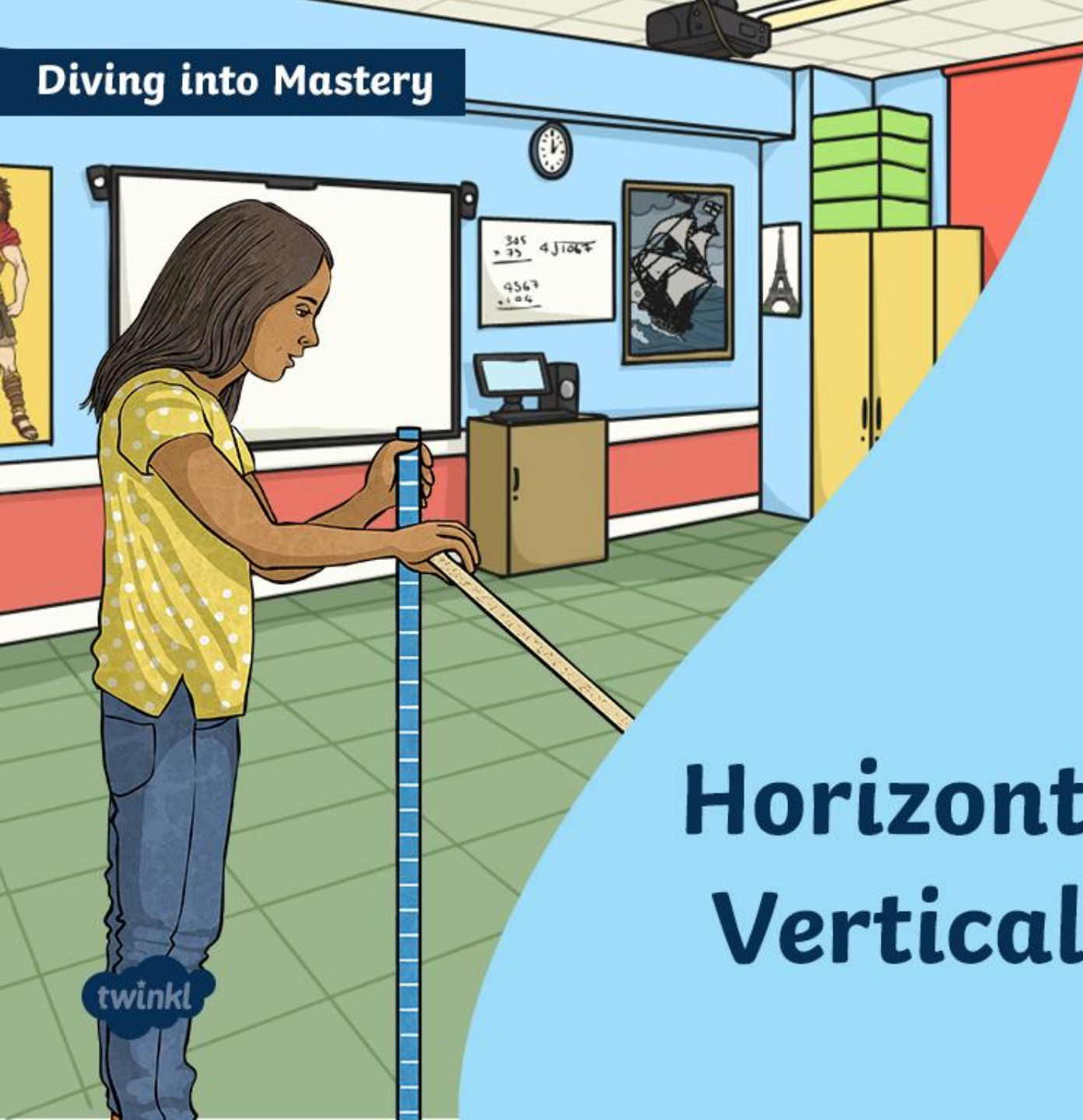


Diving into Mastery



Horizontal and Vertical Lines

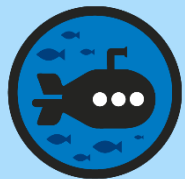
twinkl

Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



Diving



Deeper



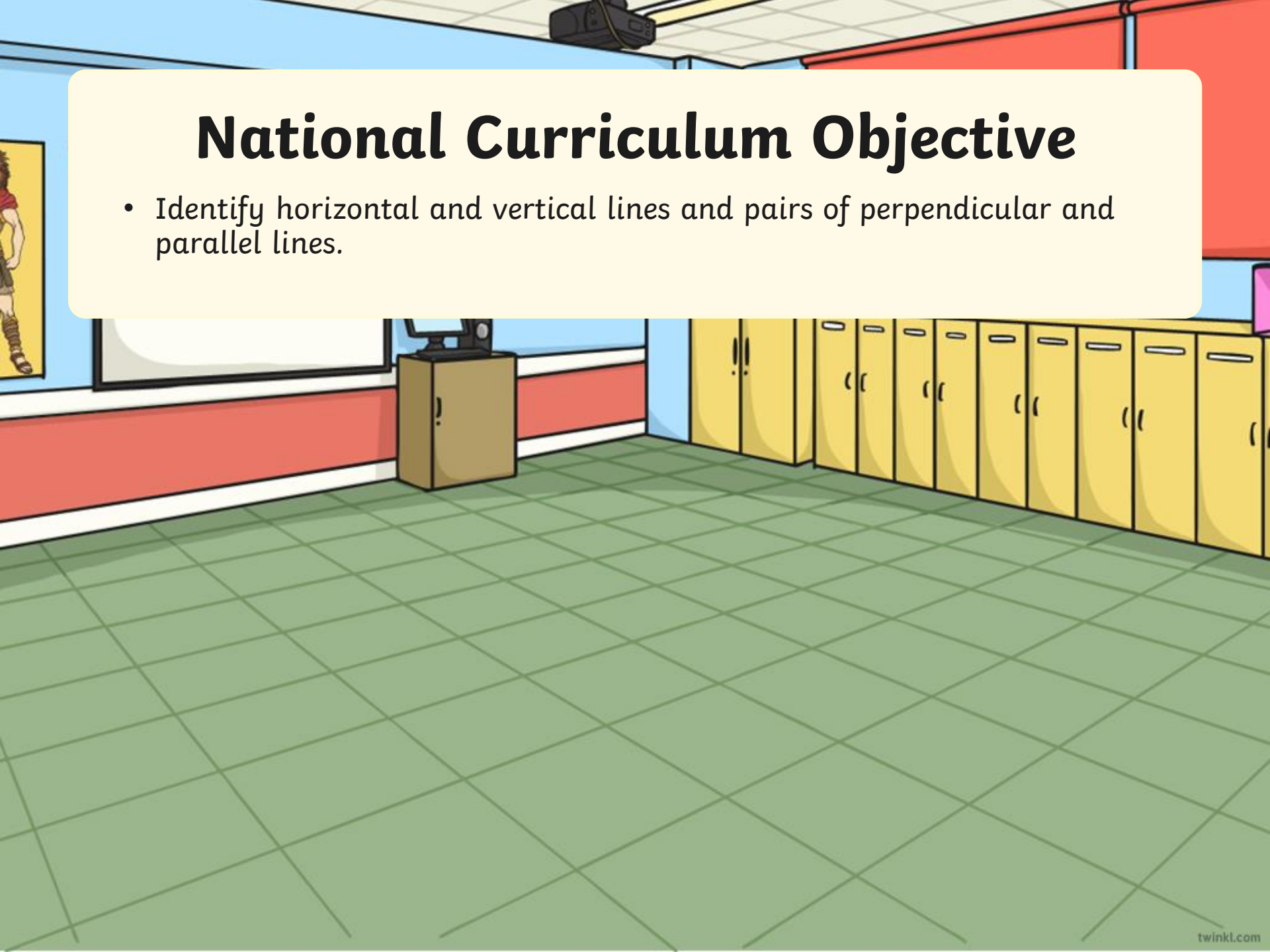
Deepest

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

