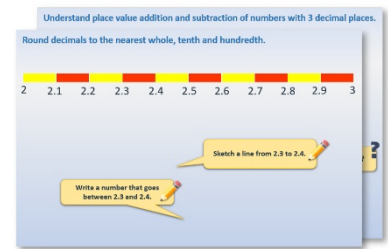


Week 8, Day 5

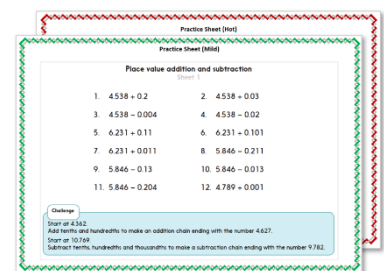
Use a Carroll diagram to sort 2-D shapes

Each day covers one maths topic. It should take you about 1 hour or just a little more.

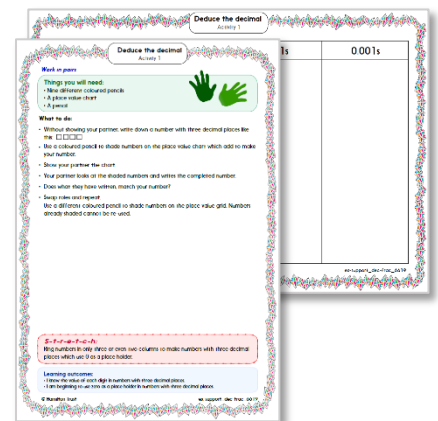
1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



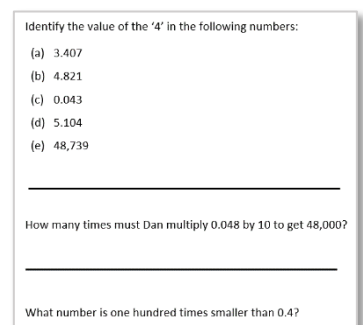
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either **Mild** (easier) or **Hot** (harder)! Check the answers.



3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**






4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



Learning Reminders

Use Carroll diagrams to sort.

	Squares	Not Squares
All sides the same length		
Sides not the same length	<p>?</p> <p>Why no shapes in this section?</p>	 <p>Triangles can go in either of these sections, can you see why?</p>

Learning Reminders

Use Carroll diagrams to sort 4-sided shapes.

	Symmetrical	Not symmetrical
1 or more right angles		
No right angles		

One of these shapes is in the wrong place. Which one is it?
Where should it be?

	Not symmetrical	Symmetrical	
			No right angles
			1 or more right angles

Use Carroll diagrams to sort 4-sided shapes.

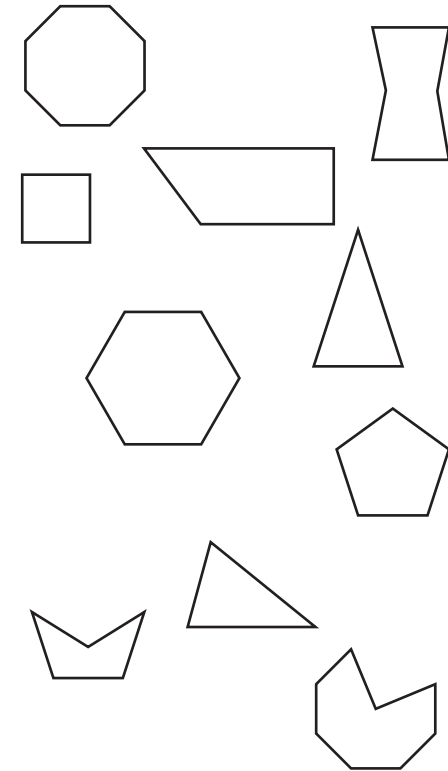
One of these shapes is in the wrong place. Which one is it?
Where should it be?

