

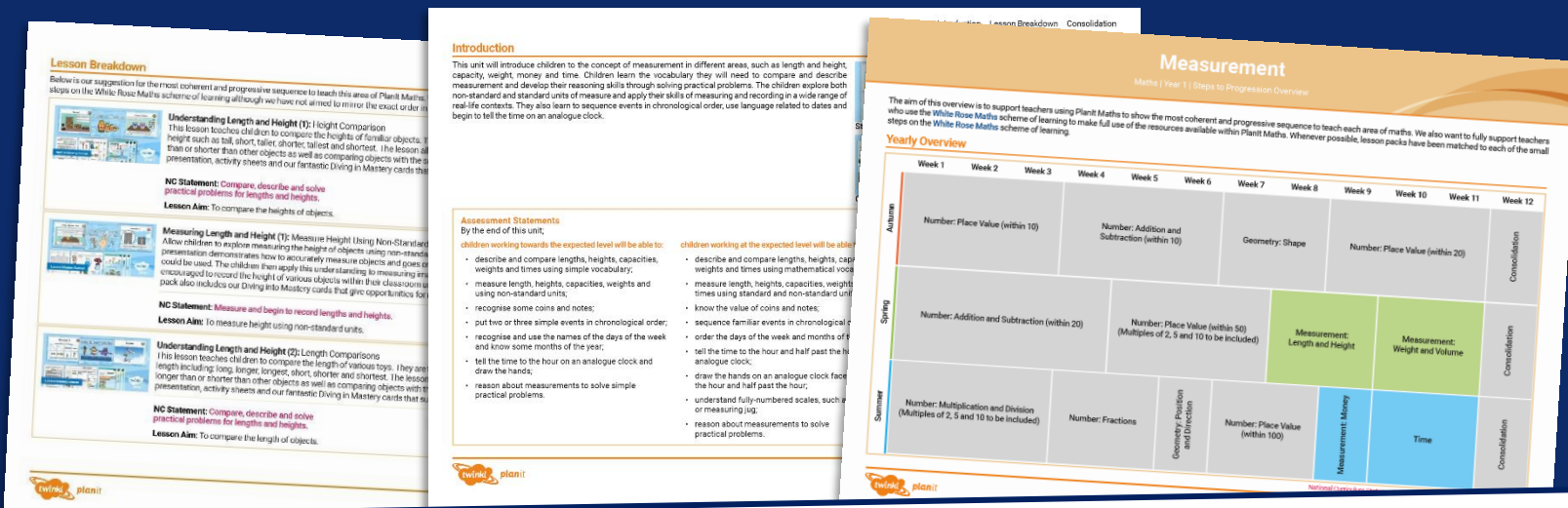


Maths

Properties of Shapes



Need a coherently planned sequence of lessons to complement this resource?



Lesson Breakdown

Below is our suggestion for the most coherent and progressive sequence to teach this area of Planit Maths steps on the White Rose Maths scheme of learning although we have not aimed to mirror the exact order in the scheme.

Understanding Length and Height (1): Height Comparison
This lesson teaches children to compare the heights of familiar objects, such as tall, short, taller, shorter, tallest and shortest. The lesson includes presentation, activity sheets and our fantastic Diving in Mastery cards that support children to understand the concepts of height.

NC Statement: Compare, describe and solve practical problems for lengths and heights.
Lesson Aim: To compare the heights of objects.

Measuring Length and Height (1): Measure Height Using Non-Standard Units
Allow children to explore measuring the height of objects using non-standard units. The lesson includes presentation, activity sheets and our fantastic Diving in Mastery cards that support children to understand the concepts of height.

NC Statement: Measure and begin to record lengths and heights.
Lesson Aim: To measure height using non-standard units.

Understanding Length and Height (2): Length Comparisons
This lesson teaches children to compare the length of various objects, such as long, longer, longest, short, shorter and shortest. The lesson includes presentation, activity sheets and our fantastic Diving in Mastery cards that support children to understand the concepts of length.

NC Statement: Compare, describe and solve practical problems for lengths and heights.
Lesson Aim: To compare the length of objects.