National Curriculum Objective

- Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.





We can describe lines as horizontal or vertical.

A **horizontal** line runs across, from left to right (or right to left):

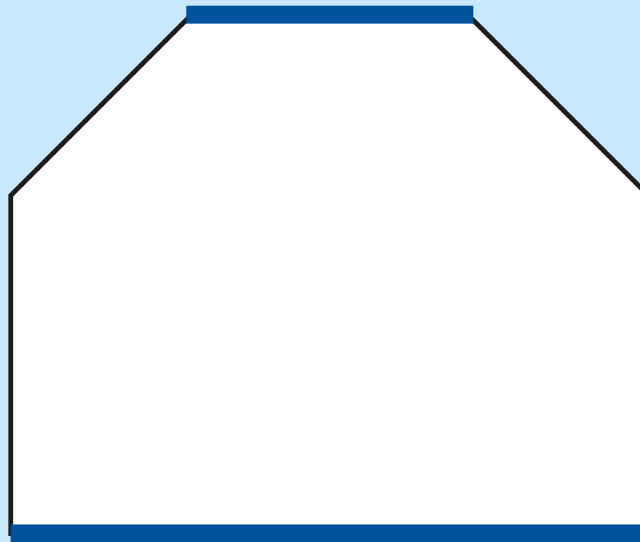


A **vertical** line runs up and down:



