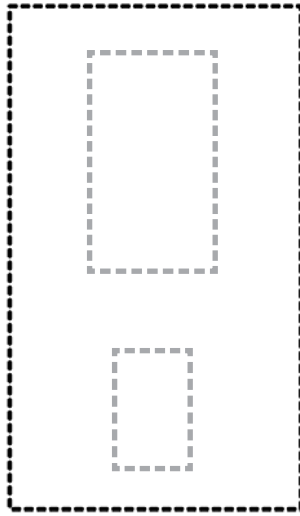
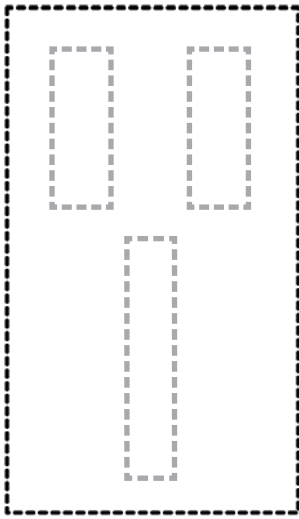
_____ blocks

2 Make your own shape with the  blocks.

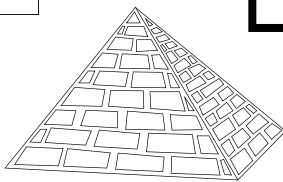
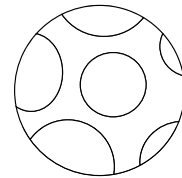
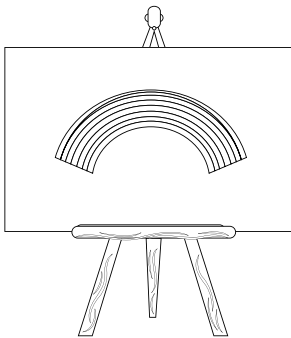
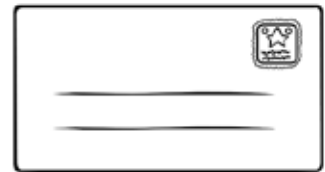
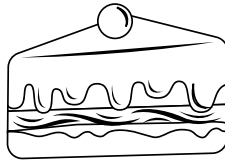
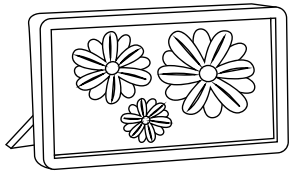
How many  blocks? _____

Rectangles

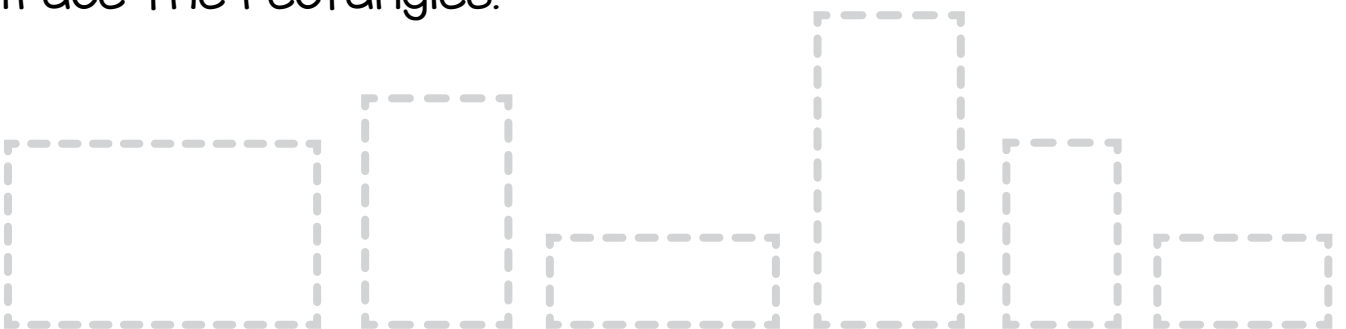
1 Finish Doc's doors. Color.



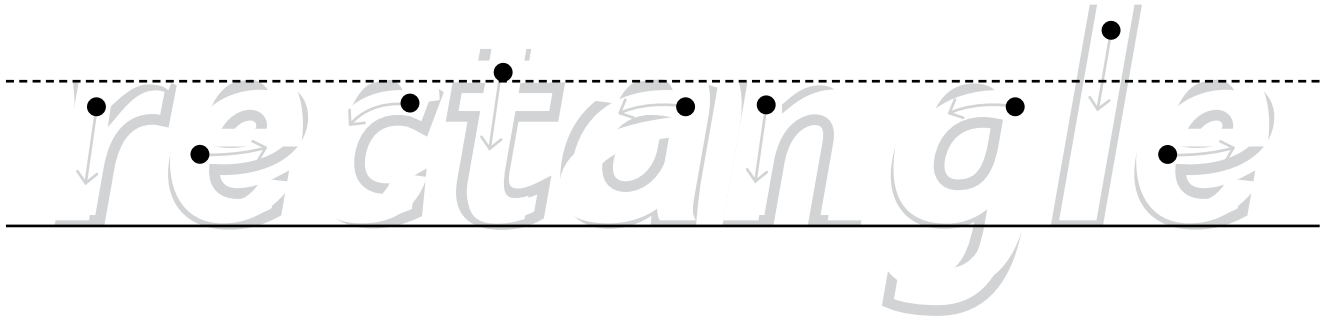
2 Which pictures are rectangles? Match.



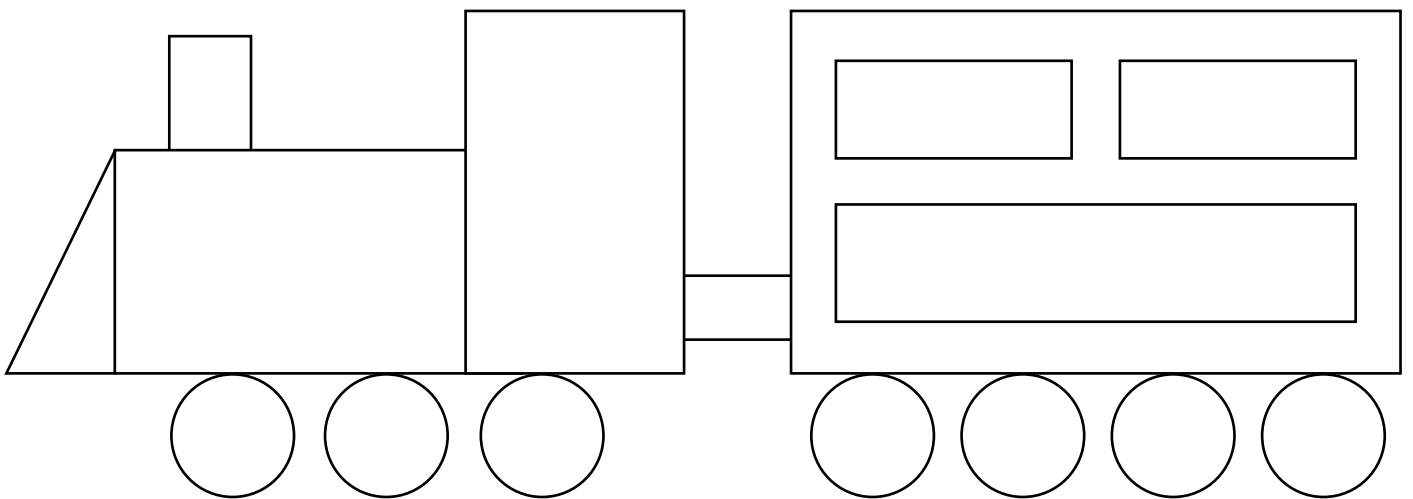
3 Trace the rectangles.



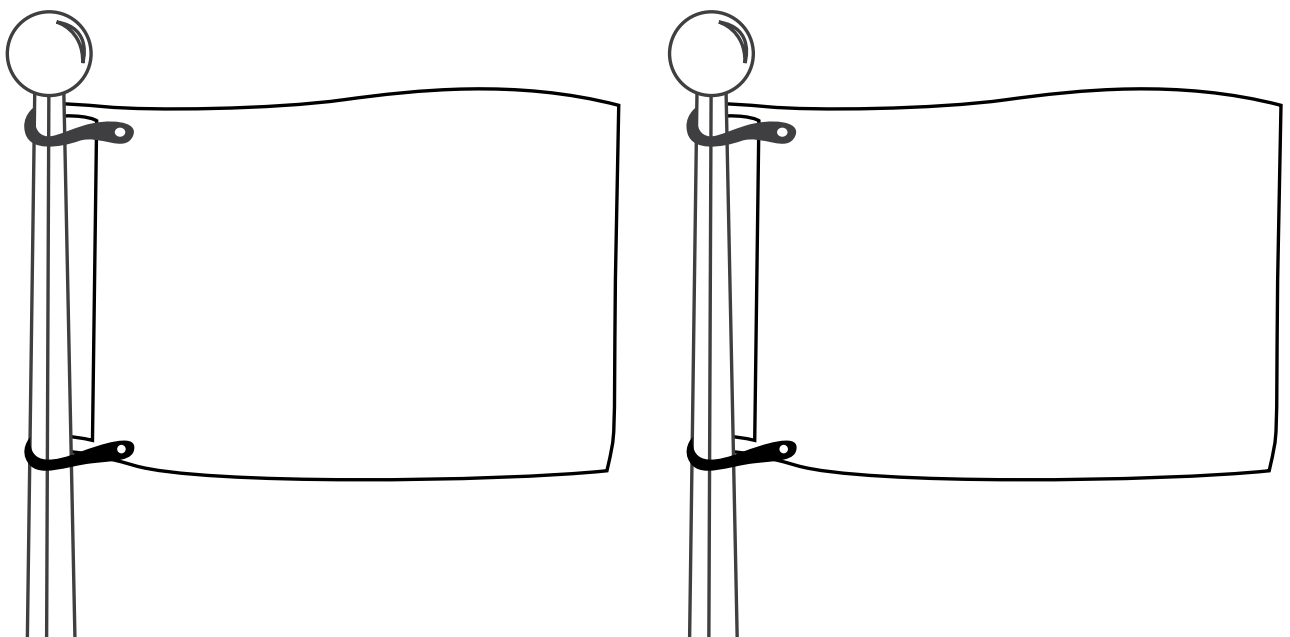
4 Trace.