Introduction

This unit will introduce children to the concept of measurement in different areas, such as length and height, capacity, weight, money and time. Children learn the vocabulary they will need to compare and describe measurement and develop their reasoning skills through solving practical problems. The children explore both non-standard and standard units of measure and apply their skills of measuring and recording in a wide range of real-life contexts. They also learn to sequence events in chronological order, use language related to dates and begin to tell the time on an analogue clock.

Assessment Statements

By the end of this unit, children working towards the expected level will be able to:

- describe and compare lengths, heights, capacities, weights and times using simple vocabulary;
- measure length, heights, capacities, weights and using non-standard units;
- recognise some coins and notes;
- put two or three simple events in chronological order;
- recognise and use the names of the days of the week and know some months of the year;
- tell the time to the hour on an analogue clock and draw the hands;
- reason about measurements to solve simple practical problems.

Children working at the expected level will be able to:

- describe and compare lengths, heights, capacities, weights and times using mathematical vocabulary;
- measure length, heights, capacities, weights and times using standard and non-standard units;
- know the value of coins and notes;
- sequence familiar events in chronological order;
- order the days of the week and months of the year;
- tell the time to the hour and half past the hour on an analogue clock;
- draw the hands on an analogue clock face to the hour and half past the hour;
- understand fully-numbered scales, such as measuring jugs;
- reason about measurements to solve practical problems.

Measurement
Maths | Year 1 | Steps to Progression Overview

The aim of this overview is to support teachers using Planit Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within Planit Maths. Wherever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

Yearly Overview

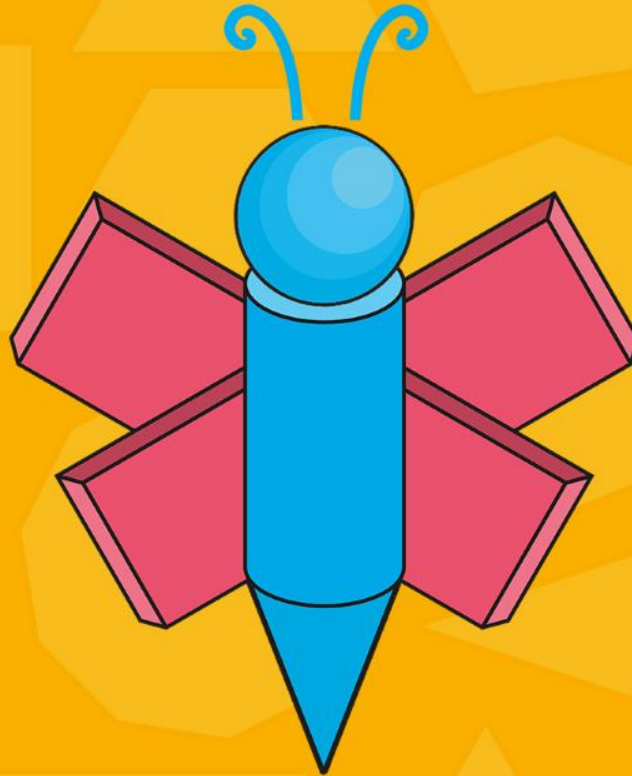
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)		Number: Addition and Subtraction (within 10)			Geometry: Shape		Number: Place Value (within 20)		Consolidation		
Spring	Number: Addition and Subtraction (within 20)			Number: Place Value (within 50) (Multiples of 2, 5 and 10 to be included)			Measurement: Length and Height		Measurement: Weight and Volume		Consolidation	
Summer	Number: Multiplication and Division (Multiples of 2, 5 and 10 to be included)		Number: Fractions		Geometry: Position and Direction	Number: Place Value (within 100)		Measurement: Money	Time		Consolidation	

See our [Properties of Shapes Steps to Progression](#) document.

Twinkl Planit is our award-winning scheme of work with over 4000 resources.



