YEAR 7 · GEOMETRY

Properties of 2D Shapes

Explore the sides, vertices and lines of symmetry in common polygons.

Name _____ **Date** _____

A Complete the table

Count the sides and vertices of each shape. Then write the number of lines of symmetry.

Shape	Number of sides	Number of vertices	Lines of symmetry
 **Isosceles triangle**	.....	.....	.....
 **Square**	.....	.....	.....
 **Rectangle**	.....	.....	.....
 **Regular pentagon**	.....	.....	.....
 **Regular hexagon**	.....	.....	.....
 **Parallelogram**	.....	.....	.....

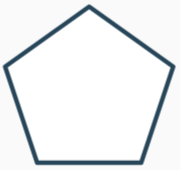
B Label and draw

Write a capital letter beside every vertex. Then draw all lines of symmetry, if there are any.

Square
Label each vertex and draw its symmetry lines.



Regular pentagon
Label each vertex and draw its symmetry lines.



Parallelogram
Label each vertex and draw its symmetry lines.



C Think it through

Use what you know about sides, vertices and symmetry.

A polygon has 8 sides. How many vertices does it have? Explain how you know.

Which shape in the table has exactly one line of symmetry? Write its name and explain how you know.

Check your labels and counts before you finish.