5 Color the rectangles.



6 Decorate the flags.

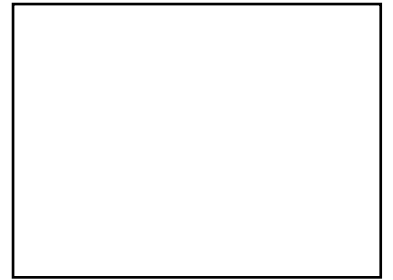
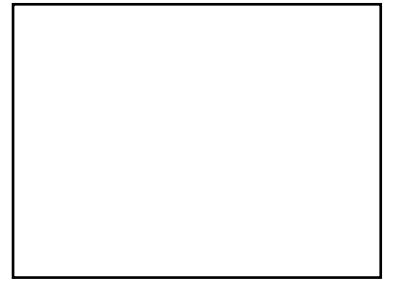


Rectangles

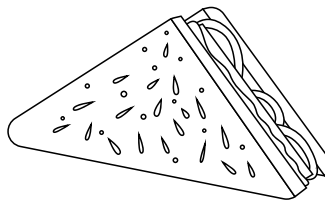
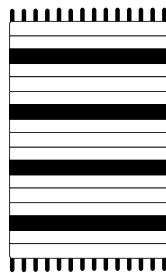
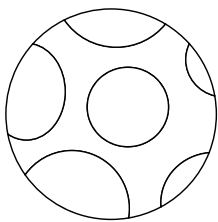
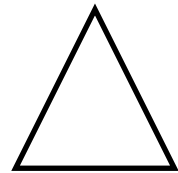
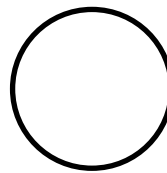
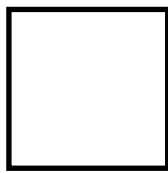
7 Trace the words. Draw the shape.

square

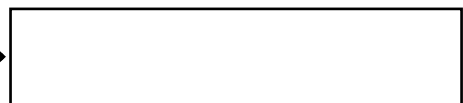
rectangle



8 Match each shape to a picture.





9 Label the sides short or long.



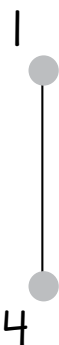
10 Circle the correct answers.

Rectangles have:

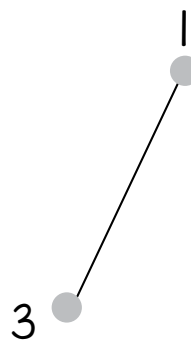
- curved sides 
- straight sides 
- 0 1 2 3 4 corners



11 Join the numbers. Name each shape.

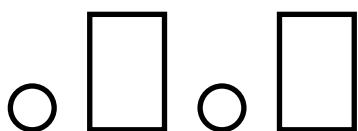


This is a



This is a

12 Finish the patterns.



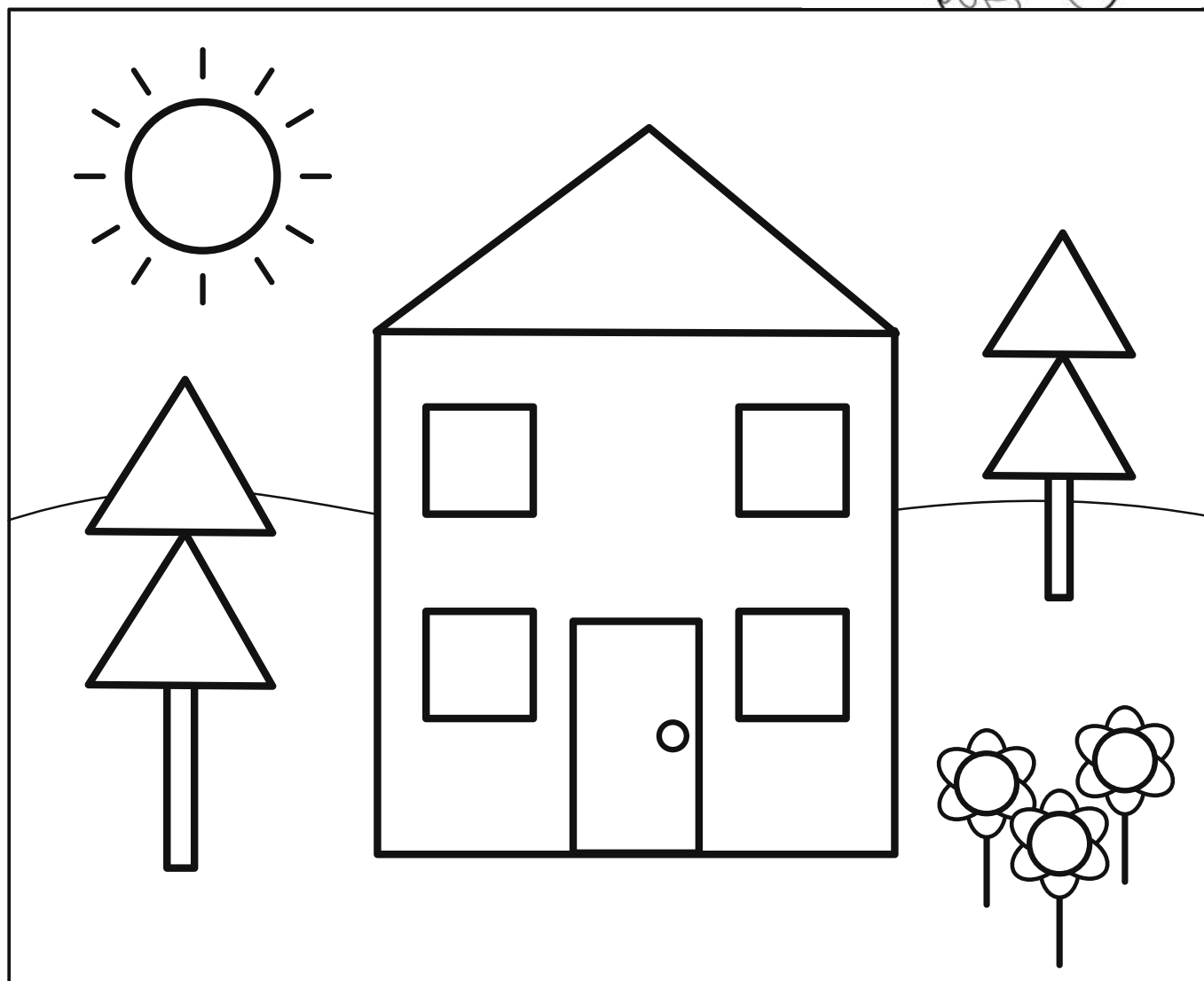


Making new shapes

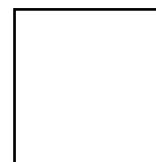
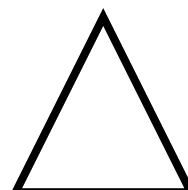
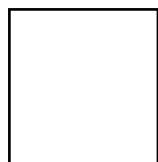
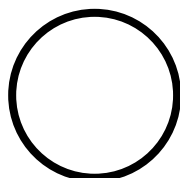
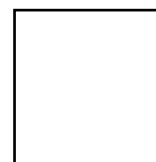
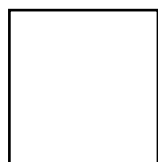
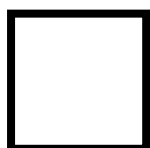
Did you know you can
put shapes together to
make pictures?



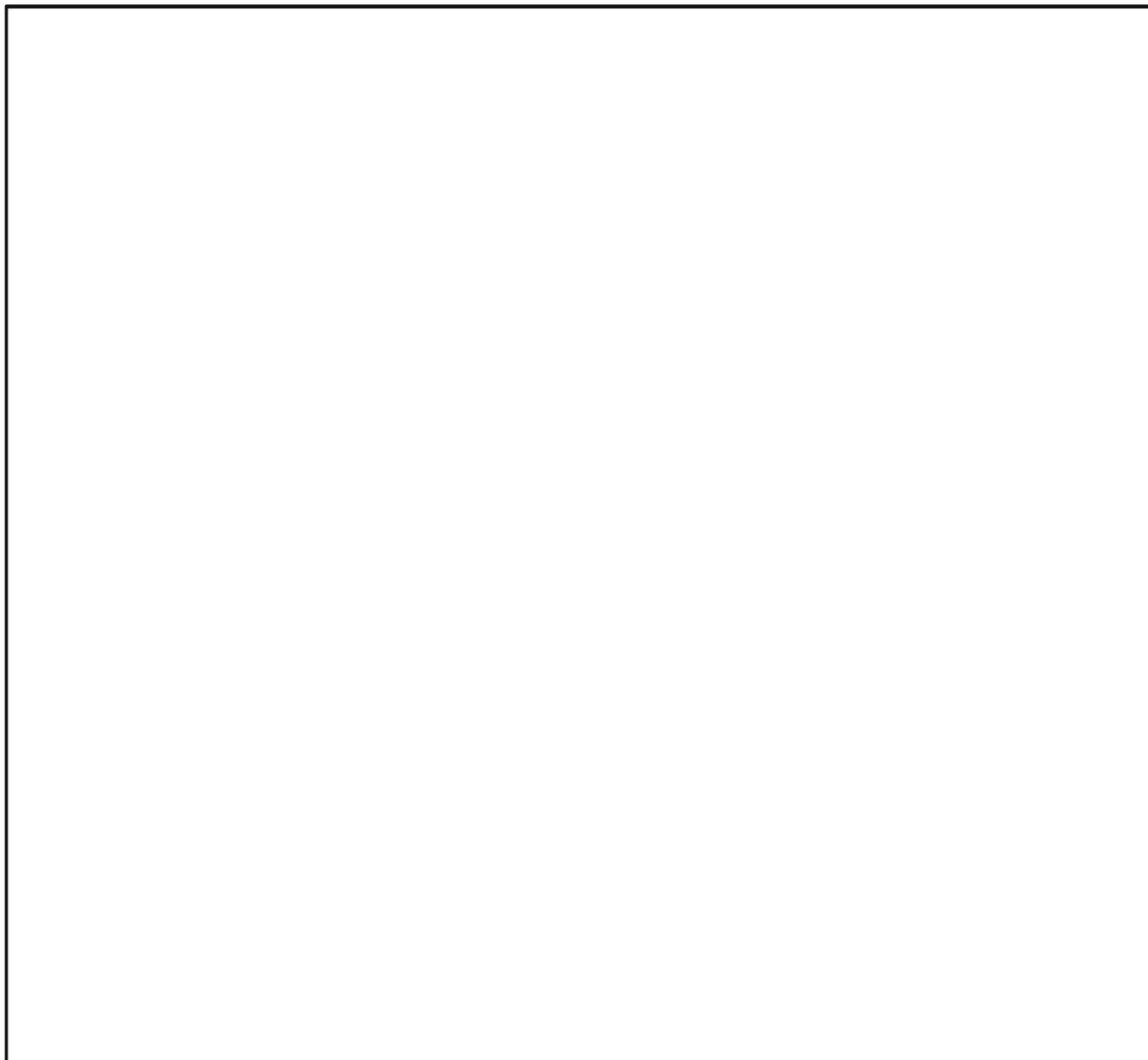
Color.



