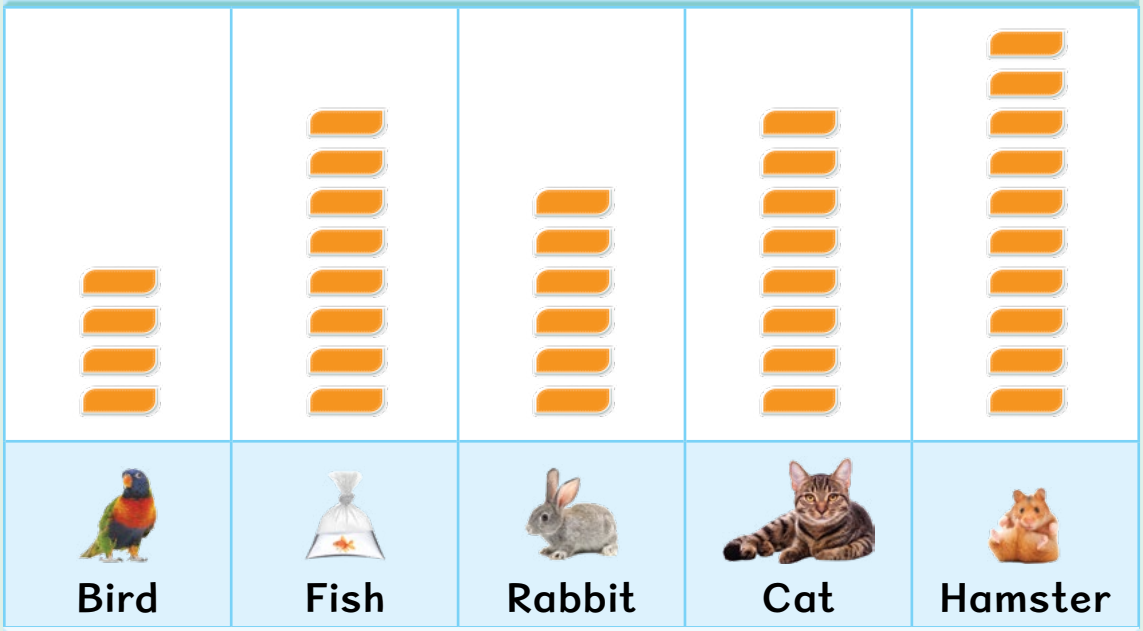
Making Picture Graphs

Recall

Hairul makes a picture graph of the pets in Bobby's shop.

Pets in Bobby's Shop



Each ▬ stands for 1 pet.

(a) There are ☐ fish.

(b) There are ☐ **fewer** birds than rabbits.

(c) There are ☐ **more** hamsters than cats.

(d) The shop has the **same** number of fish and ☐.

(e) The number of ☐ is the **most**.

(f) The number of ☐ is the **fewest**.

Go to PB 2B Practice 1

Let's Learn

1 The picture graph shows the number of storybooks Gopal, Hazel, Siti and Jayden read from January to March.

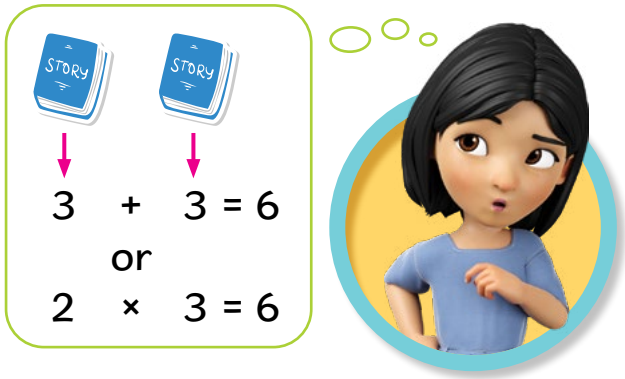
Number of Storybooks Read from January to March

Gopal	Hazel	Siti	Jayden
4	1	2	3

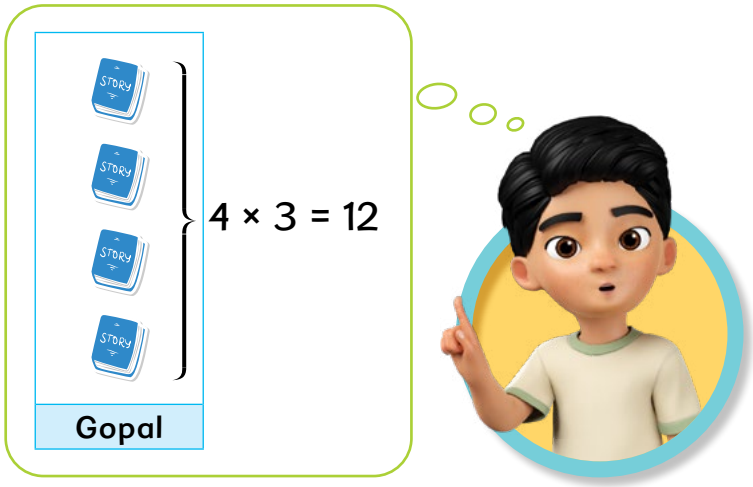
Each stands for 3 storybooks.