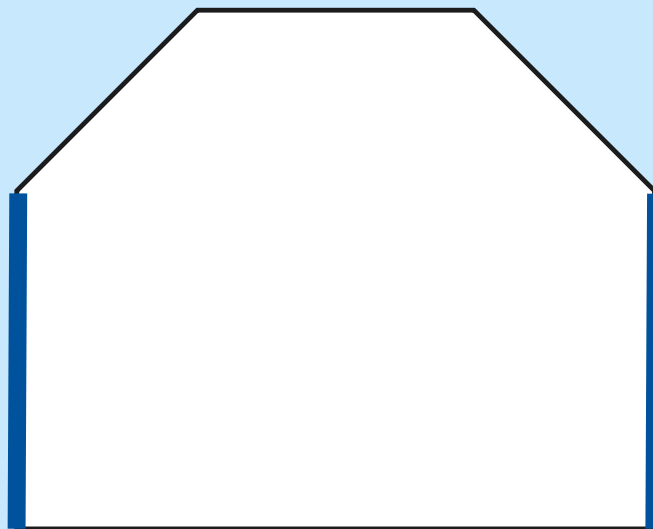


Look at this shape.
Where are the horizontal lines?

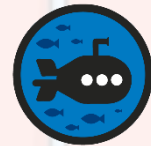




Where are the vertical lines?



Remember that some lines may not be either vertical or horizontal.



When we look at symmetry, we can talk about a **vertical line of symmetry**.

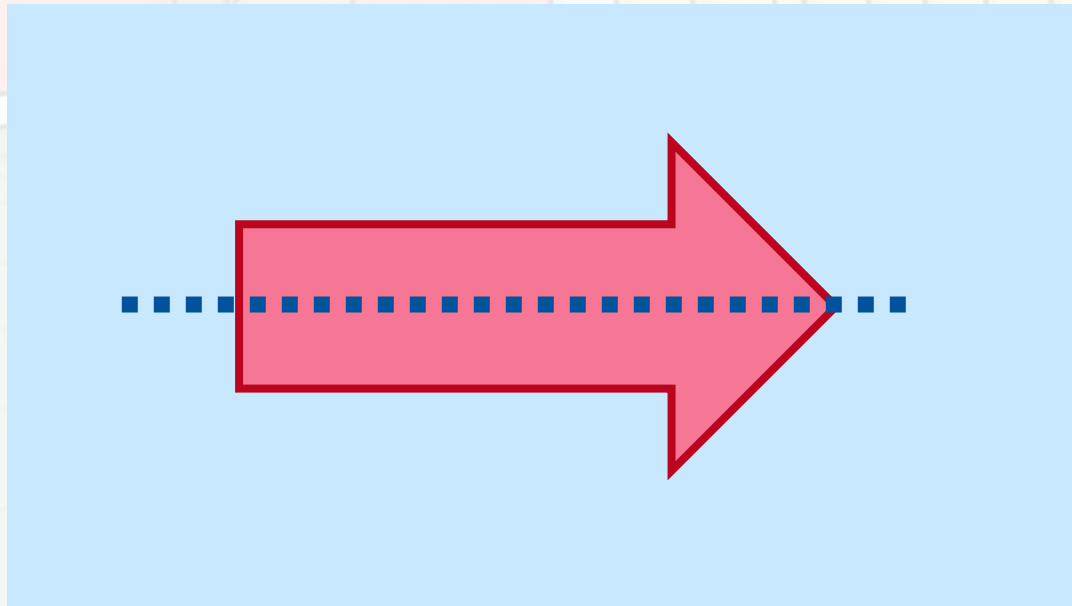
That means that the line of symmetry goes from top to bottom, like this butterfly:





When we look at symmetry, we can talk about a **horizontal line of symmetry**.