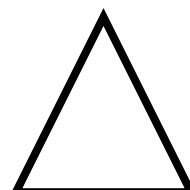
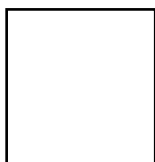
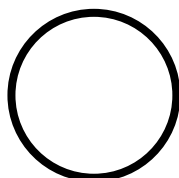
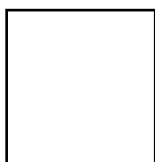
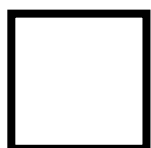
How many?



2 Make your own picture using pattern blocks.



How many?



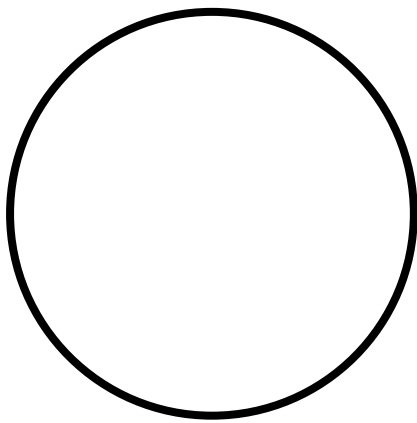
Guess my shape

Game

You will need scissors  and a partner 😊.

HOW TO PLAY

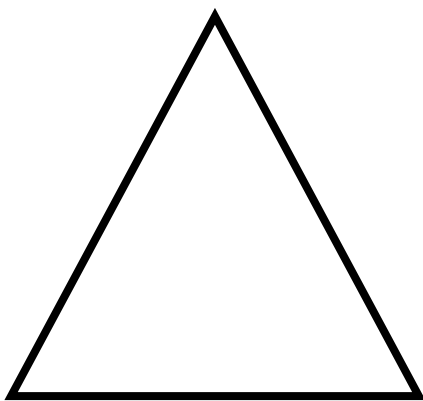
- 1 Cut out the shape pictures.
- 2 Sit back-to-back with your partner. Choose a shape but don't let your partner see it.
- 3 Describe your shape to your partner but DO NOT say your shape's name!
- 4 Can your partner guess the shape?
- 5 Swap over and play again with a different shape.



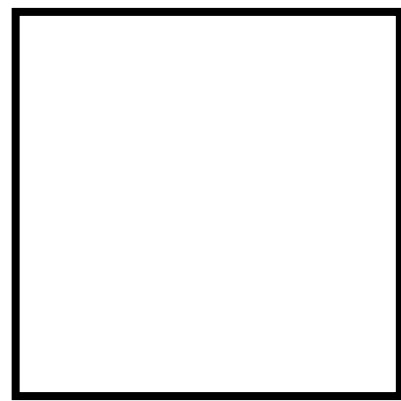
circle



rectangle



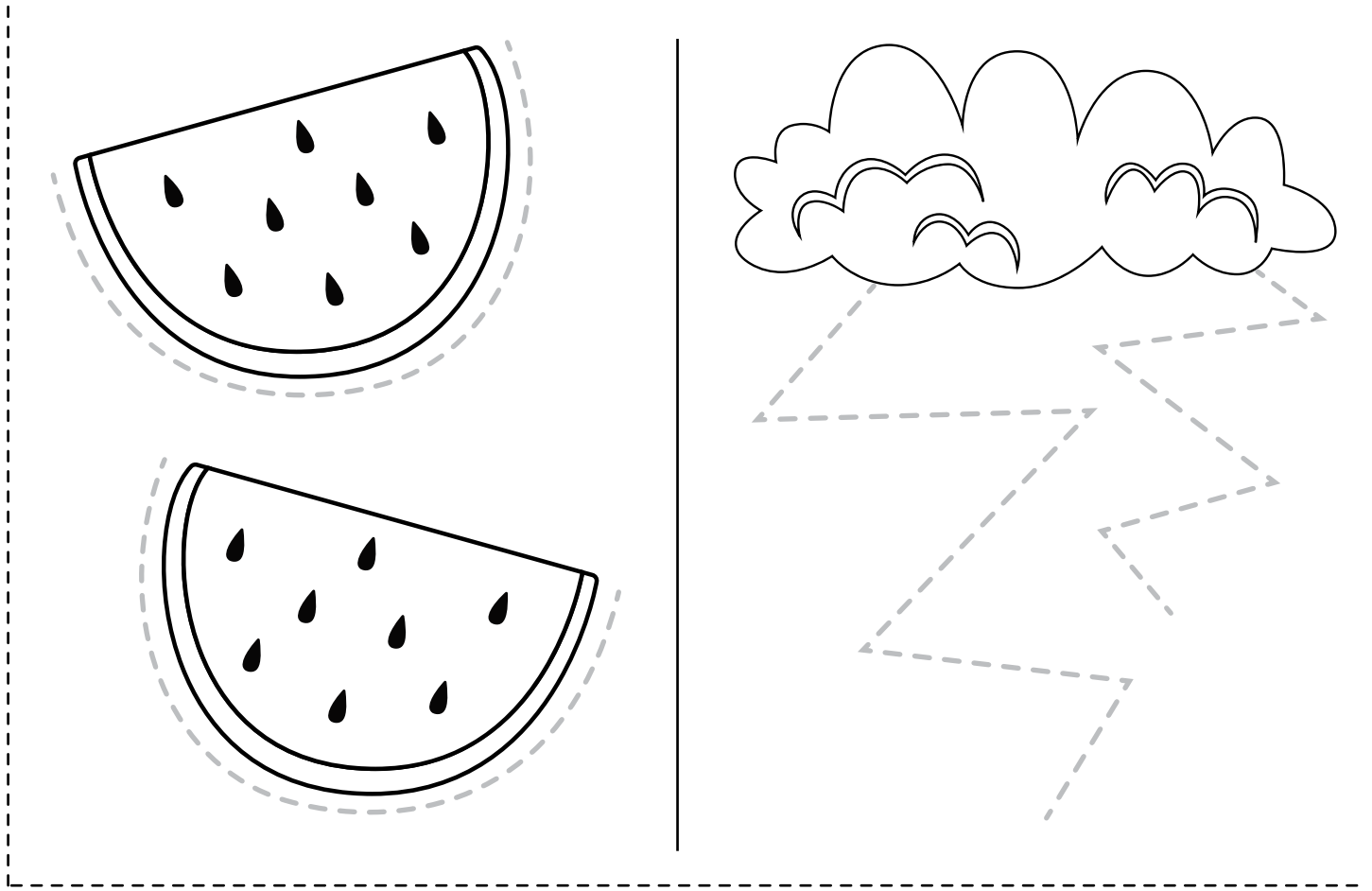
triangle



square

Straight and curved lines

1 Finish the pictures.

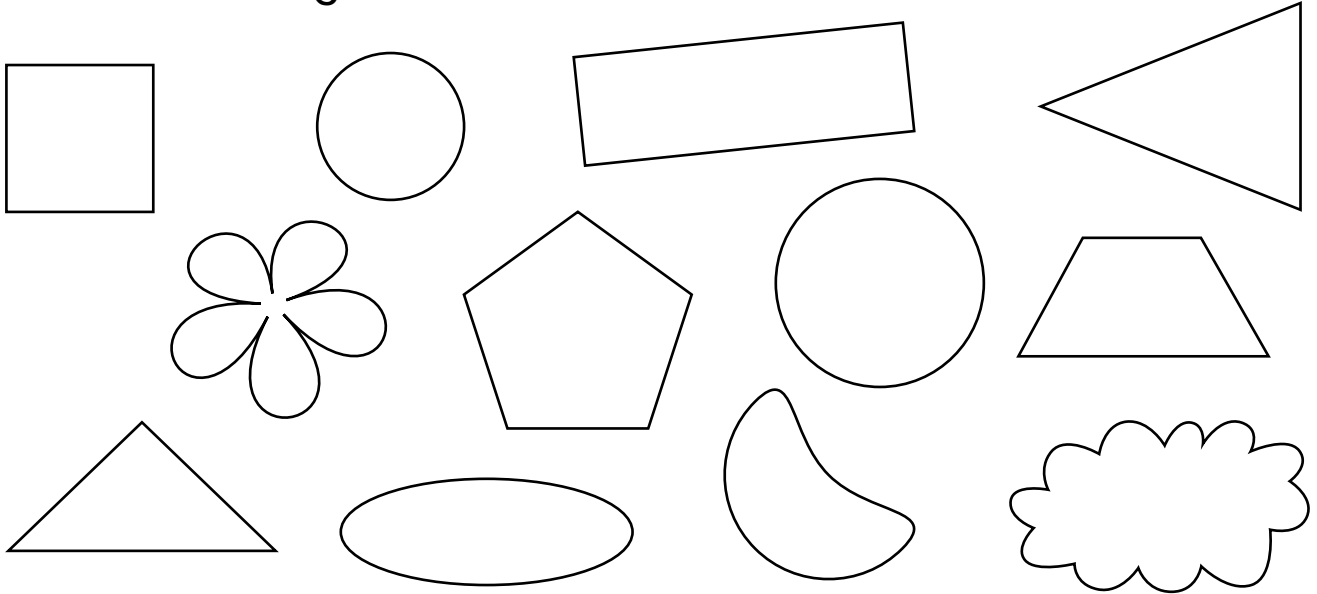


2 Trace the straight lines red. Trace the curved lines blue.



Straight and curved lines

- 3** Color the shapes with straight sides pink, curved sides green.



- 4** Draw a shape

with straight lines.

with curved lines.

- 5** Trace.

curved

straight



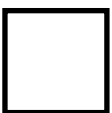
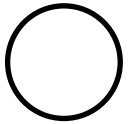


6 Complete. ✓ = yes X = no

rectangle

triangle

circle

square

shape	name	straight sides? 	curved sides? 
	<i>square</i>	✓	X
			
			
			

7 Draw a shape with 3 straight sides and 1 curved side.

Doc's shapes

Problem solving

1 Read.

Doc has a box with lots of circles and lots of squares.
He picks out 3 shapes and puts them down in a line.
What 3 shapes could they be?



2 Underline the question.

3 Circle the shapes and numbers.

4 Make patterns. Draw the pictures.

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5 I found _____ different ways to solve the problem.