(a) Hazel read the **fewest** number of storybooks.
She read **3** storybooks.

(b) Siti read **6** storybooks.

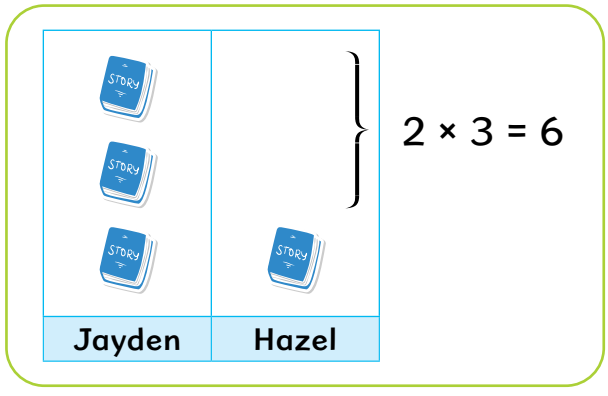


(c) Gopal read the **greatest** number of storybooks.
He read **12** storybooks.



(d) How many **more** books did Jayden read **than** Hazel?

I read 9 storybooks.
Hazel read 3 storybooks.
9 − 3 = 6



Jayden read **6** more storybooks than Hazel.

2 The picture graph shows the number of stickers five children collected.

Number of Stickers	
Ahmad	★★★★
Bala	★★★½
Cheng Li	★★★★★
David	½
Elaine	★★★★

Each ★ stands for 2 stickers.

Since ★ stands for 2 stickers
So ½ stands for 1 sticker

(a) David collected **1** sticker.

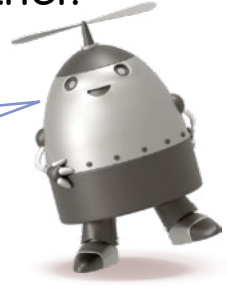
(b) Bala has **7** stickers.

(c) Cheng Li has **9 more** stickers **than** David.

Cheng Li has 10 stickers.
David has 1 sticker.
10 − 1 = 9

(d) Elaine has **as many** stickers **as** Ahmad.

(e) The five children have **34** stickers altogether.



How is the total number of stickers found?

Let's Practise

The picture graph shows the sports lessons children take part on a Saturday at a sports hub.

Sports Lessons of Children	
Soccer	
Basketball	
Badminton	
Table tennis	
Floorball	

Each  stands for 4 children.

(a) ☐ children take part in soccer lessons.

(b) ☐ children take part in table tennis lessons.

(c) The same number of children take part in floorball and ☐.

(d) ☐ fewer children take part in soccer than table tennis.

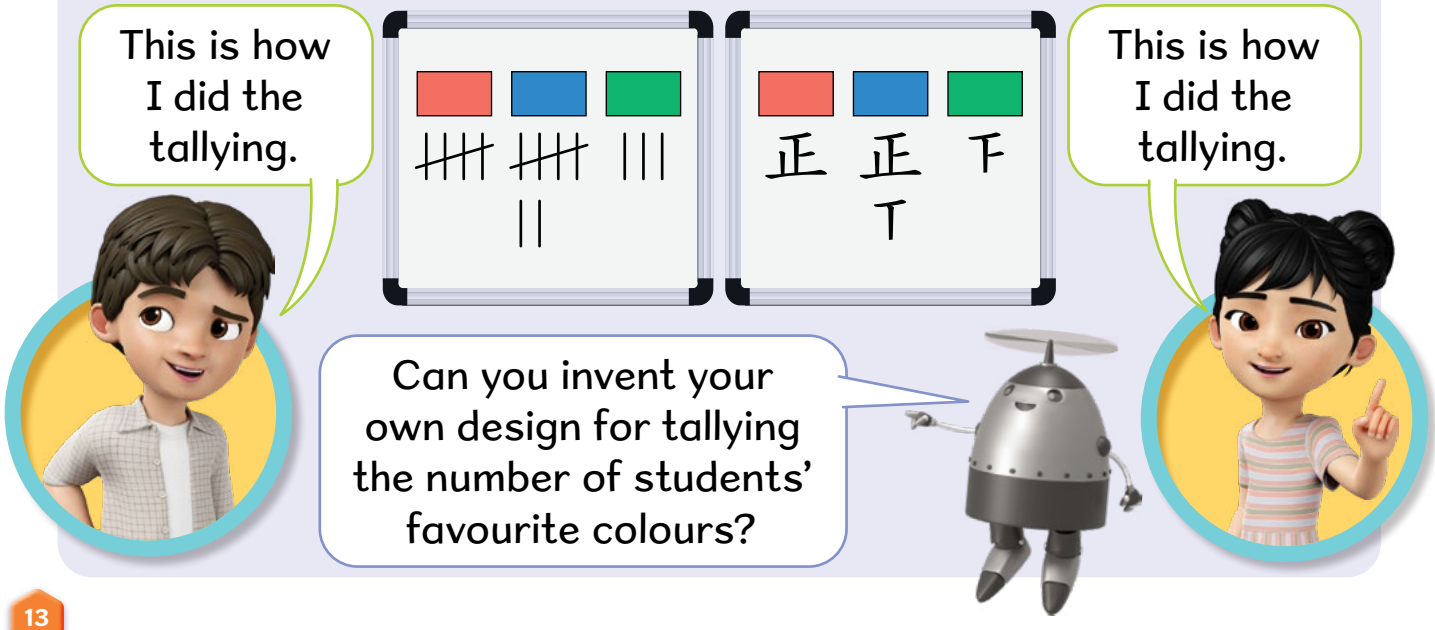
(e) Each child pays $10 to take part in a sports lesson. How much do the children who take part in soccer lessons pay altogether? ☐

