

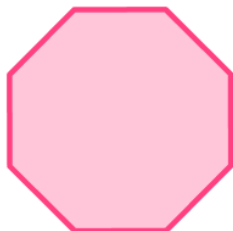
## Lines of Symmetry - Worksheet

### Skill

#### Group A - Lines of symmetry (regular shapes)

Identify the number of lines of symmetry for the following shapes:

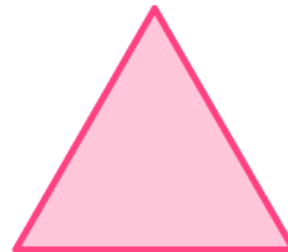
1)



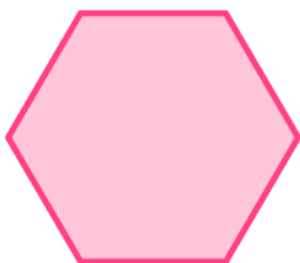
2)



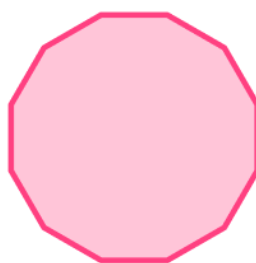
3)



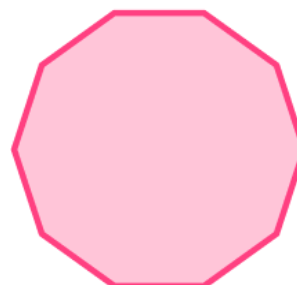
4)



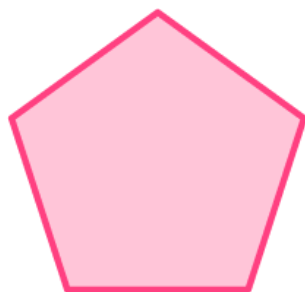
5)



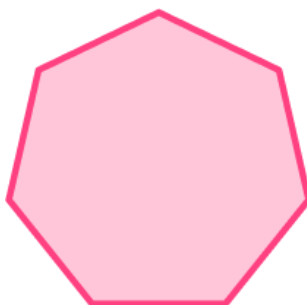
6)



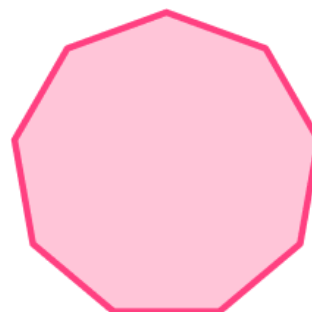
7)



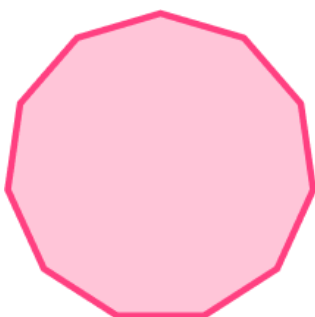
8)



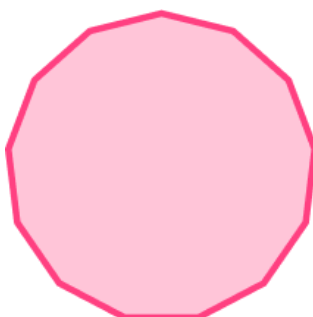
9)



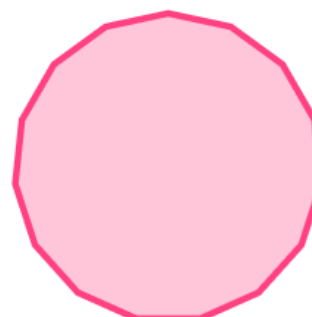
10)



11)