Make 3D Shape Models



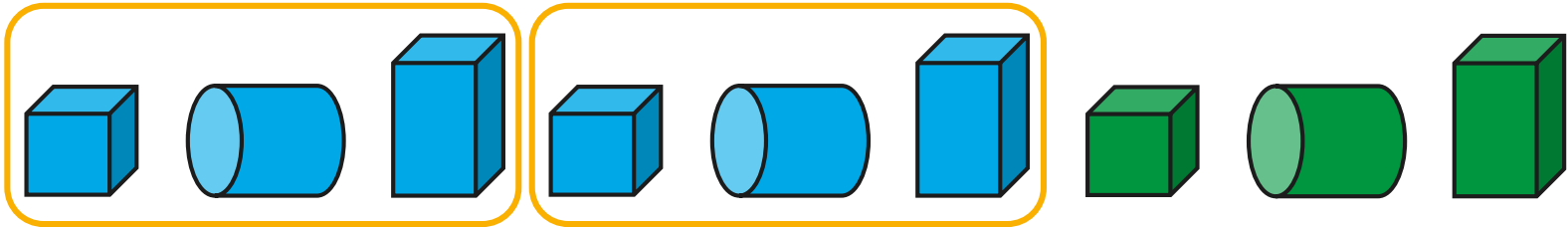
Aim

- To investigate 3D shape models.

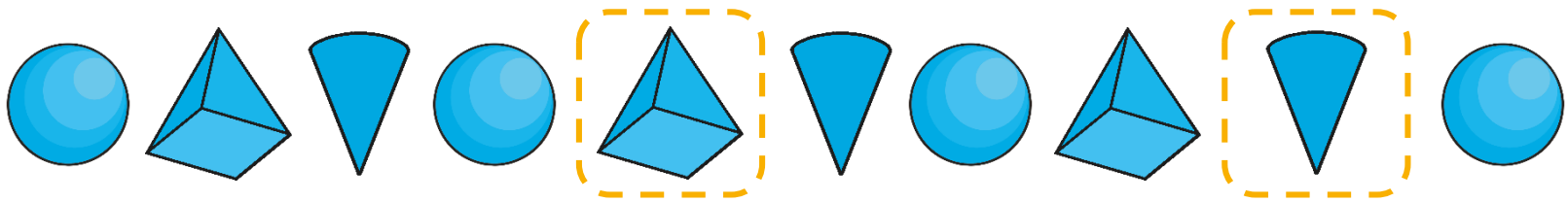
Success Criteria

- I can make models using 3D shapes.
- I can copy models using 3D shapes.
- I can name the 3D shapes that I use.

Can you continue this pattern?



Which shapes are missing from the pattern?



What can you do to find out?

- Say the pattern.
- Find the core.

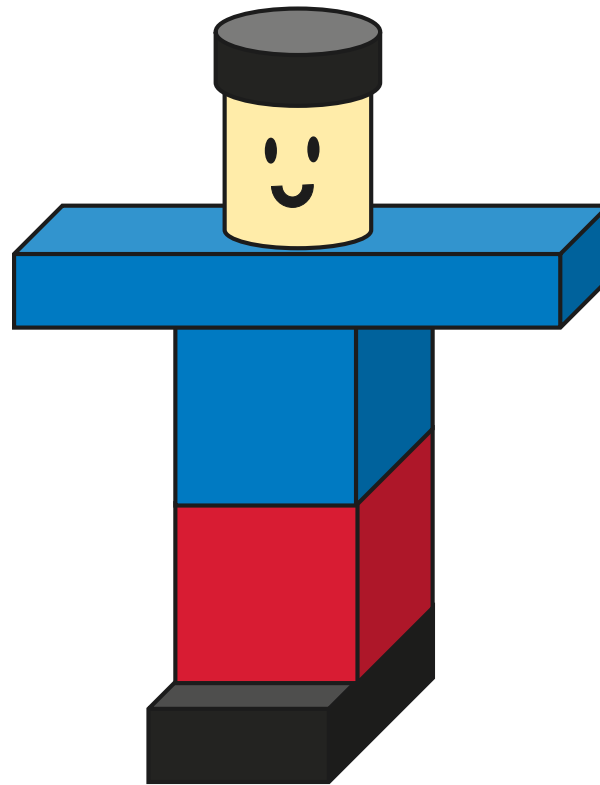
What 3D shapes can you see?

What model do you think the shapes will make?

cylinders

cuboids

cubes



What 3D shapes can you see?