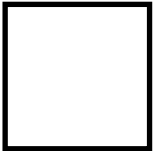
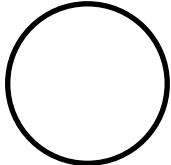

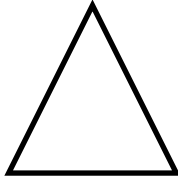
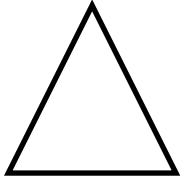
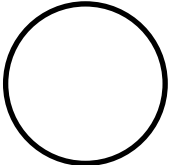
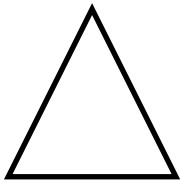
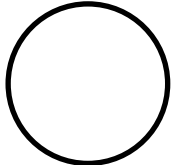

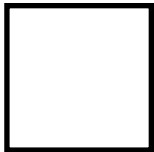

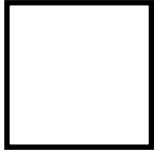
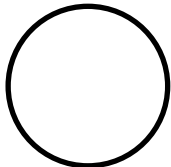
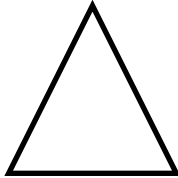

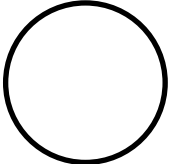

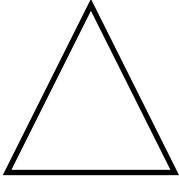
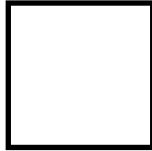
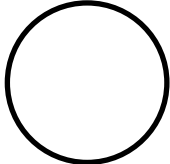
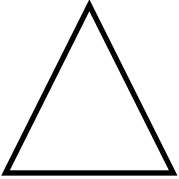
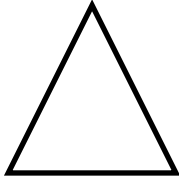
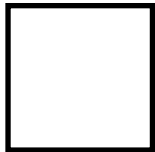
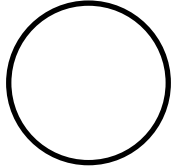

Spin a shape

Game

You will need a spinner , a paperclip , a pencil ,
2 colored crayons  (one for each player),
and a partner .

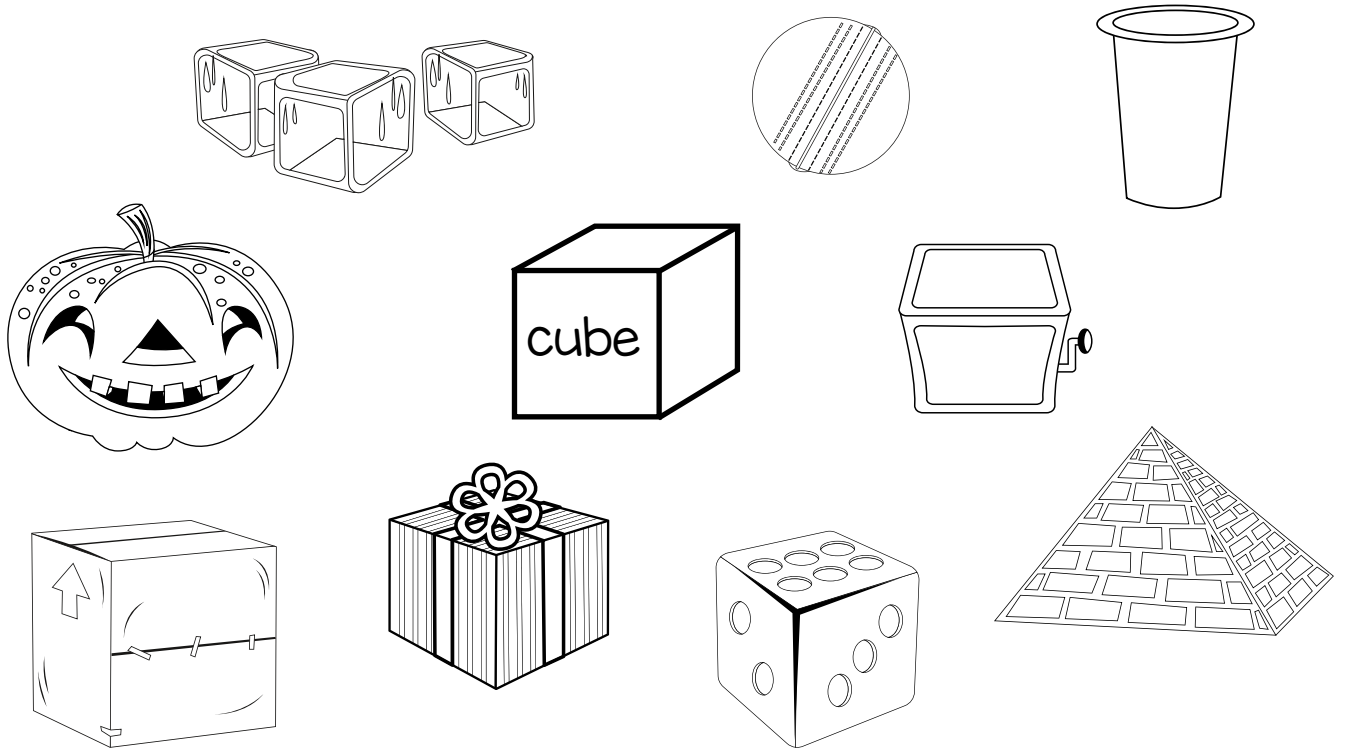
HOW TO PLAY

- 1 Make the spinner from a board circle, paperclip, and pencil. Write the numbers 3, 4, 0, 4 on the spinner.
- 2 Take turns. Spin a number and color a shape that has the matching number of sides. *0 = circle.
- 3 The first person to color 5 in a row wins the game.

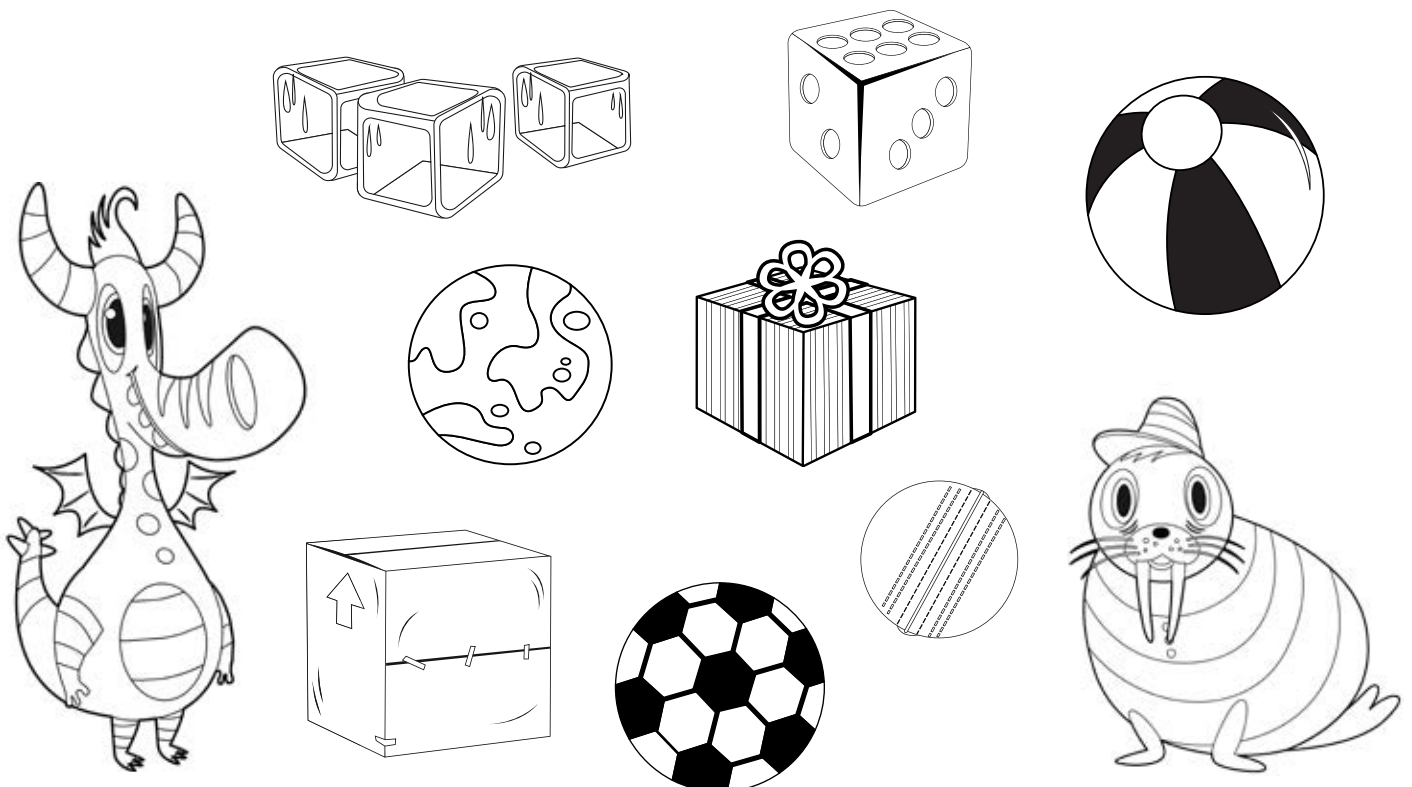
				
				
				
				
				