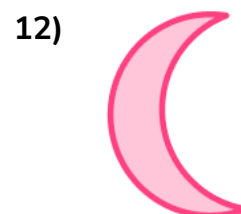
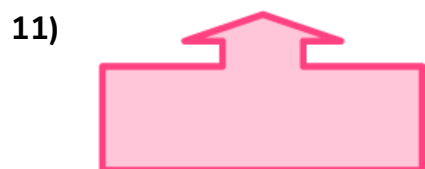
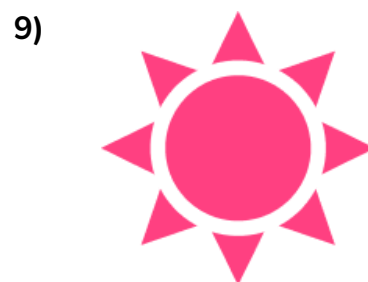
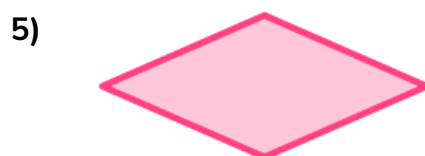
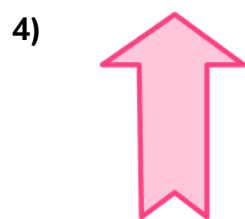
12)



## Lines of Symmetry - Worksheet

### Group B - Lines of symmetry (irregular shapes)

Identify the number of lines of symmetry for the following shapes:

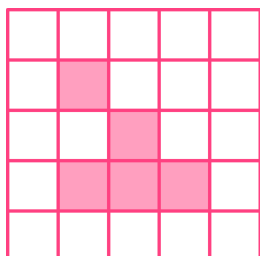


## Lines of Symmetry - Worksheet

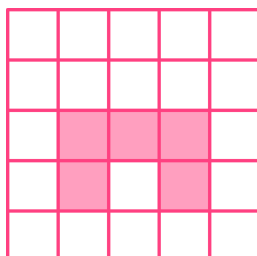
### Group C - Line symmetry problems

Shade the allocated number of squares to obtain the correct amount of lines of symmetry:

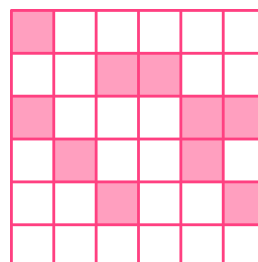
**1)** Shade 1 box so the pattern has just 1 line of symmetry.



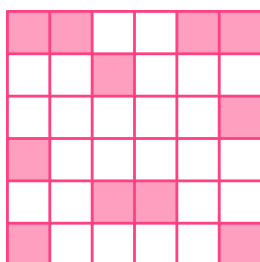
**2)** Shade 1 box so the pattern has just 1 line of symmetry.



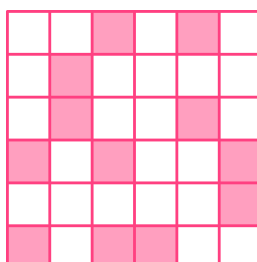
**3)** Shade 4 boxes so the pattern has just 1 line of symmetry.



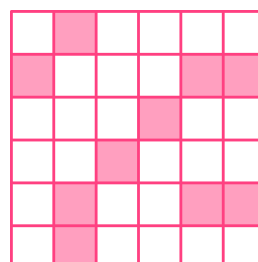
**4)** Shade 5 boxes so the pattern has just 2 lines of symmetry.



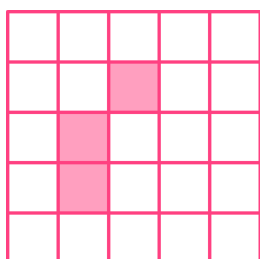
**5)** Shade 6 boxes so the pattern has just 1 line of symmetry.



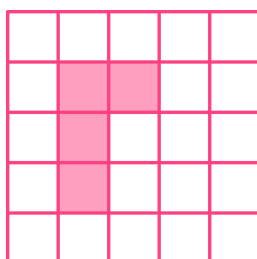
**6)** Shade 6 boxes so the pattern has just 4 lines of symmetry.



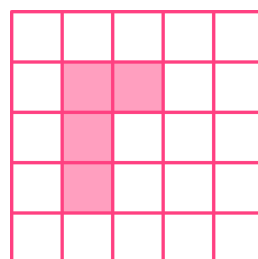
**7)** Add one square so that the shape has reflectional symmetry.



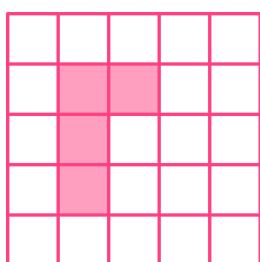
**8)** Add three squares so that the shape has reflectional symmetry.