That means that the line of symmetry goes from side to side, like this arrow:



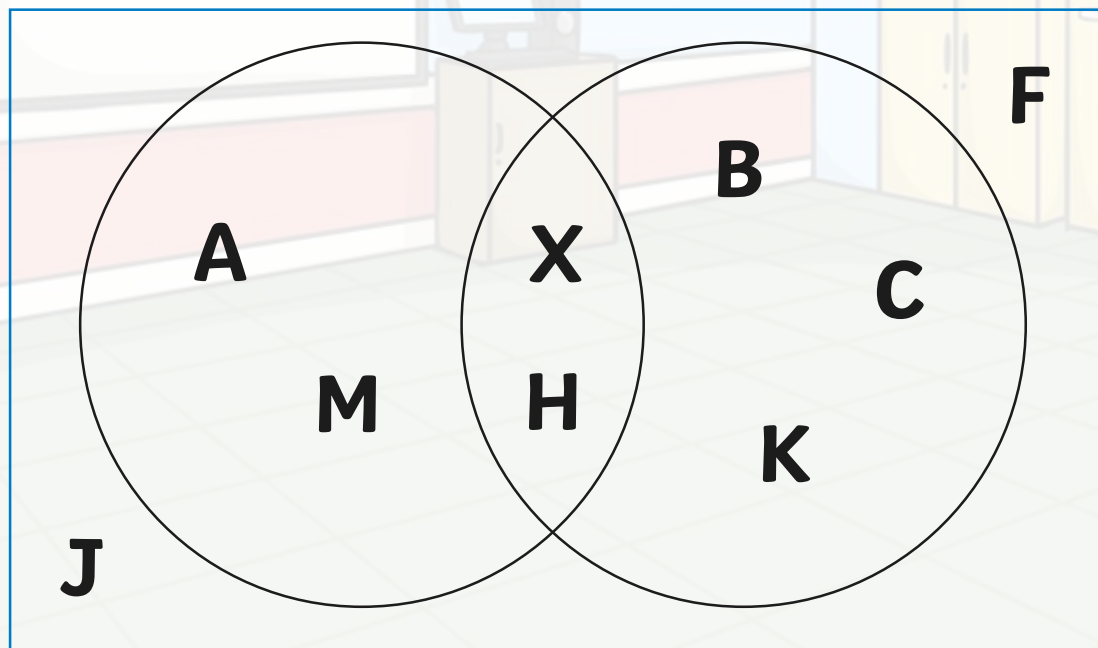
Horizontal and Vertical Lines

Deepest



Lots of letters have lines of symmetry.

Sort the letters in the box into the Venn diagram:



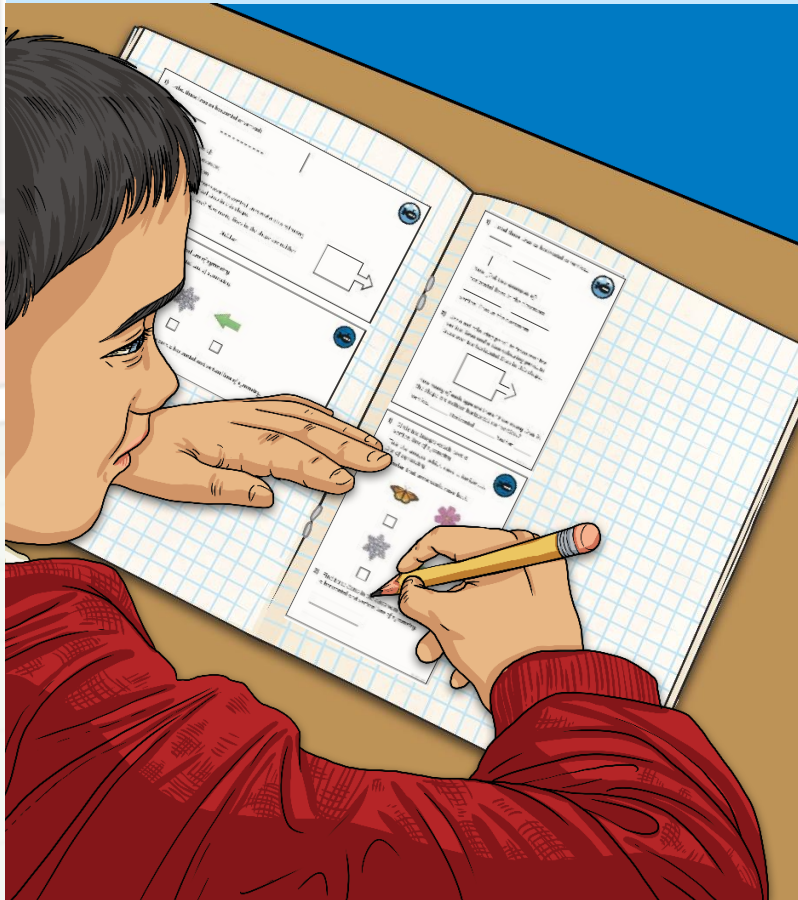
Vertical line
of symmetry

Horizontal line
of symmetry

B	A	F
H	J	C
X	K	M

Horizontal and Vertical Lines

Dive in by completing your own activity!