Cubes and spheres

1 Which pictures are cubes? Match.



2 Join Dizzy to the spheres and Waldo to the cubes.

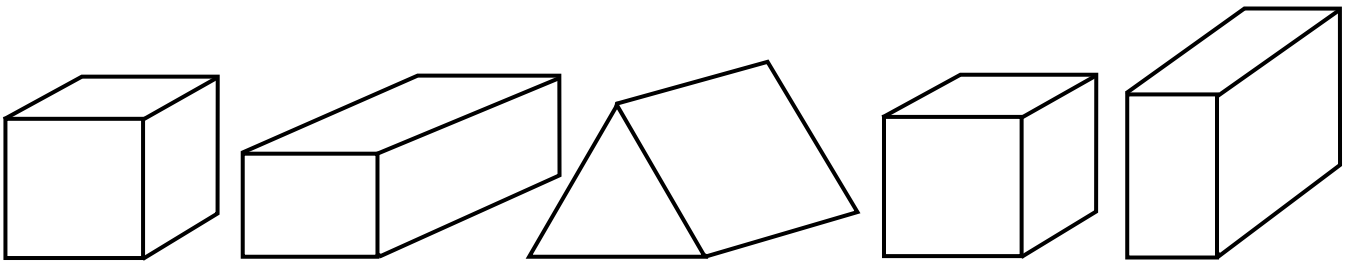


3 Trace and write.

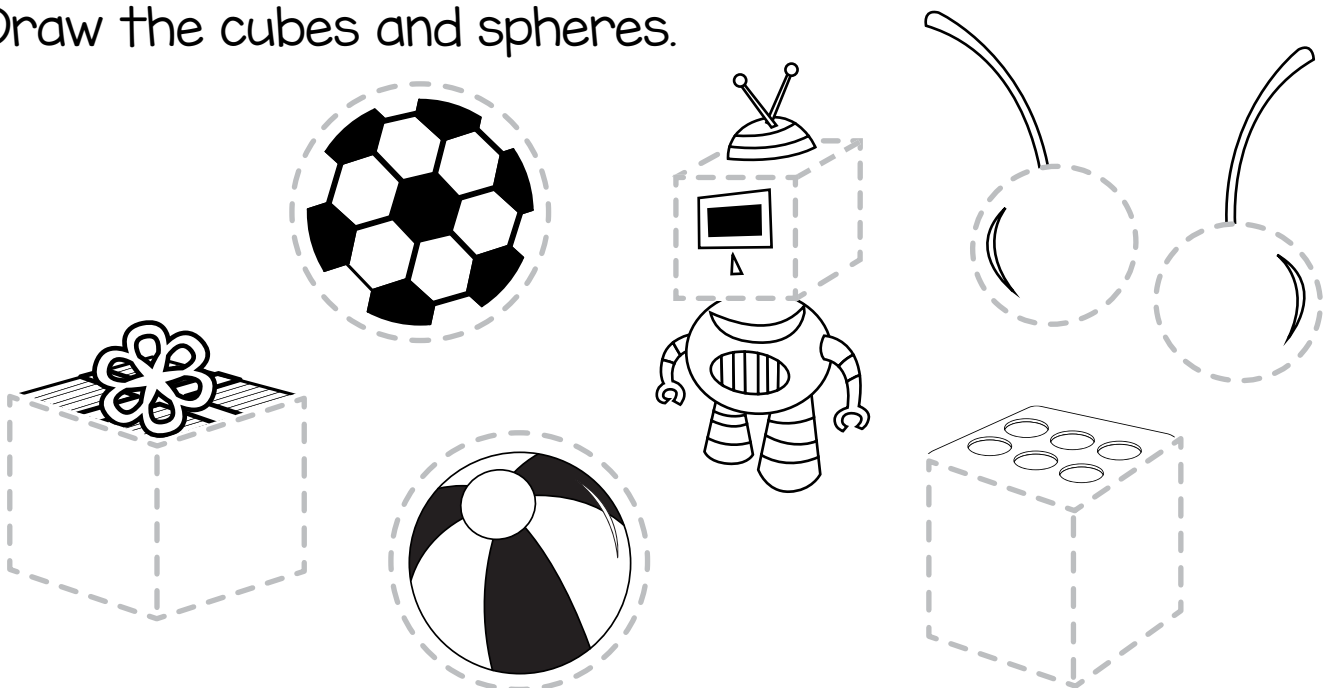
cube

sphere

4 Color the cubes.

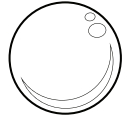
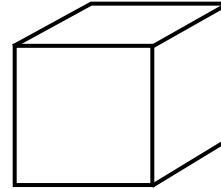
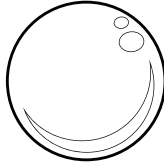
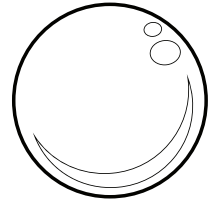
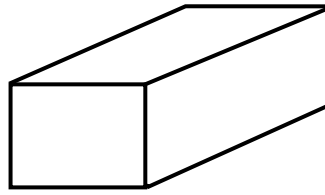
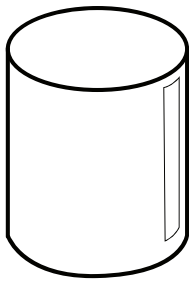
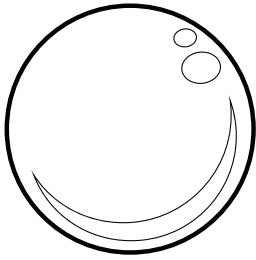


5 Draw the cubes and spheres.

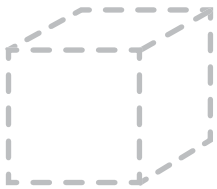


Cubes and spheres

6 Color the spheres.

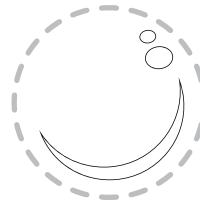


7 Trace and color. Write the shape name.



This is a

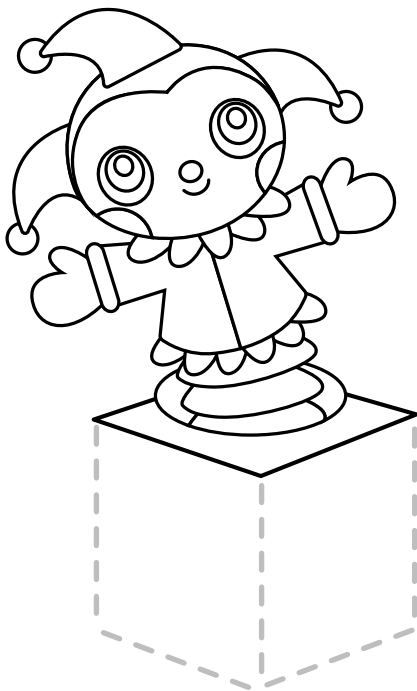
c



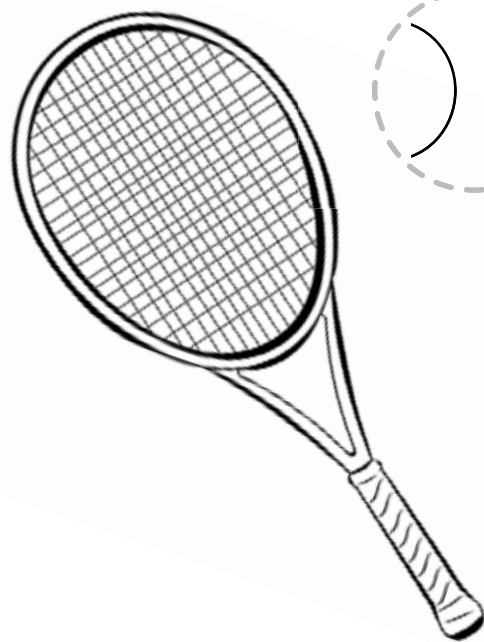
This is a

s

8 Draw

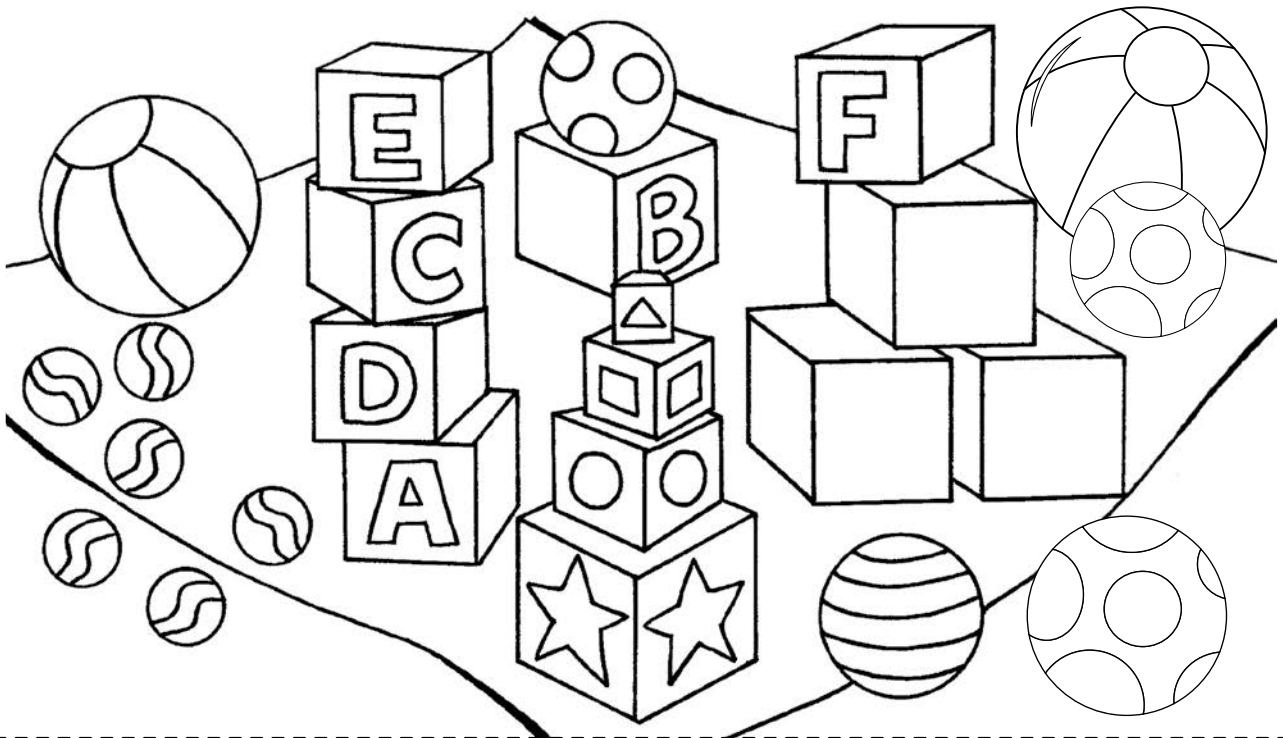


the cube

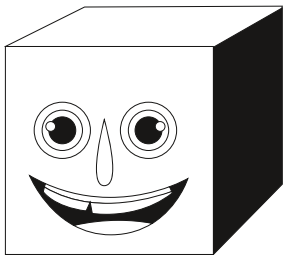
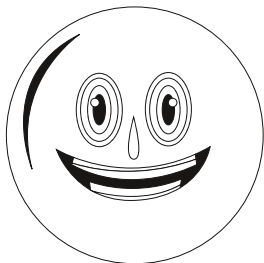


the sphere

9 Color  = blue. Color  = red.



10 Match.



cube

sphere

round

8 corners

square sides

no corners

11 Name objects that are shaped like a sphere.

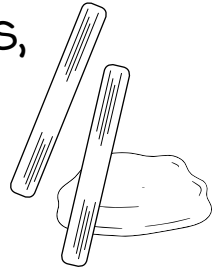
12 Name objects that are shaped like a cube.