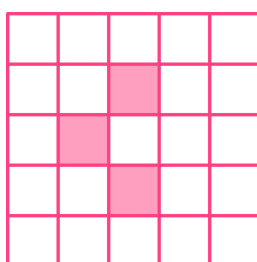
**9)** Add two squares so that the shape has reflectional symmetry.



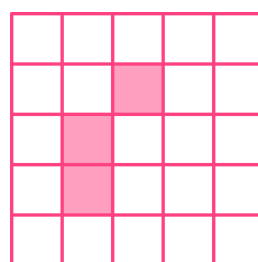
**10)** Add one square so that the shape has reflectional symmetry.



**11)** Add one square so that the shape has reflectional symmetry.



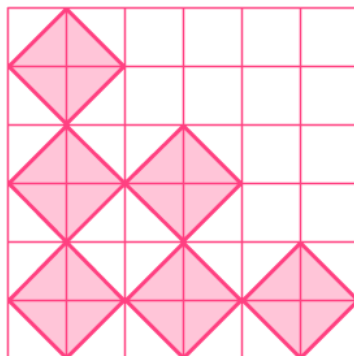
**12)** Add three squares so that the shape has reflectional symmetry.



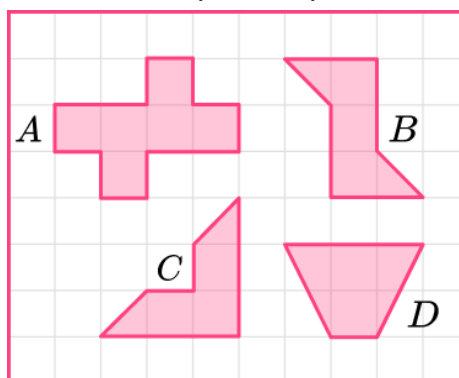
# Lines of Symmetry - Worksheet

## Applied

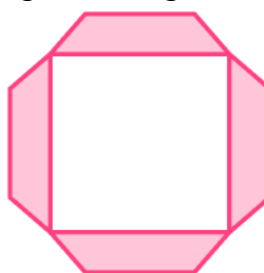
- 1) This square tile has a symmetrical pattern.  
Draw the line of symmetry.



- 2) Which two shapes have a line of symmetry?



- 3) A square is drawn inside a regular octagon.



Draw all the lines of symmetry on this shape.

- 4) Draw a shape with
- (a) 1 line of symmetry
  - (b) 2 lines of symmetry
  - (c) 0 lines of symmetry

## Lines of Symmetry - Exam Questions

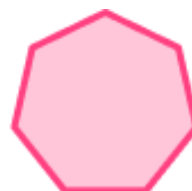
- 1) (a) Below is a rectangle.



Draw on all the lines of symmetry.

(2)

- (b) Circle the shape with the most lines of symmetry.



(1)  
(3 marks)

- 2)      **A B C D E F G H I J K L M N**  
         **O P Q R S T U V W X Y Z**

- (a) State two letters with two lines of symmetry.

.....  
(1)

- (b) State two letters with no lines of symmetry.

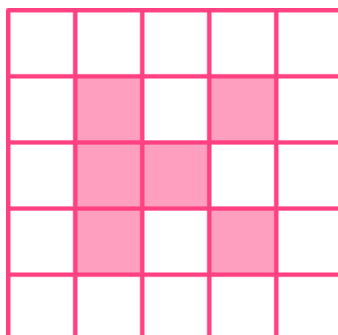
.....  
(1)

- (c) State two letters with 1 line of symmetry.

.....  
(1)  
(3 marks)

## Lines of Symmetry - Exam Questions

3)

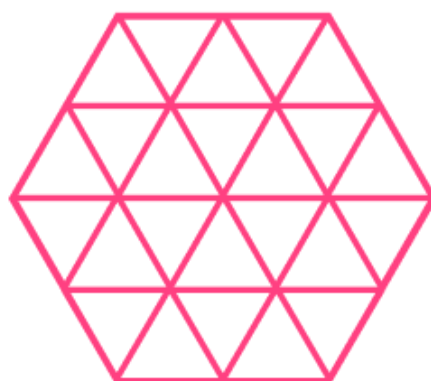


Shade one more square to make a pattern with two lines of symmetry.