Mathematics AROUND US

A teacher uses tallying to find the number of students for each way they get to school.

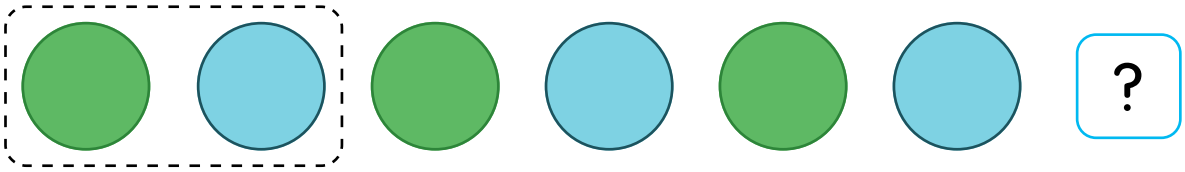
Thinking Aloud

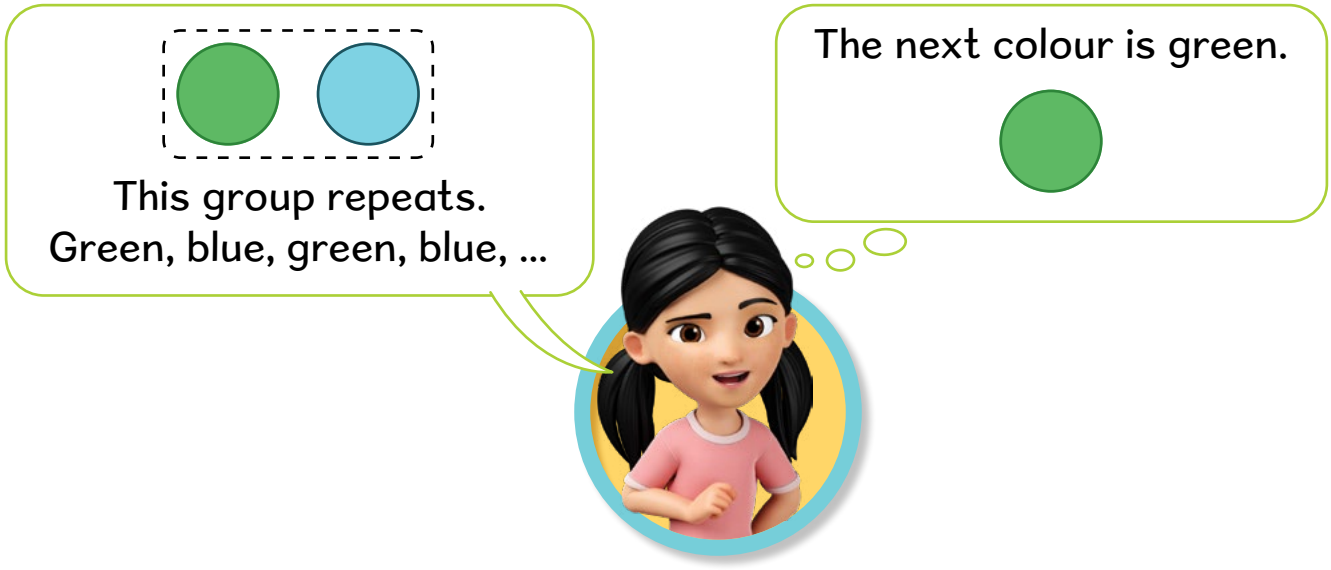
To find out the favourite colours of their classmates, Daniel and Cheryl made some tallies.