Practice Sheet Mild

Sorting shapes on a Carroll diagram

Sort the shapes into the Carroll diagram:

	<i>Fewer than 5 sides</i>	<i>5 or more sides</i>
All sides equal length		
Sides not equal lengths		



Challenge

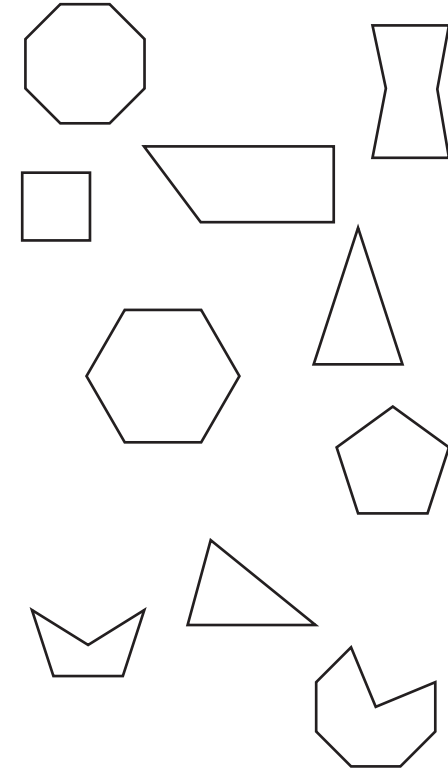
Suggest two more different ways to sort the shapes.
Create another Carroll diagram to sort the shapes using these properties.

Practice Sheet Hot

Sorting shapes on a Carroll diagram

Sort the shapes into the Carroll diagram:

	<i>Fewer than 5 sides</i>	<i>5 or more sides</i>
Symmetrical		
Not symmetrical		


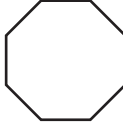

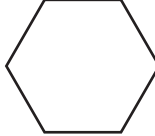


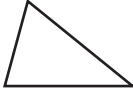





Challenge



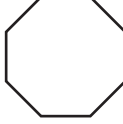


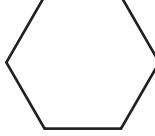




Suggest two more different ways to sort the shapes.
Create another Carroll diagram to sort the shapes using these properties.