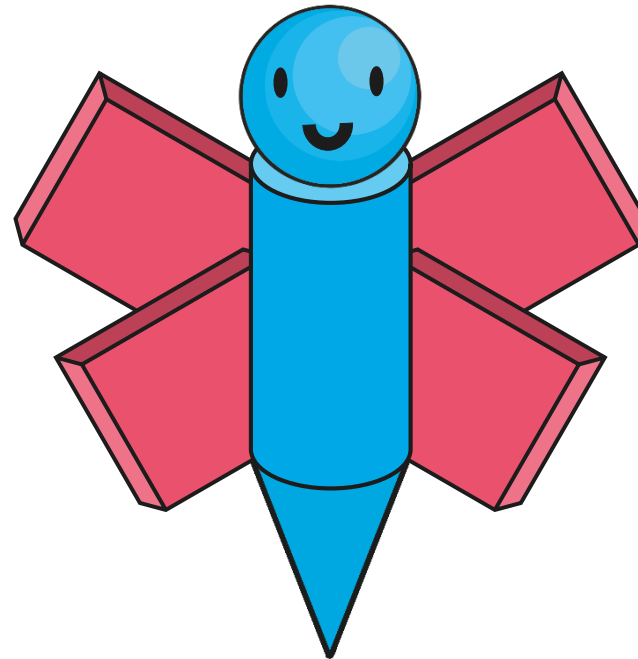
What model do you think the shapes will make?

sphere

cuboids

cylinder

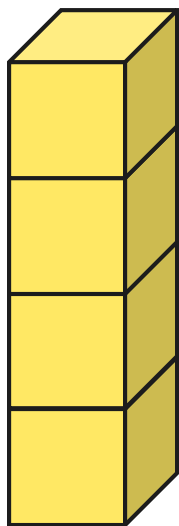
cone



These learning partners have 4 cubes each.
They both make models.

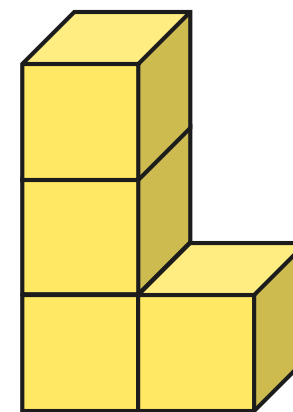


We think our models will be the same because we have the same number of cubes.



What's the same
about the models?

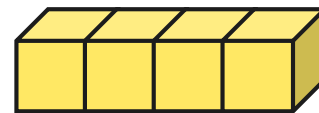
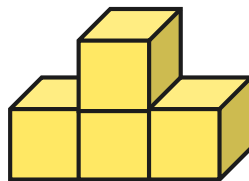
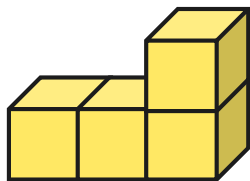
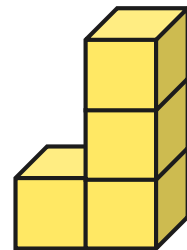
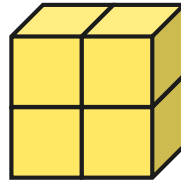
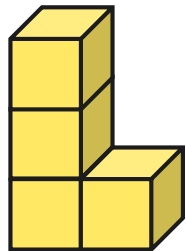
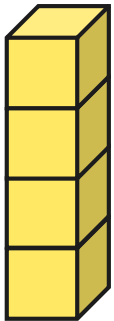
What's different?



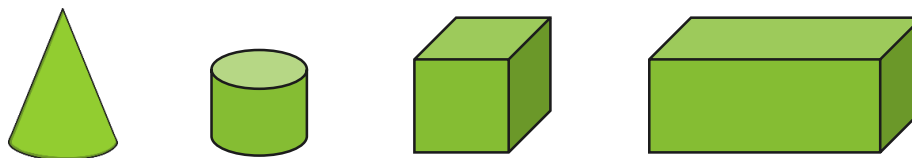
Work with a learning partner.
How many different models can you make with 4 cubes?

How many ideas did you discover?