Make a cube

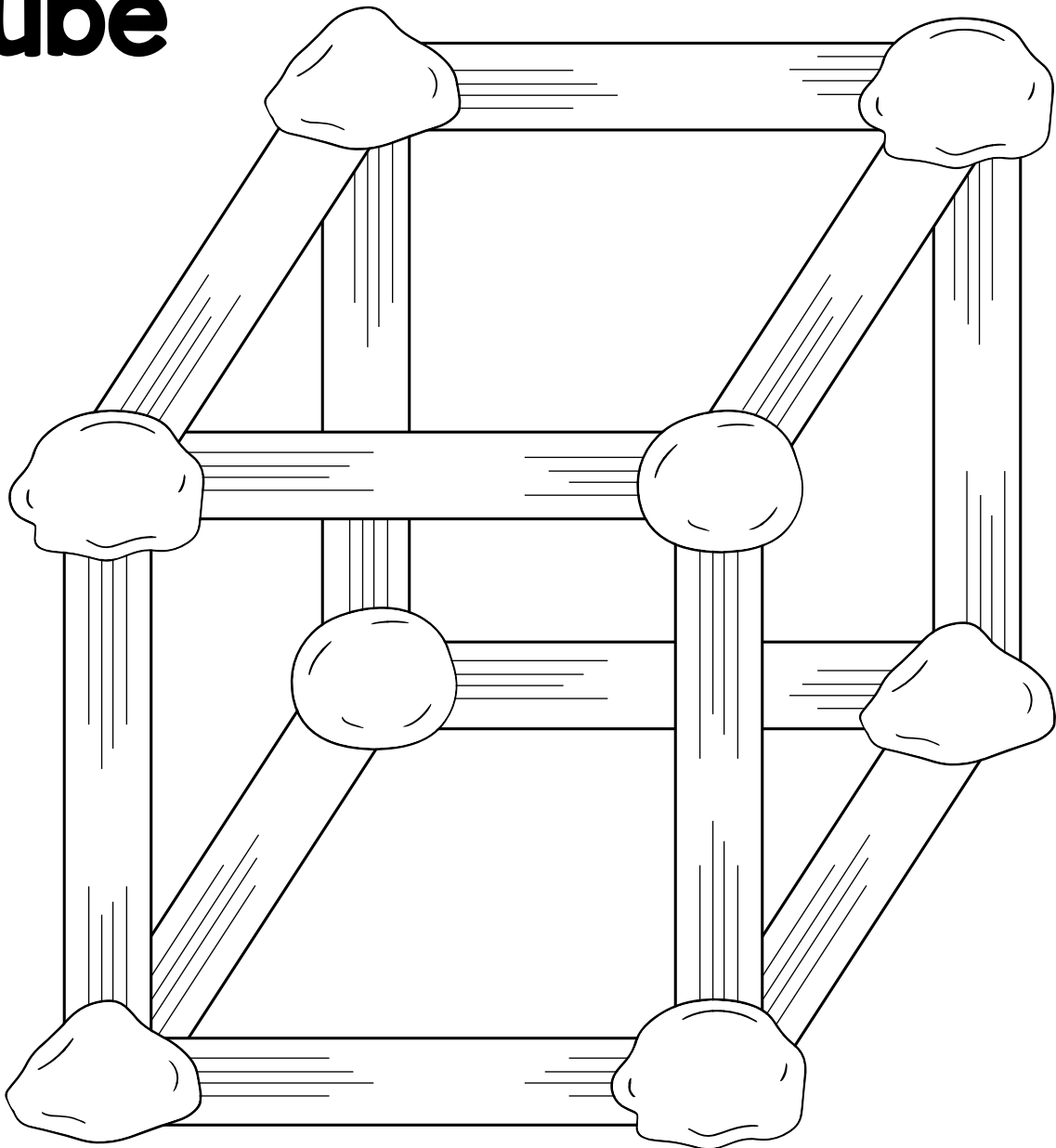
Practical activity

You will need 12 pop sticks or toothpicks,
and 8 small balls of playdough.

Look at the picture. Make it!



cube




How many sides?

How many corners?

Roll it!

Game

You will need playdough , a chair, a piece of wood or board, and a partner 😊.

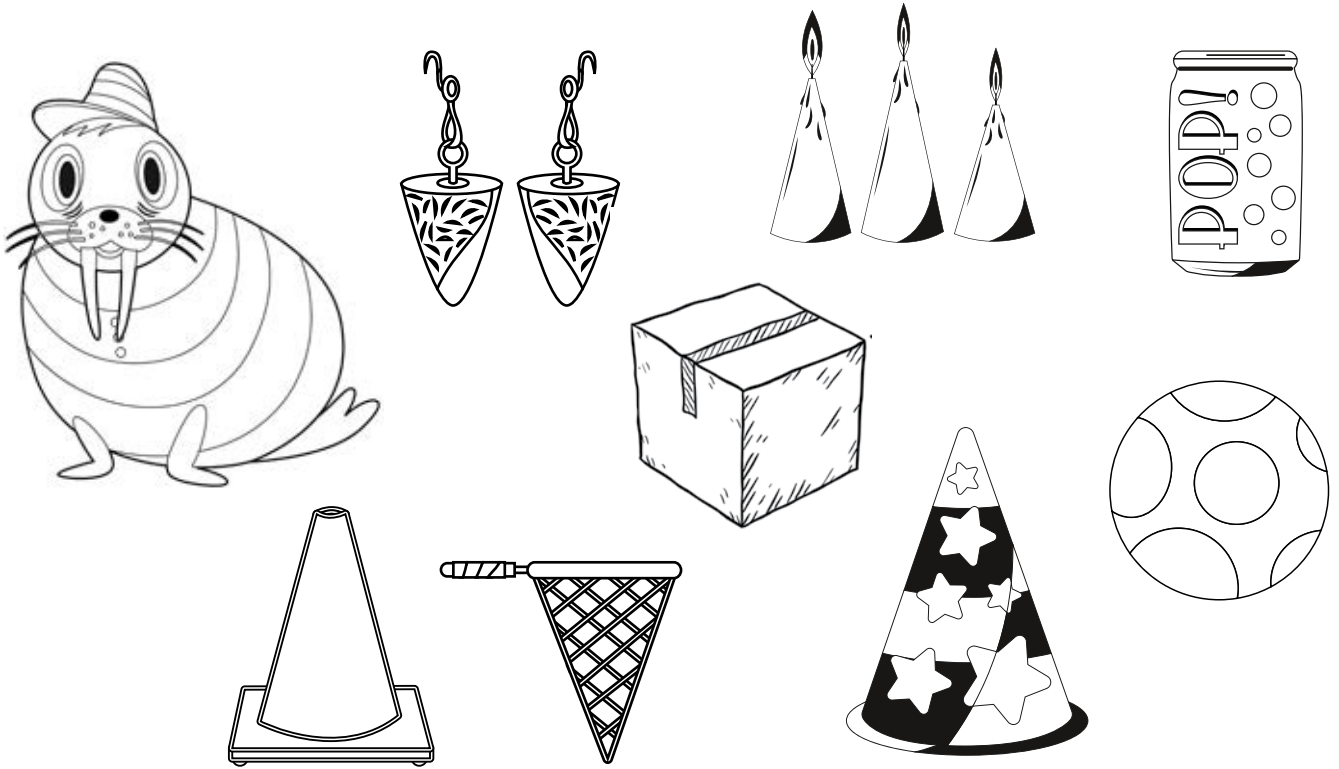
HOW TO PLAY

- 1 Roll the playdough into 5 different sized spheres.
- 2 Balance the wood against the chair to make a ramp.
- 3 Start by putting the smallest sphere at the top of the ramp. Your partner puts their smallest sphere there too.
- 4 On the count of 3, let go and watch your spheres roll down the ramp. Whose sphere rolled the furthest?
- 5 Record your results and repeat 4 more times.
Put a tick under the winner's name.