1) Label these lines as horizontal or vertical:

Now, find two examples of:
horizontal lines in the classroom _____
vertical lines in the classroom _____

2) Use a red colouring pencil to trace over the vertical lines and a blue colouring pencil to trace over the horizontal lines in this shape.

How many of each type are there? How many lines in the shape are neither horizontal nor vertical?

Vertical _____ Horizontal _____ Neither _____

1) Circle the images which have a vertical line of symmetry.

Tick the images which have a horizontal line of symmetry.
Remember that some could have both.

☐ ☐ ☐ ☐

2) Find three items in the classroom that have both a horizontal and vertical line of symmetry.

1) Scott sorts the letters in this word into two groups:

SYMMETRICAL

He says:

The letters Y, M, T, I and A are the only symmetrical letters.

What mistake has he made?

2) Use squared paper to create a picture using **only** horizontal and vertical lines.

3) Investigate: Can you find a word, written in capitals, that has six vertical lines? Write it here: _____

How many horizontal lines does it have? _____

Need Planning to Complement this Resource?

National Curriculum Aim

Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.

For more planning resources to support this aim, [click here](#).

The image displays three sample resource pages from the Twinkl Planit scheme of work for Properties of Shapes. The first page is a 'Properties of Shapes' overview table. The second page is a 'Starter Ideas' page featuring 3D shapes and a play button icon. The third page is a 'Properties of Shapes Starter Ideas' page with a list of activities.

Area	Shape 1	Shape 2	Shape 3	Shape 4	Shape 5	Shape 6	Shape 7	Shape 8	Shape 9	Shape 10	Shape 11	Shape 12
Area 1	Number - Place Value	Number - Addition and Subtraction	Number - Multiplication and Division	Measurement - Length and Perimeter	Measurement - Mass and Capacity	Measurement - Time	Measurement - Temperature	Measurement - Money	Measurement - Length and Perimeter	Measurement - Mass and Capacity	Measurement - Time	Measurement - Temperature
Area 2	Number - Multiplication and Division	Measurement - Length and Perimeter	Measurement - Mass and Capacity	Measurement - Time	Measurement - Temperature	Measurement - Money	Measurement - Length and Perimeter	Measurement - Mass and Capacity	Measurement - Time	Measurement - Temperature	Measurement - Money	Measurement - Length and Perimeter
Area 3	Number - Fractions	Measurement - Time	Measurement - Mass and Capacity	Measurement - Temperature	Measurement - Money	Measurement - Length and Perimeter	Measurement - Mass and Capacity	Measurement - Time	Measurement - Temperature	Measurement - Money	Measurement - Length and Perimeter	Measurement - Mass and Capacity