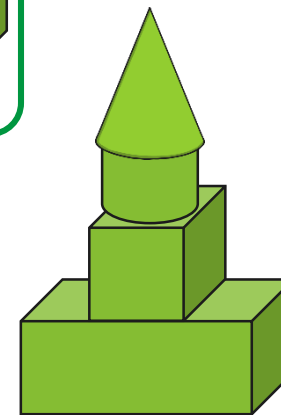
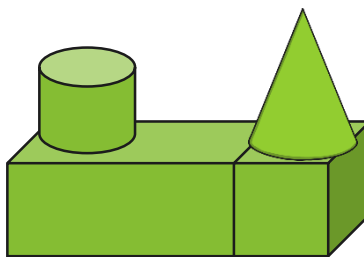
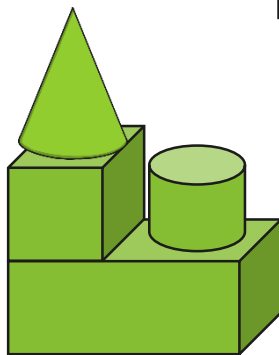
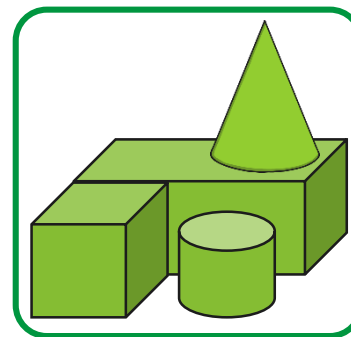
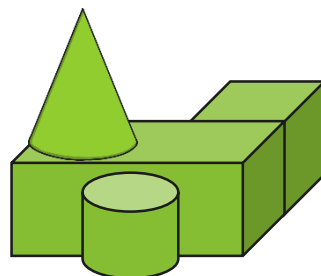
Here are some ideas.



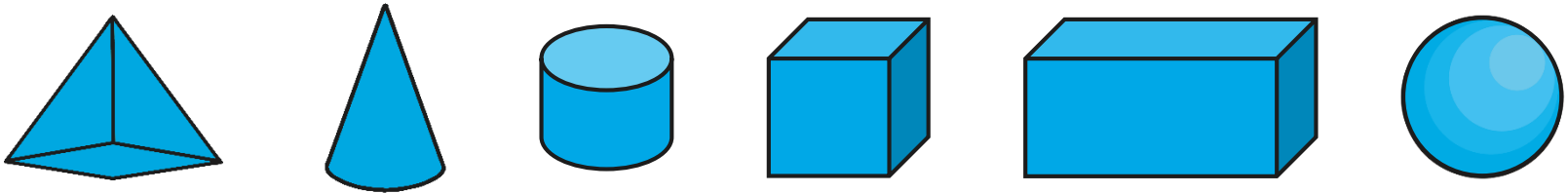
These learning partners make models with these 3D shapes.



Describe a model for your partner to identify. The talk partner to identify. part of the cuboid.



Work with a learning partner to make models with 3D shapes.