**(1 mark)**

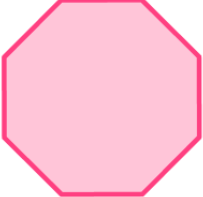

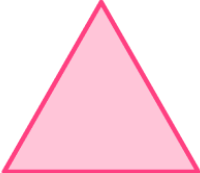
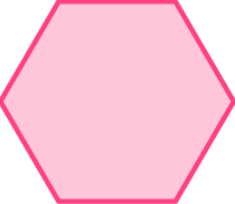
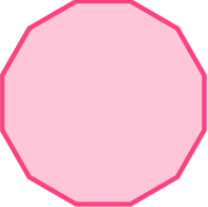
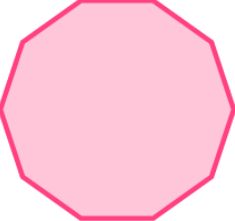
4)

Shade four triangles to make a pattern with two lines of symmetry.

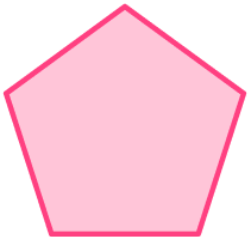
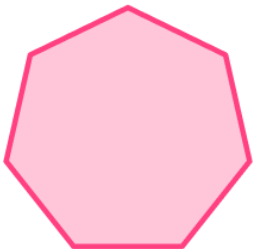
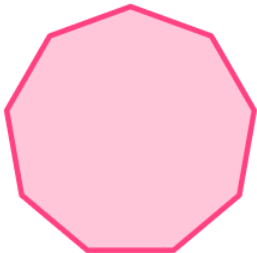
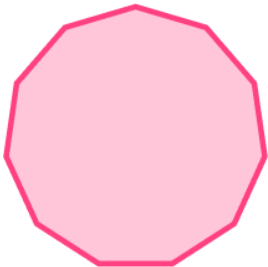
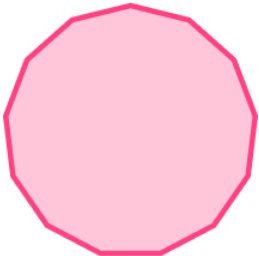
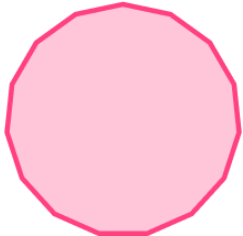


**(2 marks)**





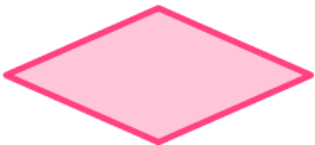


## Lines of Symmetry - Answers

	Question	Answer
	Skill Questions	
Group A	<p>Identify the number of lines of symmetry for the following shapes:</p> <p>1) </p> <p>2) </p> <p>3) </p> <p>4) </p> <p>5) </p> <p>6) </p>	<p>1) 8</p> <p>2) 4</p> <p>3) 3</p> <p>4) 6</p> <p>5) 12</p> <p>6) 10</p>






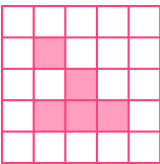
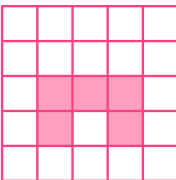
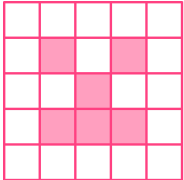
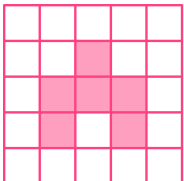
## Lines of Symmetry - Answers

Group A contd	7)		7) 5
	8)		8) 7
	9)		9) 9
	10)		10) 11
	11)		11) 13
	12)		12) 15

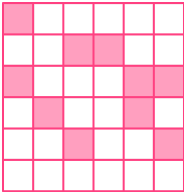
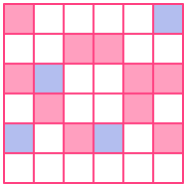
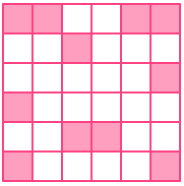
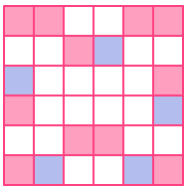
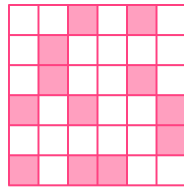
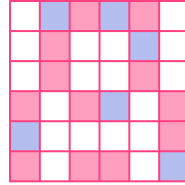
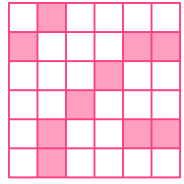
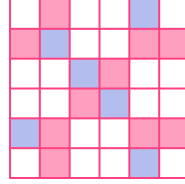
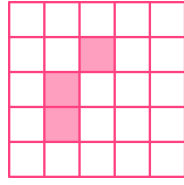
## Lines of Symmetry - Answers

