

# Diving into Mastery - Diving

## Adult Guidance with Question Prompts

Give children an enlarged copy of the activity card and shapes sheet. Ask them to continue/complete the patterns either by placing or gluing cut-out shapes in the right order. Where possible, use real 3D shapes to make patterns rather than pictures of 3D shapes. You could take photographs of the patterns children make.

What do we mean by a repeating pattern?

Can you see any repeating patterns in this room?

Say aloud the names of the shapes in the repeating pattern.

How many shapes are in the pattern?

What is the next shape in this pattern?

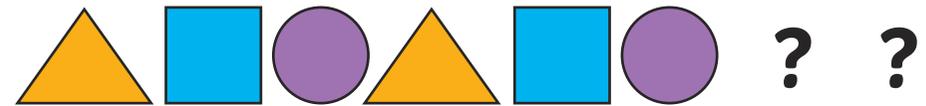
Which part of the pattern repeats?

Can you make your own repeating pattern using 2/3/4 shapes?

## Patterns with 3D and 2D Shapes

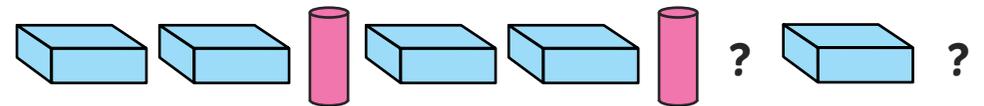


Here is a repeating pattern with 2D shapes.

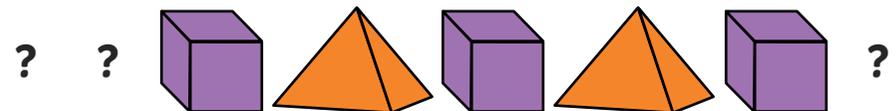


What will be the next 2 shapes in the repeating pattern?

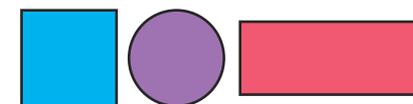
Here is a repeating pattern with 3D shapes. What are the names of the shapes that are missing in the pattern?



What are the names of the shapes that are missing from this pattern?



Make your own repeating pattern using these shapes:



# Diving into Mastery - Deeper

## Adult Guidance with Question Prompts

Children may want to recreate these patterns themselves to help them spot any mistakes (you can use the shapes within this pack). Where possible, use real 3D shapes to make patterns rather than pictures of 3D shapes. You could take photographs of the patterns children make.

What do we mean by repeating pattern?

How many shapes are there in this repeating pattern?

Can you say the pattern out loud?

If one shape was turned around, would it make the pattern wrong?

What would the shape be before the first shape in the pattern?

What is the third/fourth/fifth shape in the pattern?

Which part of the pattern might be incorrect? Why?

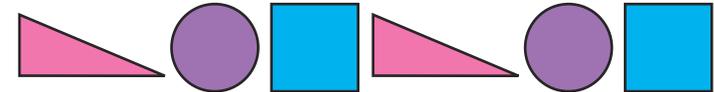
Can you make your own repeating pattern with 3D shapes?

Can you describe it?

## Patterns with 3D and 2D Shapes

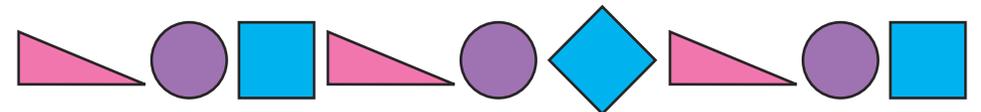


Here is a repeating pattern Mo has made using 2D shapes.

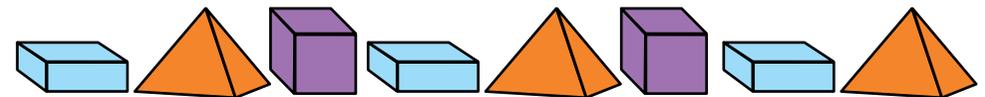


Lucy says that  will be next in the pattern. Is she right?

Lucy makes the same pattern. Mo says that she has made a mistake. Is he right?



Mo makes a pattern using 3D shapes.



What would the next 4 shapes in the pattern be?

**Use 3D shapes to make your own patterns.  
Describe your pattern to a partner.**

# Diving into Mastery - Deepest Adult Guidance with Question Prompts

Children may want to recreate these patterns themselves to help them spot any mistakes (you can use the shapes within this pack). Where possible, use real 3D shapes to make patterns rather than pictures of 3D shapes. You could take photographs of the patterns children make.

How many shapes are there in this repeating pattern?

What would the shape be before the first shape in the pattern?

What is the third/fourth/fifth shape in the pattern?

Would recreating the pattern help?

Can you say the pattern?

How can we find out what the fifth shape after the end of the pattern would be?

Can you spot a mistake?

Explain what it is.

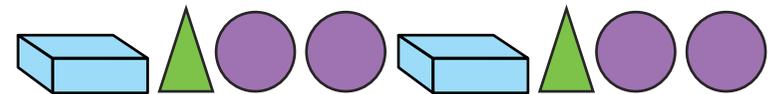
How could we correct it?

Can you use the same shapes and make a different pattern?

## Patterns with 3D and 2D Shapes

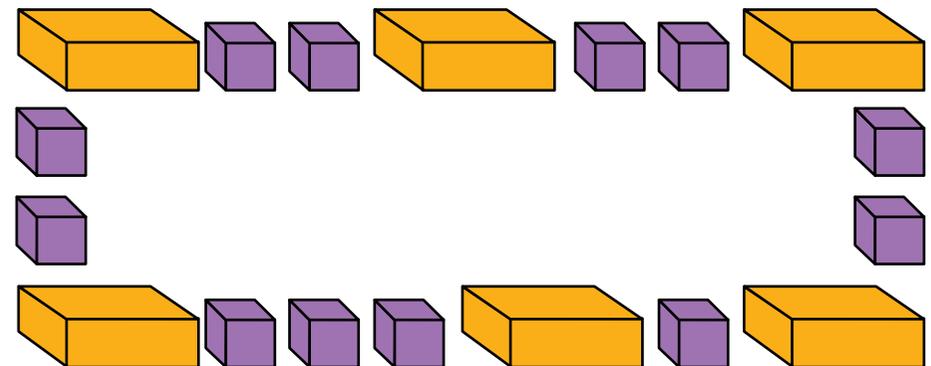


Here is a repeating pattern which has been made using 2D and 3D shapes.



If the pattern was continued for 5 more shapes, would the shape be a 2D shape or a 3D shape? What would the shape be?

Jas has made his repeating pattern in a rectangular shape.



Has he made the pattern correctly? If not, can you see how he could change it to make it right?

**Make your own repeating pattern using 3D shapes placed in a rectangle.**