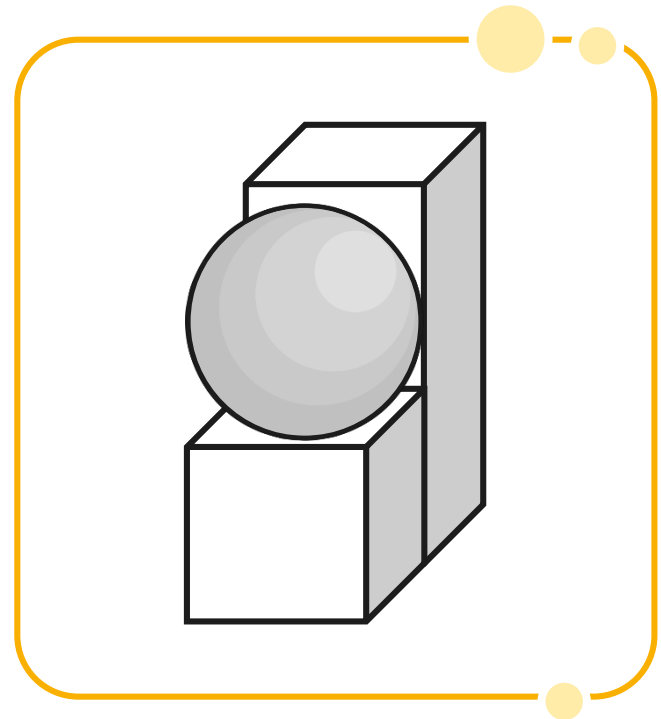
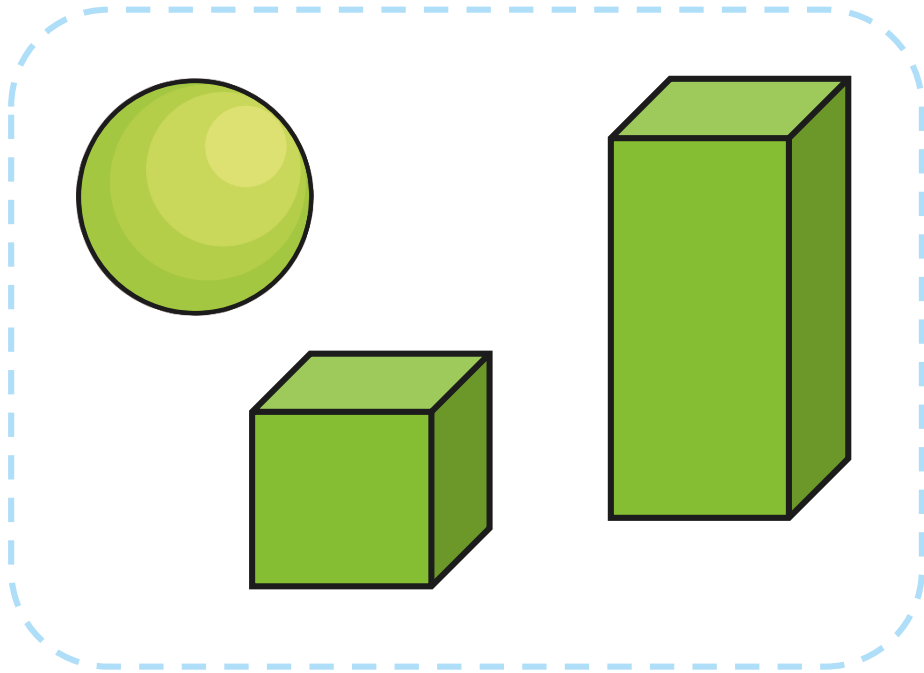


Take turns to place 3D shapes to make your model.

Which shapes will you use?

Where will you place them?

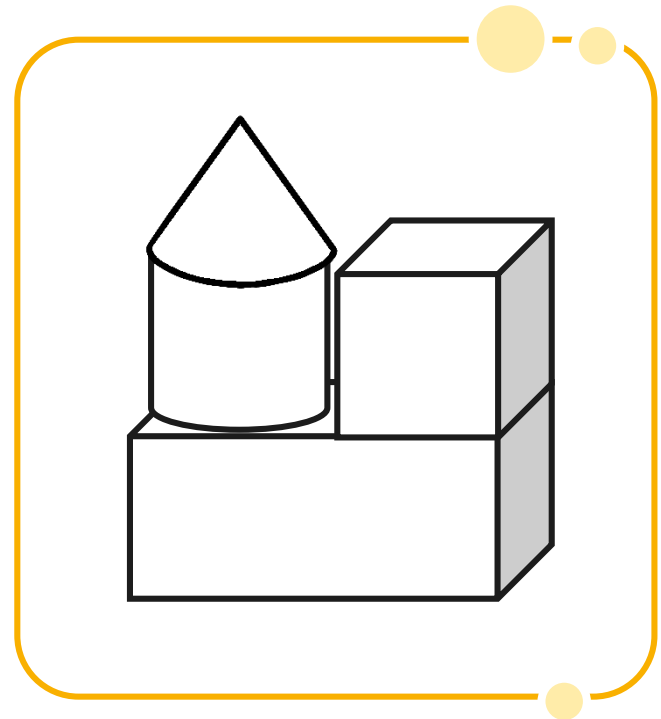
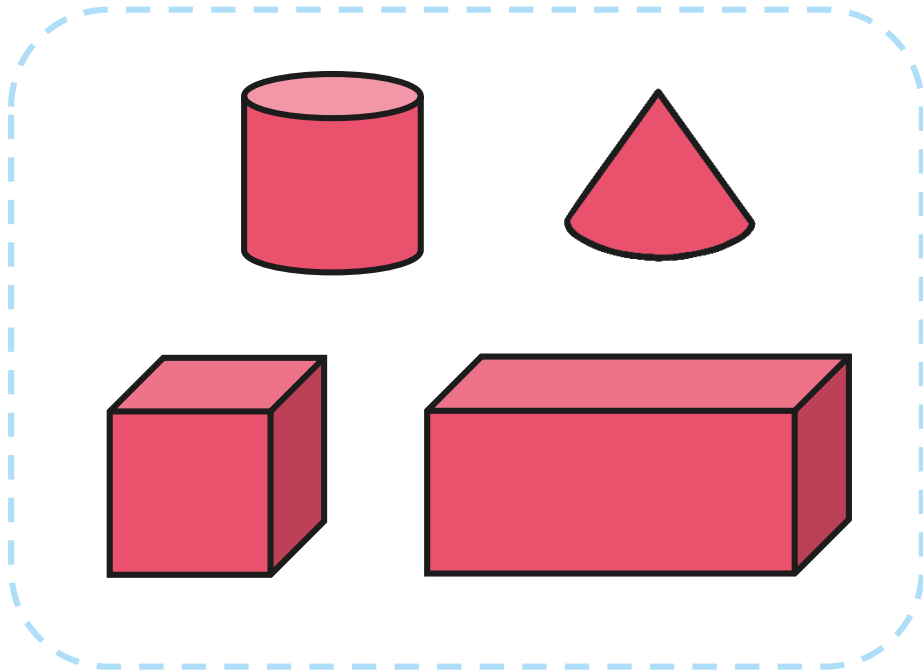
Use 3D shapes to make this model.