<b>Group B</b>	<p>Identify the number of lines of symmetry for the following shapes:</p> <p>1) </p> <p>2) </p> <p>3) </p> <p>4) </p> <p>5) </p> <p>6) </p> <p>7) </p>	<p>1) 2</p> <p>2) 2</p> <p>3) 1</p> <p>4) 1</p> <p>5) 2</p> <p>6) 2</p> <p>7) 2</p>
----------------	--	---

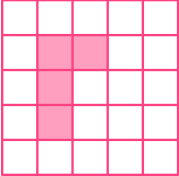
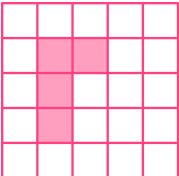
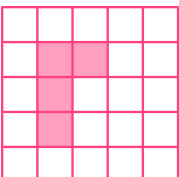
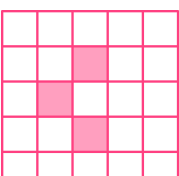
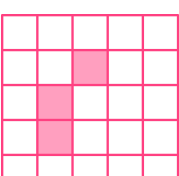
## Lines of Symmetry - Answers

Group B	<p>8) </p> <p>9) </p> <p>10) </p> <p>11) </p> <p>12) </p>	<p>8) 1</p> <p>9) 8</p> <p>10) 2</p> <p>11) 1</p> <p>12) 1</p>
Group C	<p>Shade the allocated number of squares to obtain the correct amount of lines of symmetry:</p> <p>1) Shade 1 box so the pattern has just 1 line of symmetry.</p>  <p>2) Shade 1 box so the pattern has just 1 line of symmetry.</p> 	<p>1) </p> <p>2) </p>

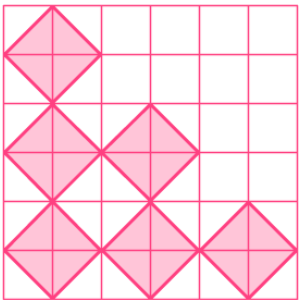
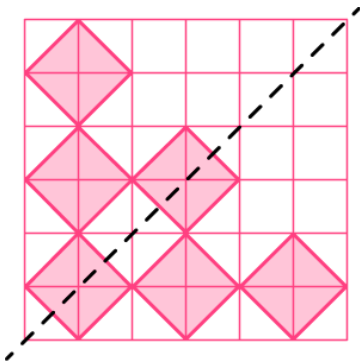
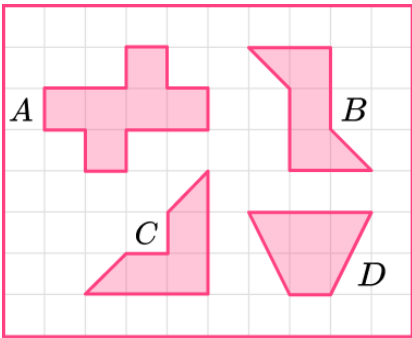
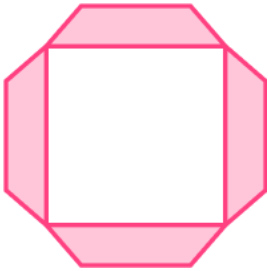
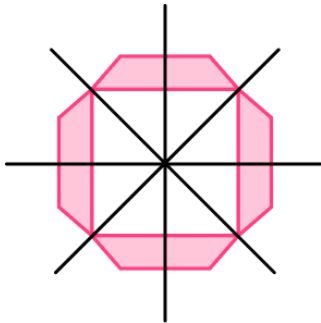



## Lines of Symmetry - Answers

Group C contd	<b>3)</b> Shade 4 boxes so the pattern has just 1 line of symmetry. 	<b>3)</b> Example: 
	<b>4)</b> Shade 5 boxes so the pattern has just 2 lines of symmetry. 	<b>4)</b> 
	<b>5)</b> Shade 6 boxes so the pattern has just 1 line of symmetry. 	<b>5)</b> 
	<b>6)</b> Shade 6 boxes so the pattern has just 4 lines of symmetry. 	<b>6)</b> 
	<b>7)</b> Add one square so that the shape has reflectional symmetry. 	<b>7)</b> Any correct pattern