Let's Learn

1 We can make patterns with shapes in different **colours**.

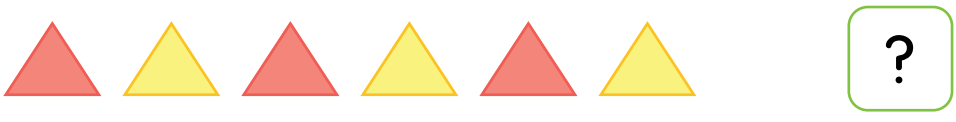




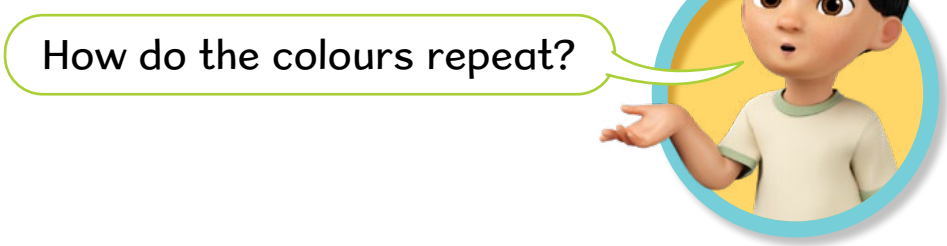
Let's Practise

Look at the patterns.
What is the colour of the next shape?

(a)



(b)

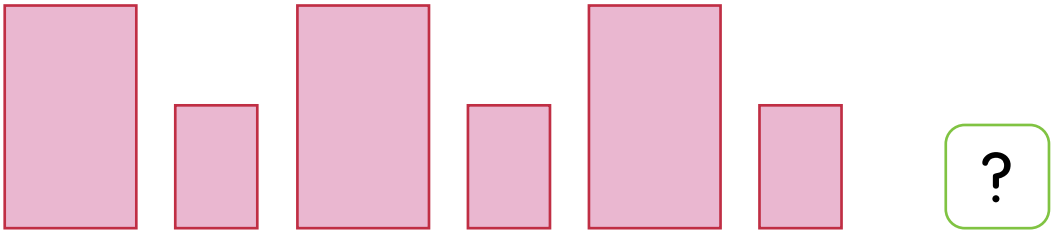


2 We can make patterns with shapes in different **sizes**.

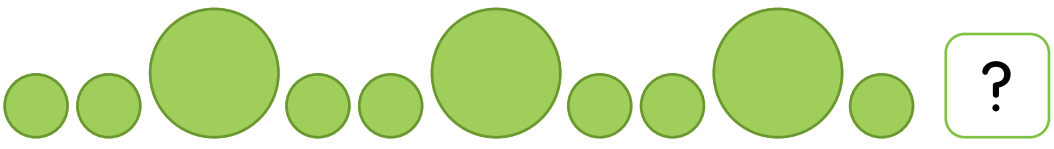
Let's Practise

Look at the patterns.
What is the size of the next shape?

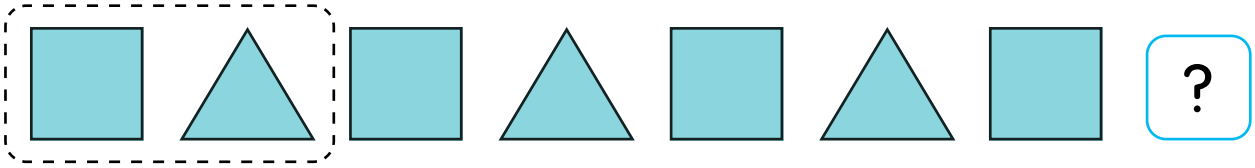
(a)