Where would you place each shape?

Use these words to help you: next to, left, right, on top of, above, below, in front of, behind, between

Use 3D shapes to make this model.



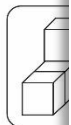
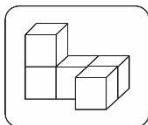
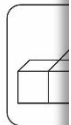
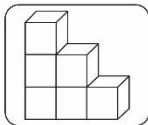
Where would you place each shape?

Use these words to help you: next to, left, right, on top of, above, below, in front of, behind, between

3D Shape Models

To investigate

- Use cubes to copy the models.

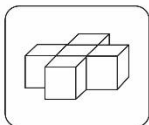
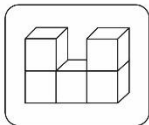


Can you make more models with the same number of cubes?

3D Shape Models

To investigate

- Use cubes to copy the models.

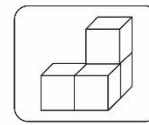
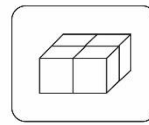
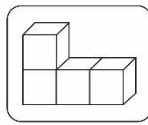
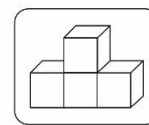
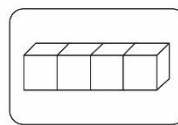


Can you make more models with the same number of cubes?

3D Shape Models

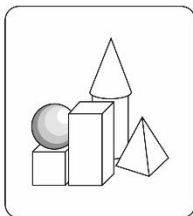
To investigate 3D shape models.

- Use cubes to copy each model.



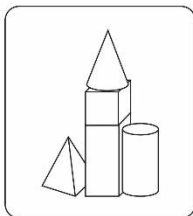
Can you make more models with the same number of cubes?

- Use these 3D shapes to copy the models.



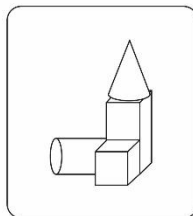
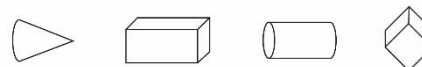
Can you use the same 3D shapes to copy the model?

- Use these 3D shapes to copy the models.

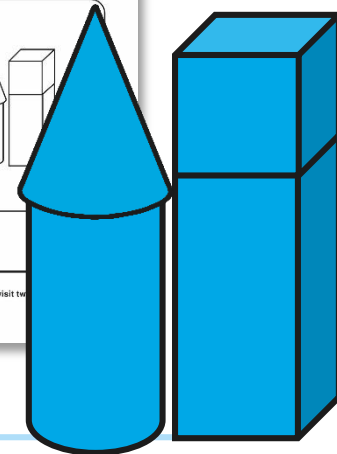


Can you use the same 3D shapes to copy the model?