Starter Ideas

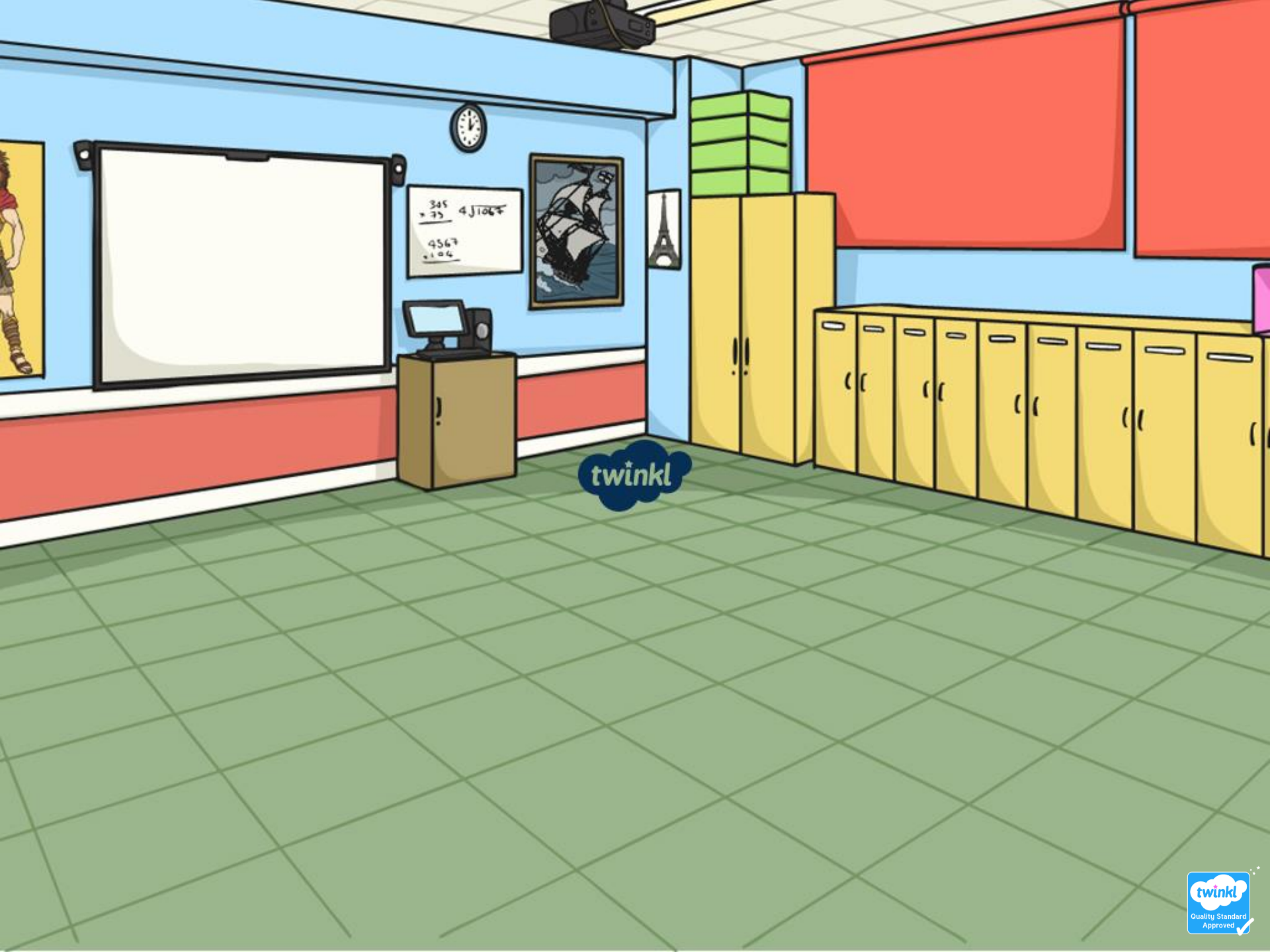
How many right angles can you find in this house?

Properties of Shapes Starter Ideas

- Shape Sort**
Children individually search a 3-D shape on worksheets. Two starting headings are shown on the Starter Ideas Presentation which point to opposite sides of the classroom. Children move to the side of the classroom which their shape belongs to. Discuss the outcomes. Repeat with two different headings.
- 3D Shape Quiz**
Children answer a set of multiple choice questions on the Starter Ideas Presentation which introduce and rehearse different 3-D shapes.
- Pass the Building**
Follow the Building. Organise children into groups of four. Children take turns to pass a building around the group, stating the property of the shape shown on the Starter Ideas Presentation on each turn. New groups pass the building around each other. The person last holding the building gets a point. The winner is the person with the lowest score.
- Where Does It Get Carried Diagram**
As a class, children sort different 3-D shapes according to their properties on the Carried Diagram provided on the Starter Ideas Presentation.
- Where Does It Get Seen Diagram**
Using the cards on the Starter Ideas Presentation, sort different 3-D shapes according to their properties on a seen diagram.
- True or False**
Children answer a set of quick fire true or false statements on the Starter Ideas Presentation which describe properties of 3-D shapes, rehearsing angle as a property of shape.
- How Many Right Angles?**
Children identify right angles hidden within the 3-D shape pictures on the Starter Ideas Presentation.
- Where Will Be Facing?**
Using the cards on the Starter Ideas Presentation to find out which 3-D shape the child will be facing after completing the turn.
- Lines in Our Environment**
Children identify horizontal and vertical lines in the photographs of environmental spaces provided on the Starter Ideas Presentation.

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





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