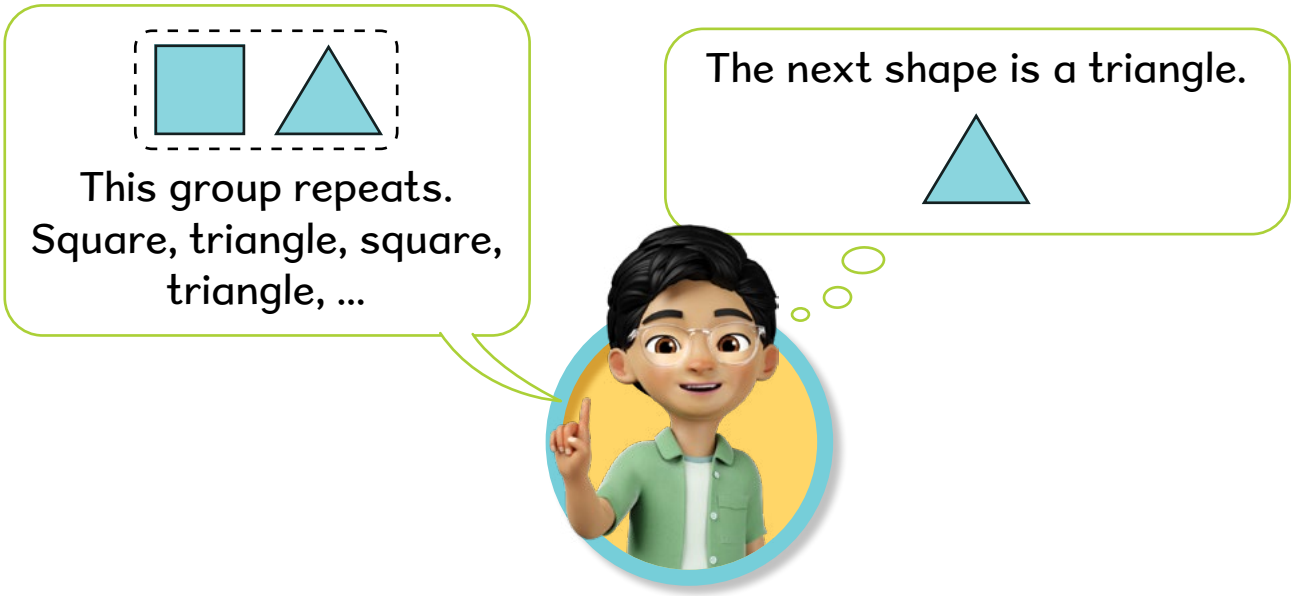


(b)



3 We can make patterns in different **shapes**.

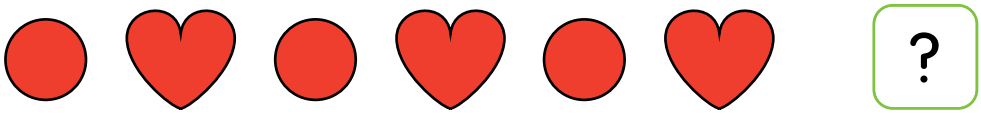




Let's Practise

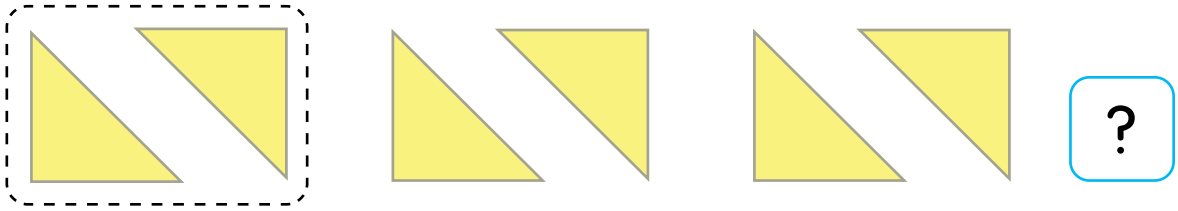
Look at the patterns.
What is the next shape?

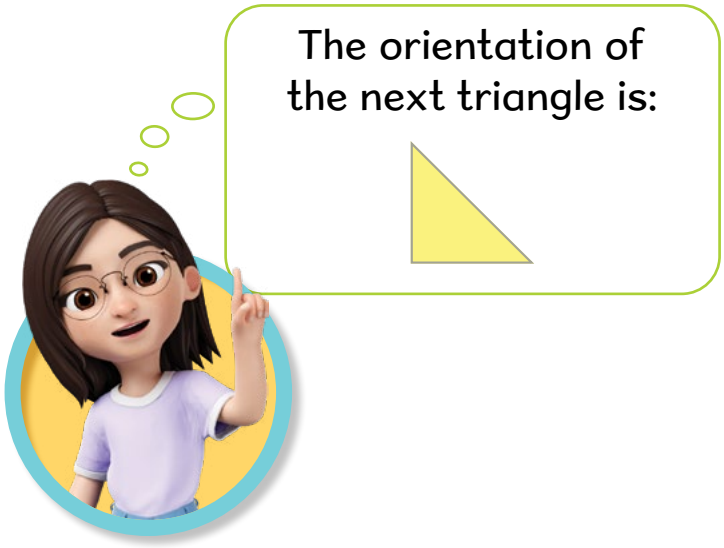
(a)



(b)

4 We can make patterns with shapes in different **orientations**.

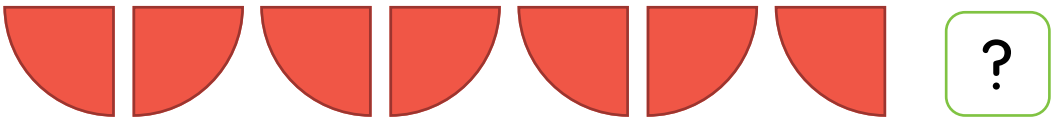




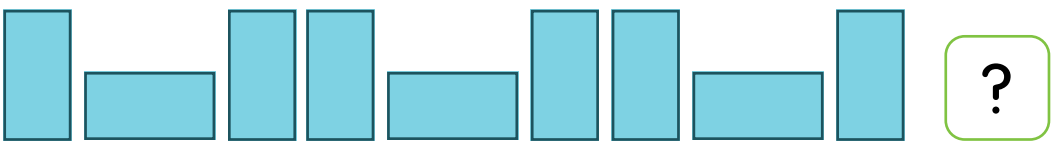
Let's Practise

Look at the patterns.
What is the orientation of the next shape?