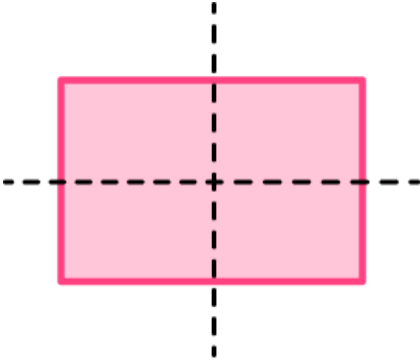


## Lines of Symmetry - Answers

Group C contd	<p><b>8)</b> Add three squares so that the shape has reflectional symmetry.</p>  <p><b>9)</b> Add two squares so that the shape has reflectional symmetry.</p>  <p><b>10)</b> Add one square so that the shape has reflectional symmetry.</p>  <p><b>11)</b> Add one square so that the shape has reflectional symmetry.</p>  <p><b>12)</b> Add three squares so that the shape has reflectional symmetry.</p> 	<p><b>8)</b> Any correct pattern</p> <p><b>9)</b> Any correct pattern</p> <p><b>10)</b> Any correct pattern</p> <p><b>11)</b> Any correct pattern</p> <p><b>12)</b> Any correct pattern</p>
------------------	--	---

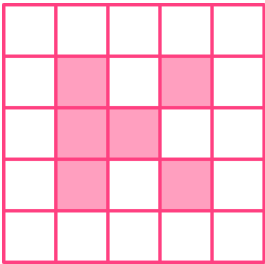


## Lines of Symmetry - Answers

	Question	Answer
	Applied Questions	
1)	<p>This square tile has a symmetrical pattern. Draw the line of symmetry.</p> 	
2)	<p>Which two shapes have a line of symmetry?</p> 	C and D
3)	<p>A square is drawn inside a regular octagon.</p>  <p>Draw all the lines of symmetry on this shape.</p>	
4)	<p>a) Draw a shape with 1 line of symmetry</p>	<p>a) Any correctly drawn shapes. E.g.</p> 
	<p>b) 2 lines of symmetry</p>	<p>b)</p> 
	<p>c) 0 lines of symmetry</p>	<p>c)</p> 

## Lines of Symmetry - Answers

	Question	Answer	
	Exam Questions		
1) (a)	<p>Below is a rectangle.</p>  <p>Draw on all the lines of symmetry.</p>	<p>(a)</p>  <p>1 correct line drawn 2 correct lines drawn only</p>	<p>(1) (1)</p>
(b)	<p>Circle the shape with the most lines of symmetry.</p> 	<p>(b)</p> 	<p>(1)</p>
2) (a)	<p>A B C D E F G H I J K L M N O P Q R S T U V W X Y Z</p> <p>State two letters with two lines of symmetry.</p>	<p>(a) Two letters from: H, I, O or X only</p>	<p>(1)</p>
(b)	<p>State two letters with no lines of symmetry.</p>	<p>(b) Two letters from: F, G, J, L, N, P, Q, R, S or Z only</p>	<p>(1)</p>
(c)	<p>State two letters with 1 line of symmetry.</p>	<p>(c) Two letters from: A, B, C, D, E, K, M, T, U, V, W or Y only</p>	<p>(1)</p>

## Lines of Symmetry - Mark Scheme

3)	 <p>Shade one more square to make a pattern with two lines of symmetry.</p>	Any correct pattern - example:	(1)
4)	<p>Shade four triangles to make a pattern with two lines of symmetry.</p> 	<p>Any correct pattern - example:</p>  <p>4 triangles with one line of symmetry <b>or</b> 3 or 5 triangles with two lines of symmetry 4 triangles with two lines of symmetry</p>	(1) (1)

***Do you have KS4 students who need additional support in maths?***

Our specialist tutors will help them develop the skills they need to succeed at GCSE in weekly one to one online revision lessons. Trusted by secondary schools across the UK.

Visit [thirdspacelearning.com](https://thirdspacelearning.com) to find out more.