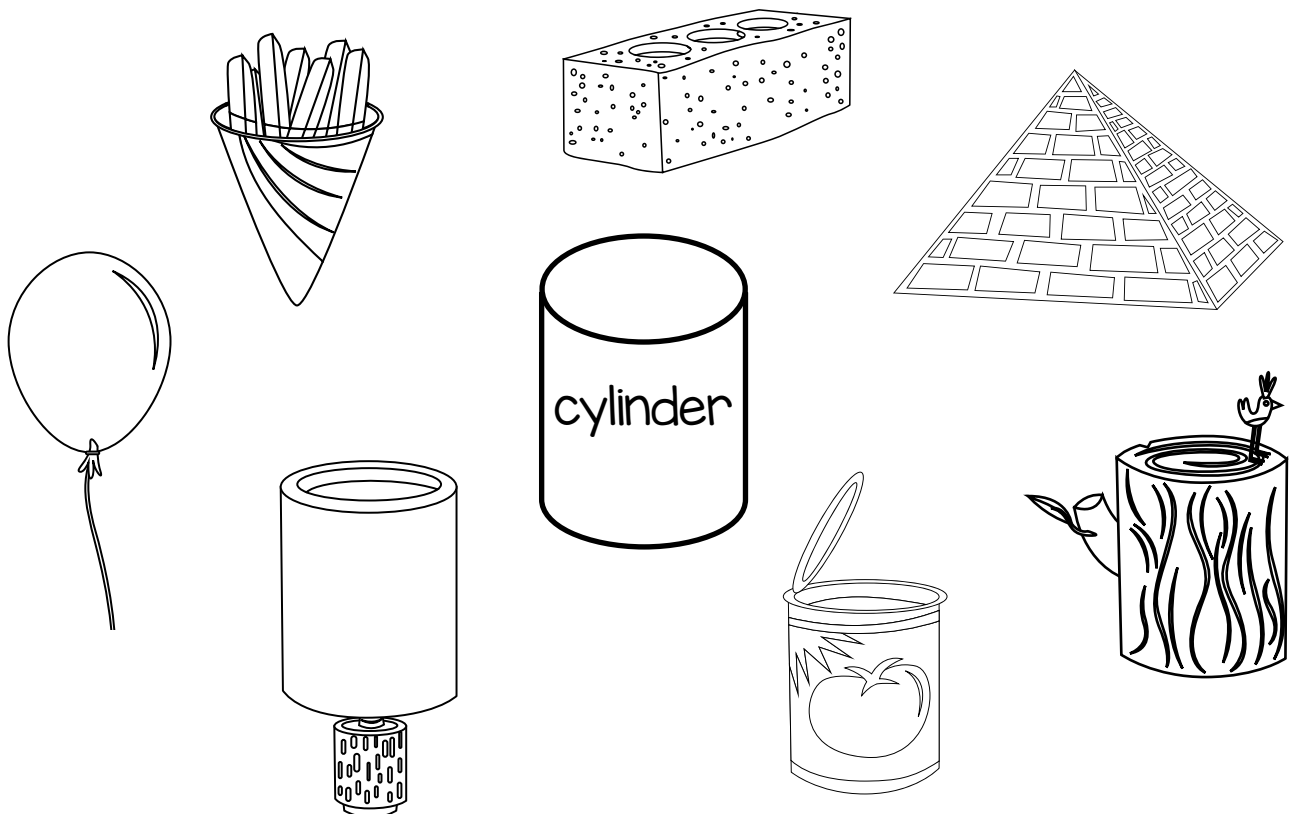
Roll	Name:	Name:
1		
2		
3		
4		
5		

Cones and cylinders

1 Join Waldo to the cones.



2 Which pictures are cylinders? Match.

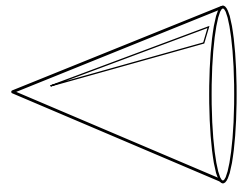
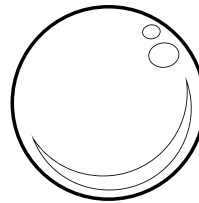
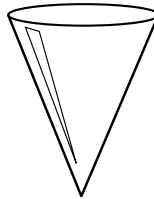
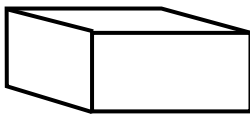
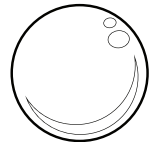
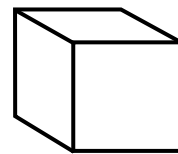
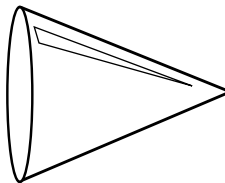
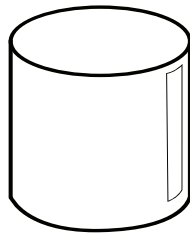
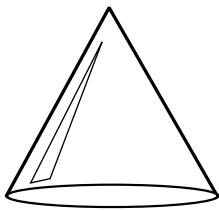


3 Trace and write.

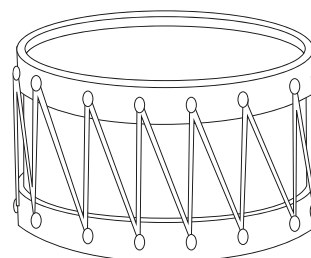
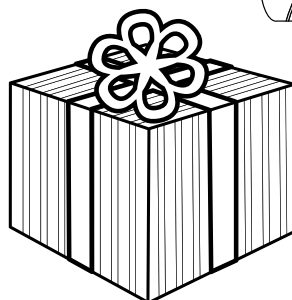
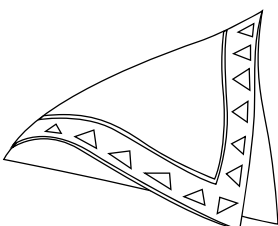
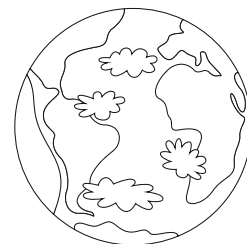
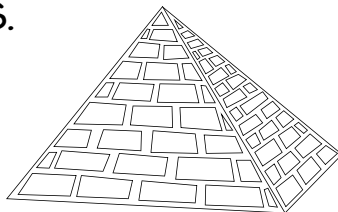
cone

cylinder

4 Color the cones blue.

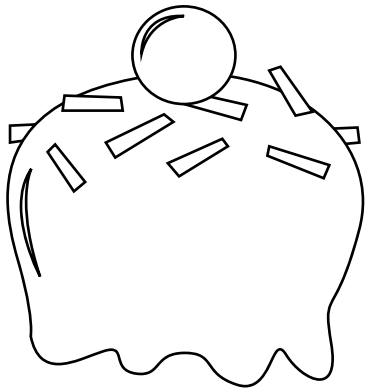


5 Color the cylinders.



Cones and cylinders

6 Draw



an ice cream cone.

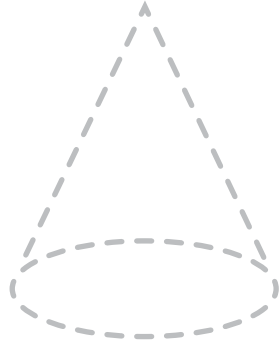


2 more cans.

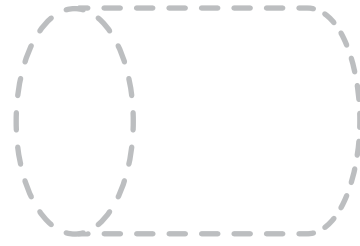
7 Color red. Color green.



8 Trace.



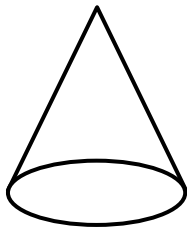
This is a



This is a



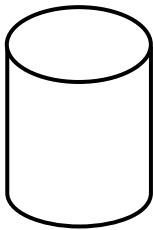
9 Match.



cylinder

pointy end

2 flat round faces



cone

1 round face

10 Name objects that are shaped like a cylinder.

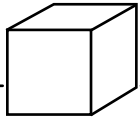
11 Name objects that are shaped like a cone.

Find it!

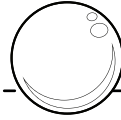
Practical activity

1 Have a look around your environment.
Can you find any 3D objects?

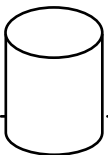
2 Draw them in the correct boxes.



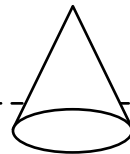
cube



sphere



cylinder



cone

Ruby's shapes

Problem solving

1 Read.

Ruby has lots of cones and lots of spheres.

She picks out 3 objects and puts them down in a line.

What 3 objects could they be?



2 Underline the question.





3 Circle the objects and numbers.

4 Make patterns. Draw the pictures.

5 I found _____ different ways to solve the problem.

In the bag

Game

You will need various 3D objects that are shaped like a cube , a sphere , a cylinder , and a cone . You will also need a bag and a partner 😊.

HOW TO PLAY

- 1 Put the 3D objects into the bag so that they cannot be seen.
- 2 Close your eyes, put your hand in the bag and feel for an object.
- 3 Carefully describe how the object feels to your partner. Can you guess what it is?
- 4 Swap over and play again.

WORD BANK

cone

flat

straight

cube

corners

sides

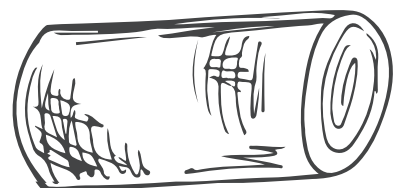
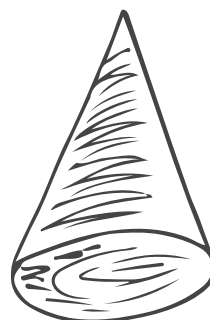
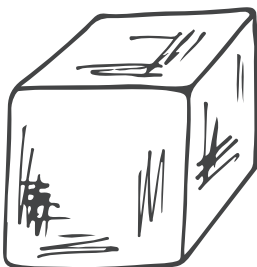
pointy

curved

cylinder

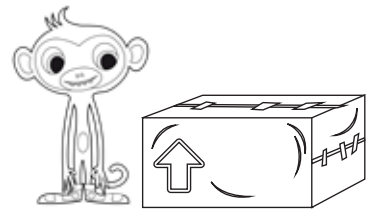
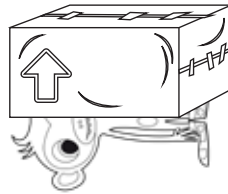
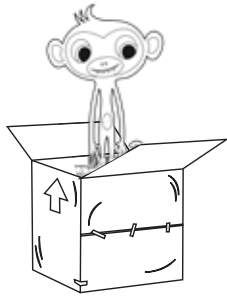
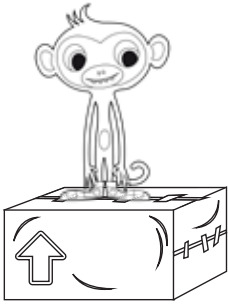
round

cone



Position

1 Match.



inside

underneath

next to

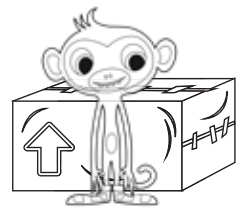
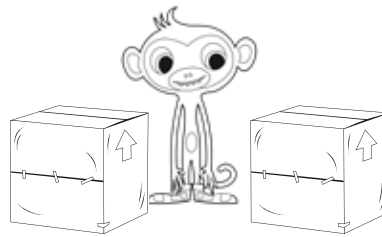
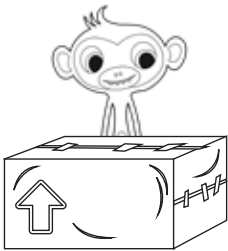
on top

above

in front

behind

between



2 Draw



a circle next to Dizzy.



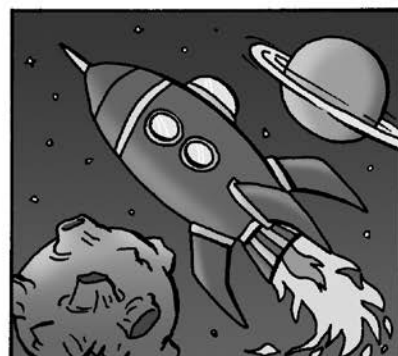
a square above Doc.