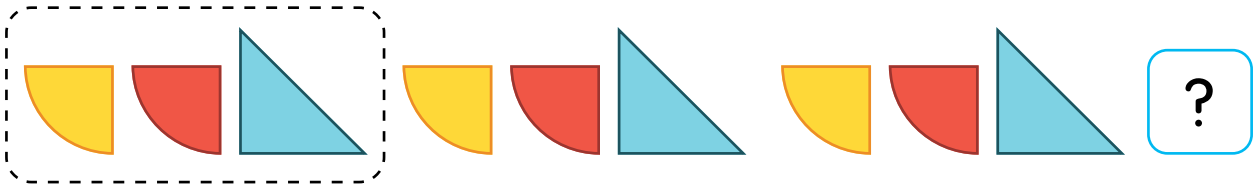
(a)

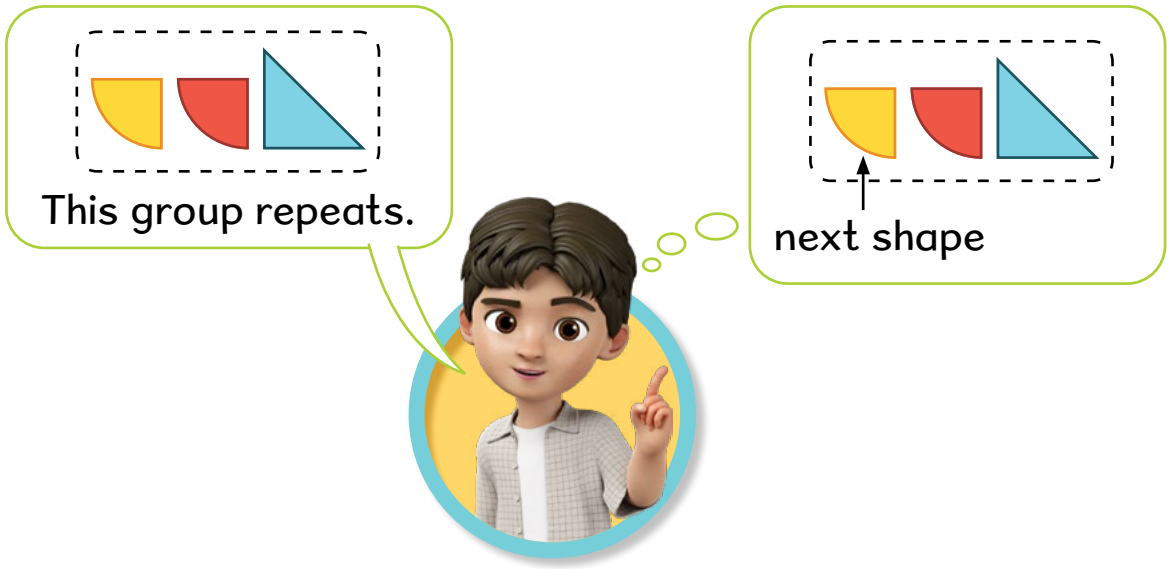


(b)

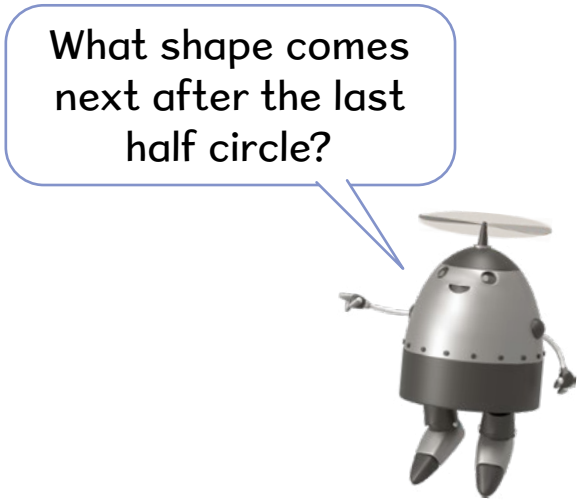


5 We can make patterns with different **shapes** and **colours**.





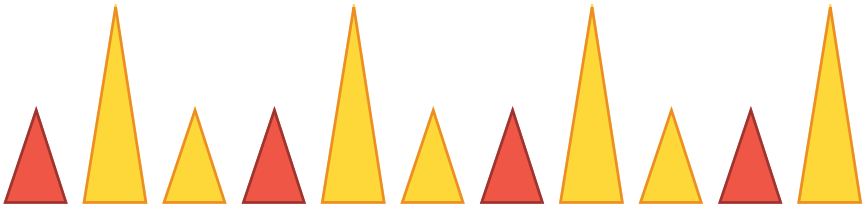
6 We can also make patterns with shapes in different **sizes** and **orientations**.