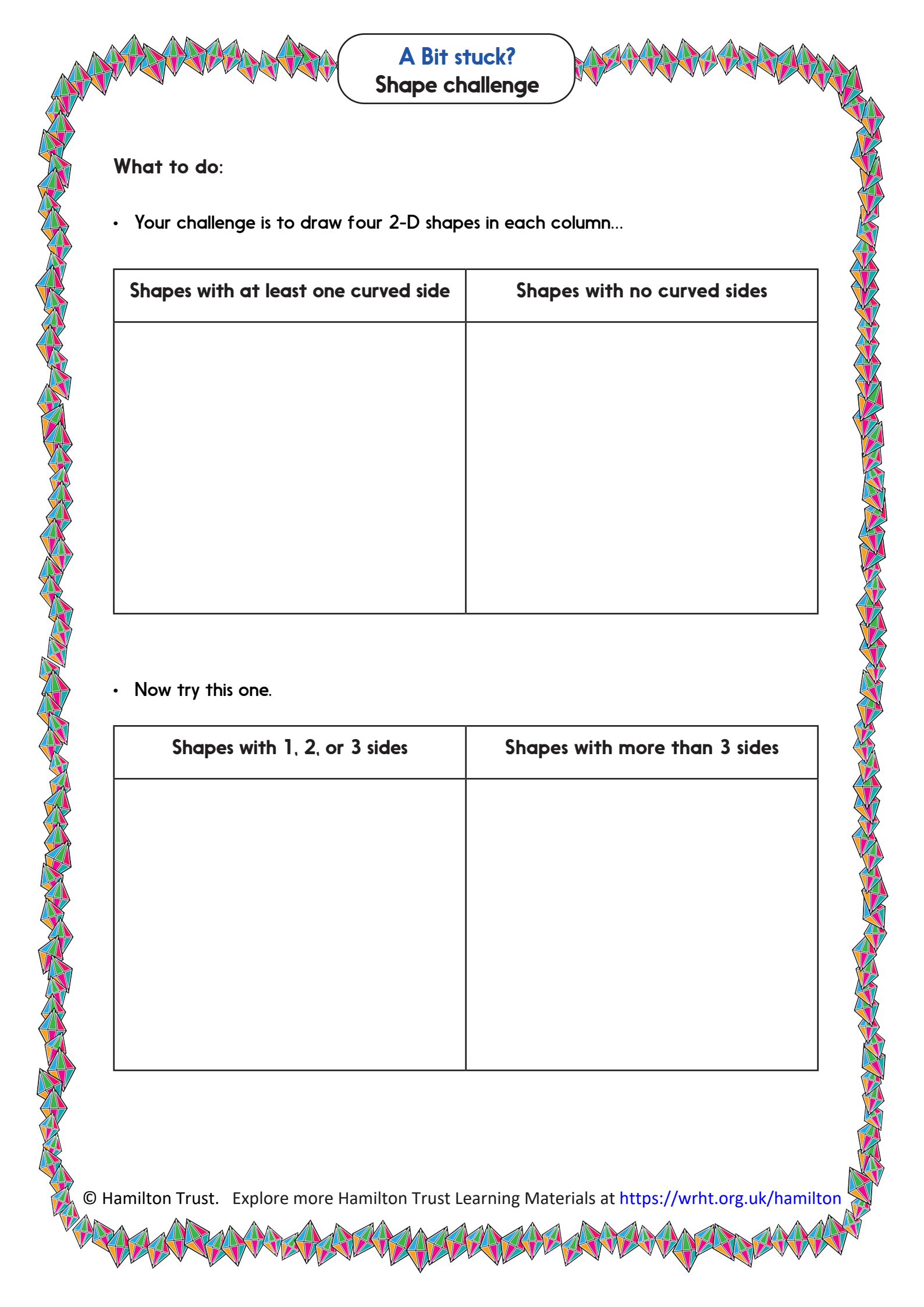
Practice Sheet Answers

Sorting shapes on a Carroll diagram (Mild)

	<i>Fewer than 5 sides</i>	<i>5 or more sides</i>
All sides equal length		   
Sides not equal lengths	  	 

Sorting shapes on a Carroll diagram (Hot)

	<i>Fewer than 5 sides</i>	<i>5 or more sides</i>
Symmetrical	 	     
Not symmetrical	 	



A Bit stuck? Shape challenge

What to do:

- Your challenge is to draw four 2-D shapes in each column...

Shapes with at least one curved side	Shapes with no curved sides

- Now try this one.

Shapes with 1, 2, or 3 sides	Shapes with more than 3 sides

Check your understanding: Questions

Sort the names of your friends and family into this Carroll diagram.
Make sure you have at least two in each category.

	More than 5 letters	5 or fewer letters
Starts with a vowel		
Starts with a consonant		

Draw a Venn diagram with two overlapping sets.
Label one set *more than 4 sides* and label the other set *has at least one right angle*.
Draw at least two shapes in each space on your diagram, including **outside** both sets.

Answers on the next page

Check your understanding:

Answers

Sort the names of your friends and family into this Carroll diagram.

Make sure you have at least two in each category.

Some examples are below.

	More than 5 letters	5 or fewer letters
Starts with a vowel	Amelia Ingrid	Elvis Amy
Starts with a consonant	Samira Sinead	Harry Kofi

Draw a Venn diagram with two overlapping sets.

Label one set *more than 4 sides* and label the other set *has at least one right angle*.

Draw at least two shapes in each space on your diagram, including **outside** both sets.

Check children's drawings and ask them to explain their placements of shapes. Some children find it difficult to 'juggle' 2 different attributes, particularly a negative one. A square or right-angled triangle, for example, would be included in the set that has at least one right angle but not in the set with more than 4 sides.

Shapes outside both sets have 3 or 4 sides and no right angles – e.g. scalene triangles or kites.