3 Match each word to a picture.



on top

next to



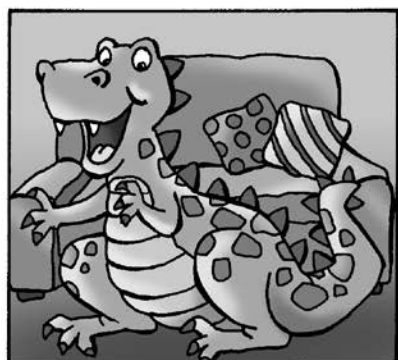
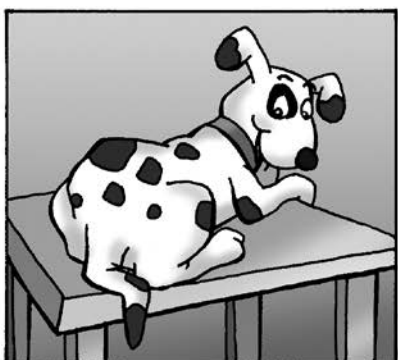
between

under



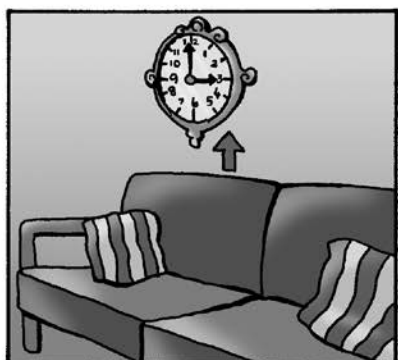
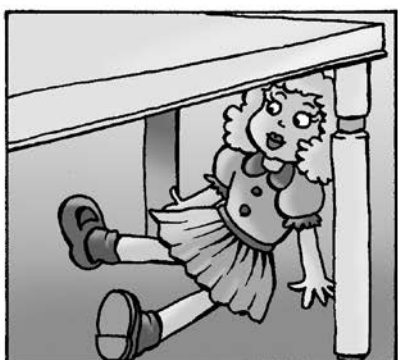
above

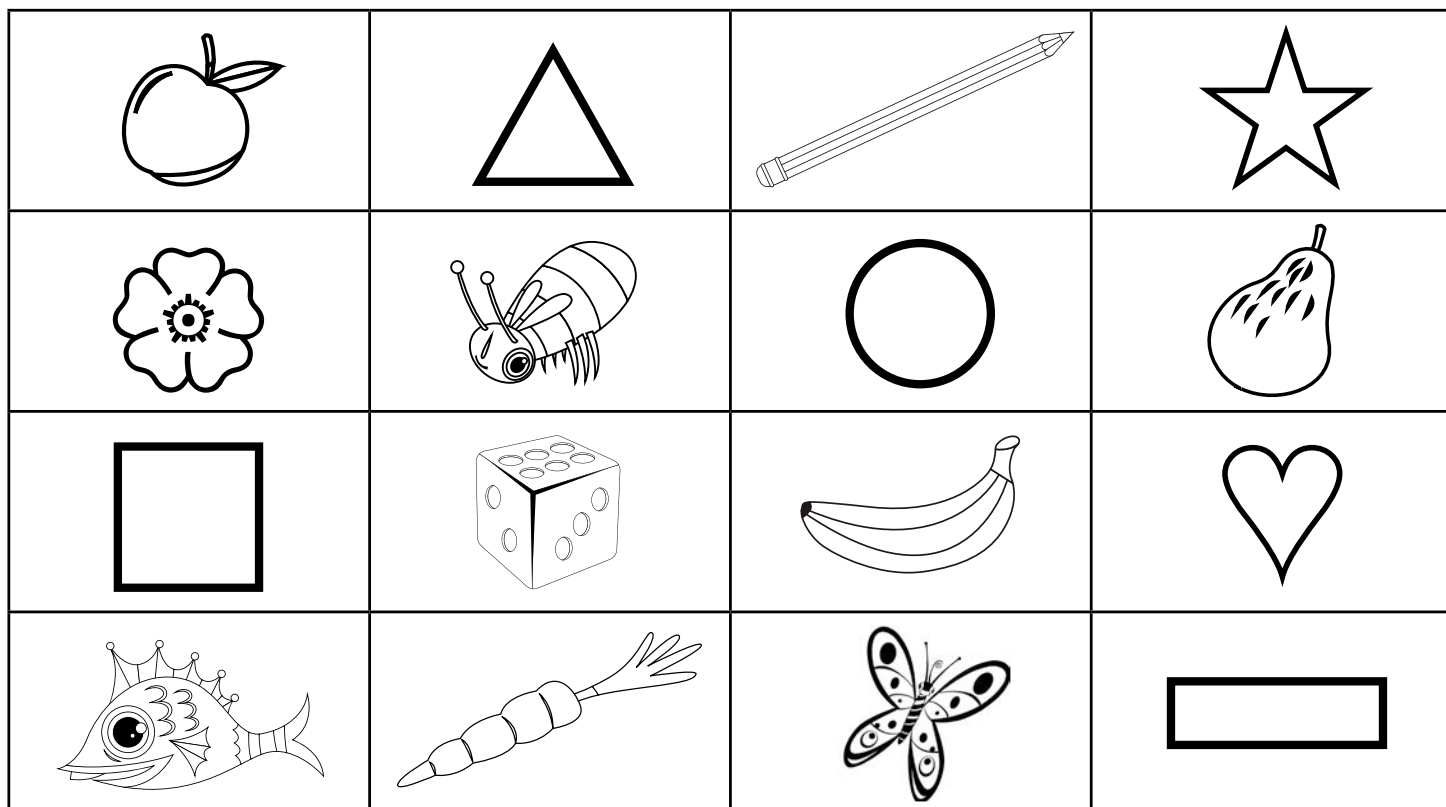
behind



in front

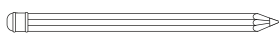
inside



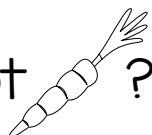


4 Color the answer. Which item is:

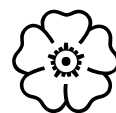
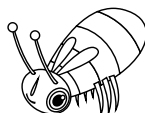
above the circle ○ ?



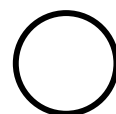
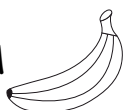
above the carrot ?



below the apple ?

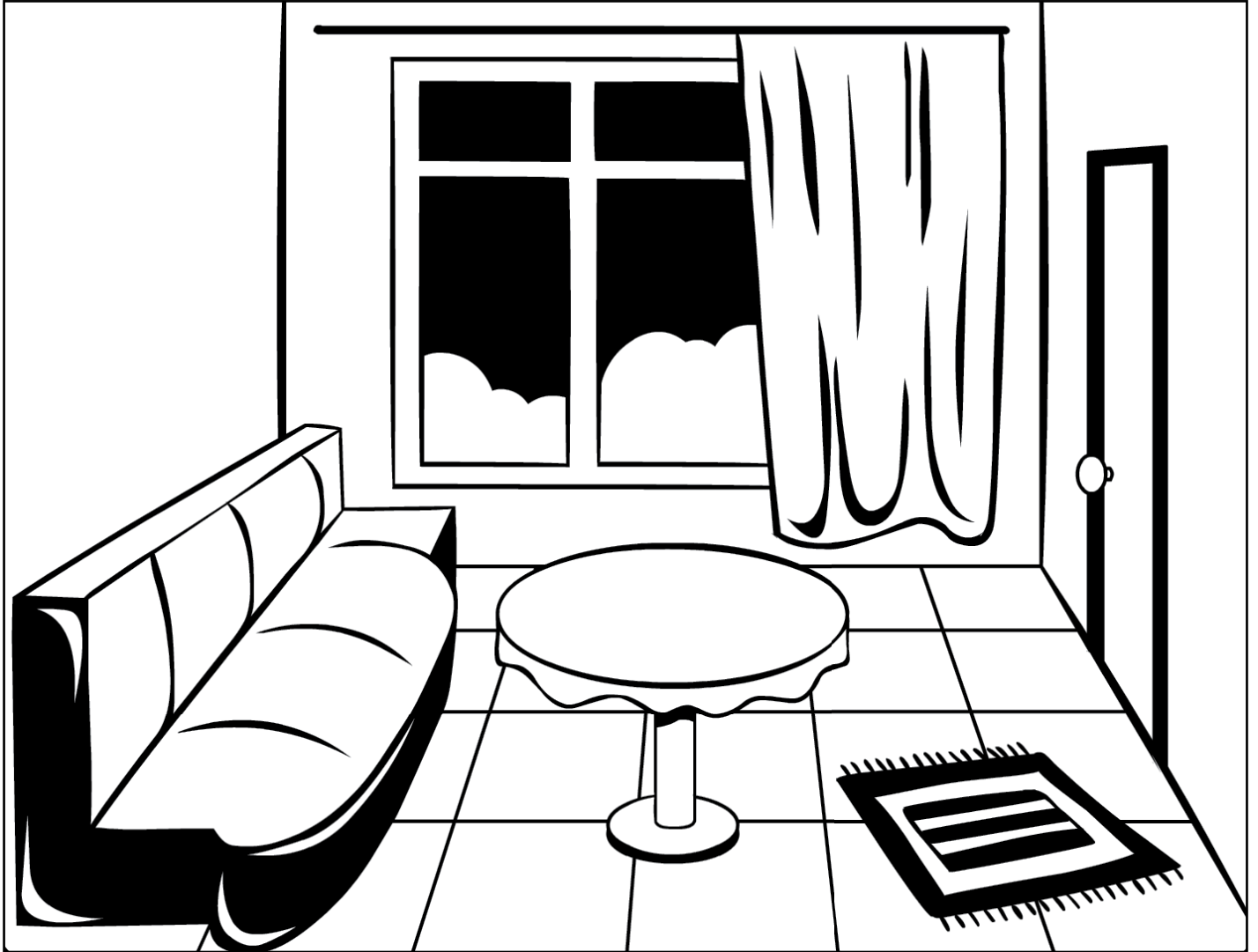


below the banana ?



between the triangle △ and the star ☆ ?






5 Draw

a fishbowl  on the table.

a cat  in front of the sofa.

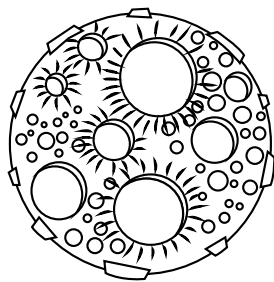
a ball  under the table.

a picture  above the sofa.

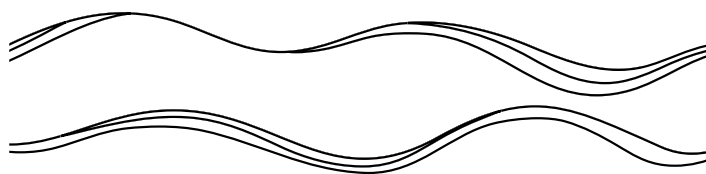
a balloon  between the table and the door.

a book  on the rug.

6 Draw



a star below the moon.



a bird above the water.

7 Color



the flower closest to Ruby red.

the flower furthest away blue.

the smallest flower yellow.

the tallest flower green.

the biggest flower purple.


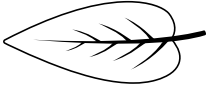




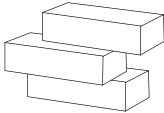



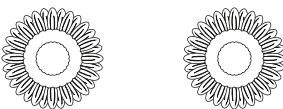
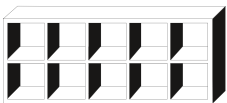







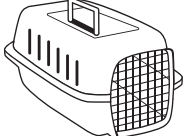

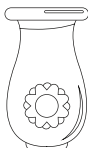
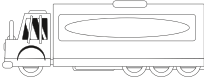
X marks the spot!

Game

You will need a die  and a partner 😊.

HOW TO PLAY

- 1 Take turns. Roll a die and find the row that matches your number.
- 2 Start from the first box. Read the word and draw an X in the correct place.
- 3 The winner is the first person to finish 4 rows.

	on 	under 	between 
	next to 	on top 	inside 
	behind 	between 	on top 
	on 	next to 	under 
	between 	below 	inside 
	next to 	on top 	below 