Let's Practise

Look at the patterns.
What is the next shape?

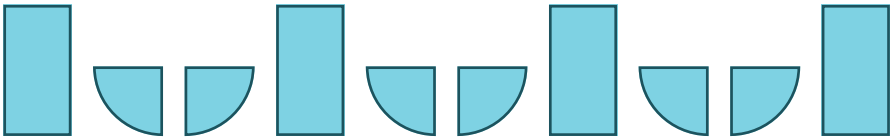
(a)



?

This pattern is made up of different sizes and colours.

(b)



?

This pattern is made up of different shapes and orientations.

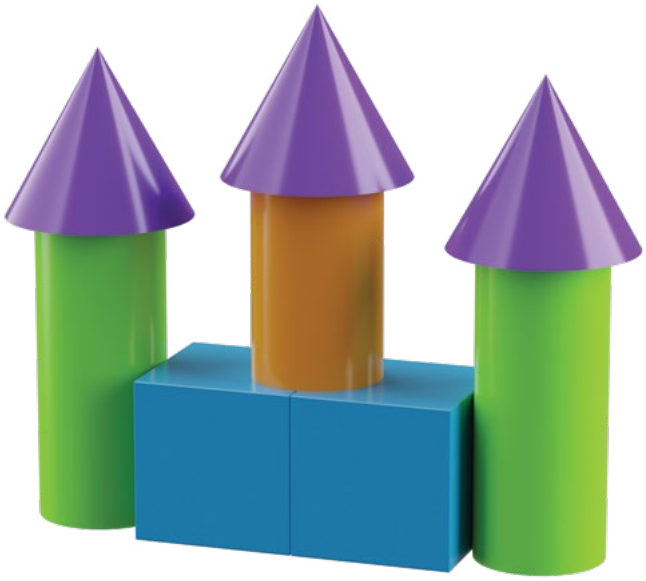
(c)

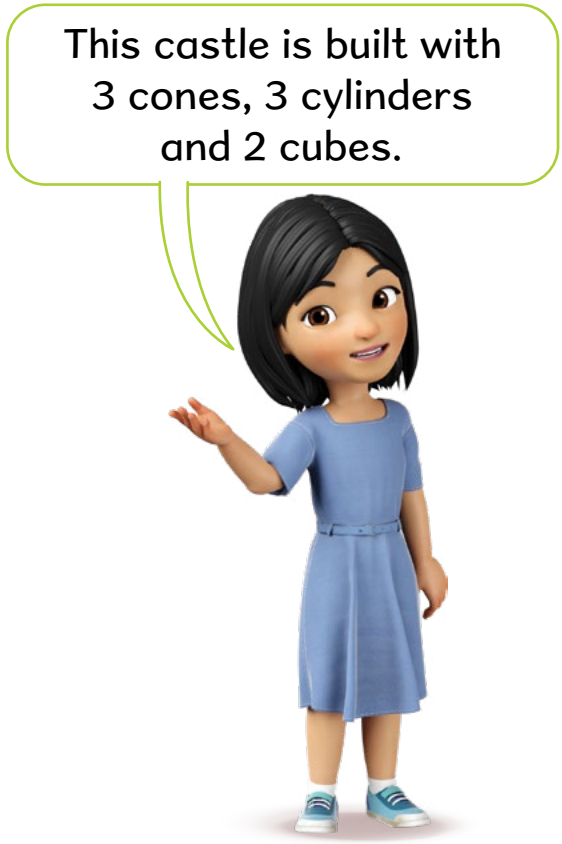
?

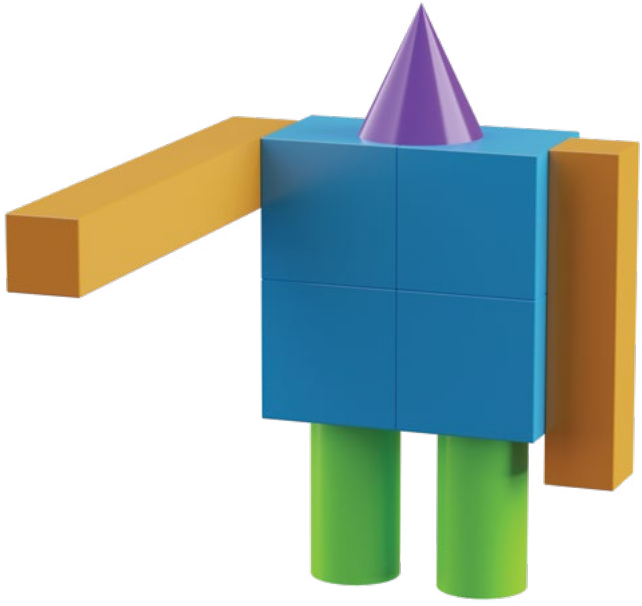
This pattern is made up of different colours and shapes.

Building Figures with 3-Dimensional Shapes

We can build 3D models from 3D shapes.