- Use these 3D shapes to copy the models.



Can you make more models with the same 3D shapes?



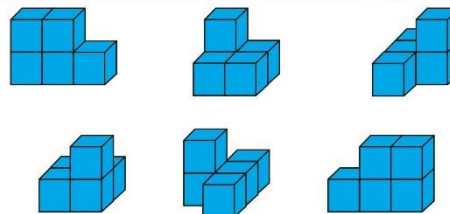
Diving into Mastery

Dive in by completing your own activity!



Make 3D Shape Models

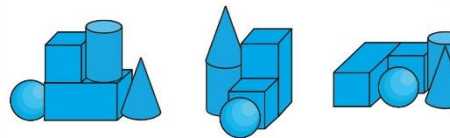
Draw lines to show the matching models.



Copy these models.

Can you make new models with the same number of cubes?

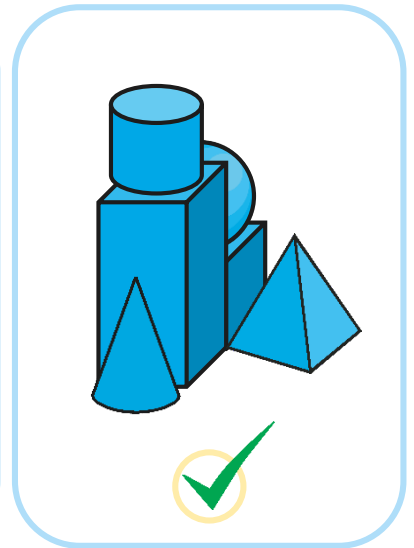
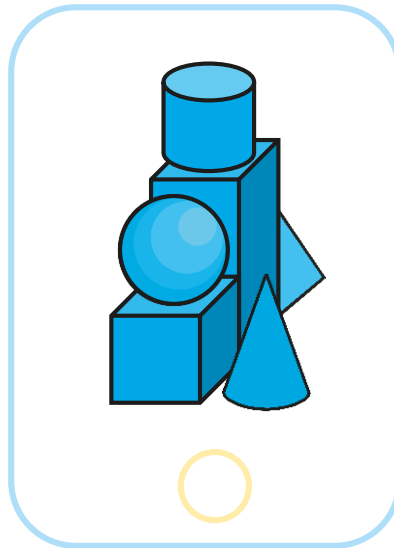
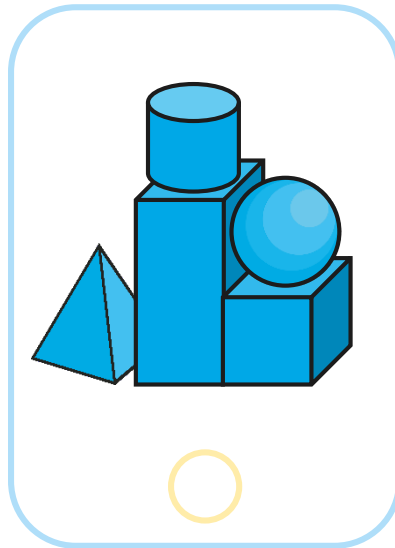
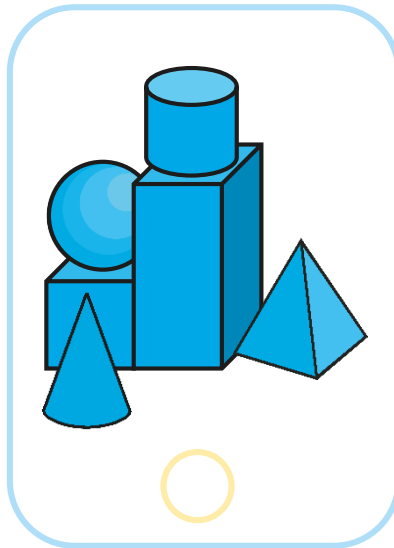
What shapes were used to make these models?



Copy these models.

Can you use the same shapes to make new models?

These pictures show the same model from different viewpoints.



What could you do to correct it?

Aim



- To investigate 3D shape models.

Success Criteria

- I can make models using 3D shapes.
- I can copy models using 3D shapes.
- I can name the 3D shapes that I use.