Hands-on Activity

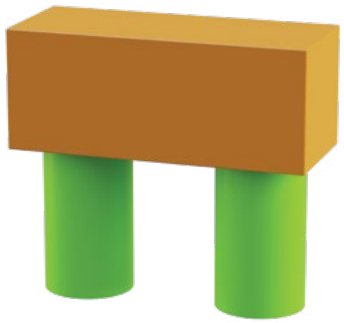
Make a 3D model with your 3D shapes.

What 3D shapes did you use to make your model?

Let's Practise

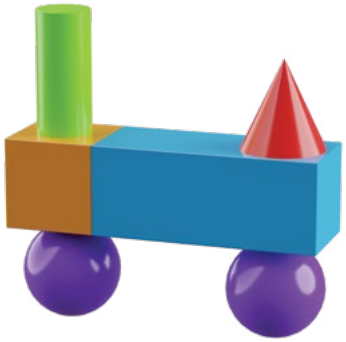
Write the number of 3D shapes used to make each model.

(a)



- ☐ cube
- ☐ cuboid
- ☐ cone
- ☐ cylinder
- ☐ sphere

(b)

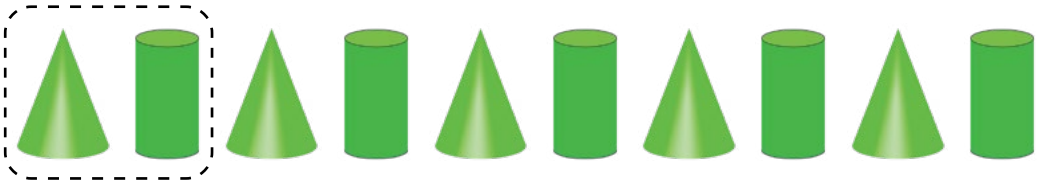


- ☐ cube
- ☐ cuboid
- ☐ cone
- ☐ cylinder
- ☐ sphere

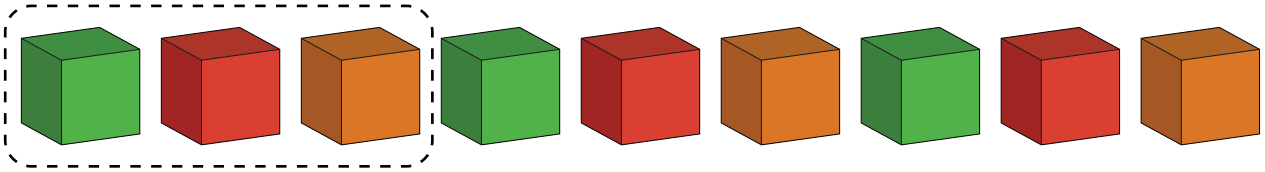
Making Patterns with 3-Dimensional Shapes

We can make patterns with different shapes.
We can find the next shape by looking at the group that repeats.

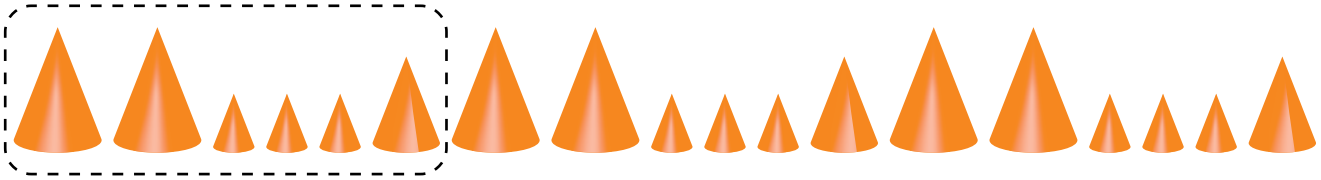
We can make patterns with different **shapes**.



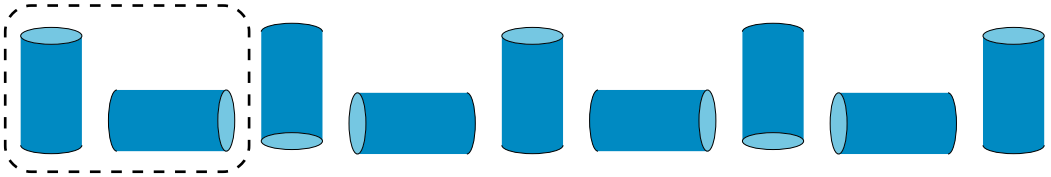
We can make patterns with solids in different **colours**.

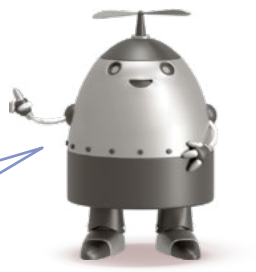


We can make patterns with solids in different **sizes**.



We can make patterns with solids in different **orientations**.





Can you make other patterns with these shapes?