What's special?

Focus of activity: Identify and describe properties of triangles; Use these to sort them.

Working together: conceptual understanding

- Sit chn in pairs. *Draw a triangle, but try to make it look different to your partner's.*
- Look at each pair of triangles in turn, asking chn to say what is different about their two triangles. Draw out vocabulary such as symmetrical, isosceles, right angle, obtuse, acute, scalene, equilateral.
- Show chn a sheet of triangles (see child instructions). Discuss each in turn, discuss what is special about it.
- Use a right angle measurer to find if it has a right angle, or an obtuse angle (greater than a right angle) or acute angle (less than a right angle).
- Model using a ruler to see if two or three sides are the same length. Remind chn that a triangle with two sides of the same length is called an <u>isosceles</u> triangle. If all three are the same length it is an <u>equilateral</u> triangle.
- *Even a triangle which isn't right-angled, isosceles or equilateral, in fact doesn't look like it has anything special about it, has a special name: <u>scalene</u>. Just like people, every triangle has something special about it!*
- Some chn may not recognise the equilateral triangle, because it is not sat on one side, and the isosceles triangle because it isn't sat on one side or the right-angled triangle because the right angle is at the top.

Up for a challenge?
Challenge chn to draw a scalene triangle - it isn't easy!

Now it's the children's turn:
- Chn work in pairs to sort the set of triangles using a Carroll diagram. They cut them out and stick in the correct place in the diagram.
- Go round the group and mark their work as they do sort the triangles. Make sure that they recognise different triangles regardless of their orientations.

S-t-r-e-t-c-h:
If chn cope well, ask them to think of another way to sort the triangles.

Things to remember

Remember that triangles can face different directions, so we need to look at what make it special to determine what sort to triangle it is. They can also have more than one special feature! Ask chn to draw an isosceles triangle which is also a right-angled triangle!

You may want to add something that has emerged from the activity. This may refer to misconceptions or mistakes made.

Resources	Outcomes
• Sets of triangles with different properties (see child instructions) • Right angle measurers • Rulers • Scissors • Glue sticks	1. Chn can identify and describe properties of triangles. 2. Chn can sort triangles according to their properties. 3. Chn begin to find their own way to sort triangles.

What's special?

Things you will need:
• A sheet of triangles
• Scissors
• Ruler
• Right angle measurer
• A Carroll diagram sheet
• Glue stick
• A pencil

What to do:

• Cut out the triangles.

• Take one and discuss where it belongs in the diagram.

• Once you are agreed, stick it in the correct place on the sheet.

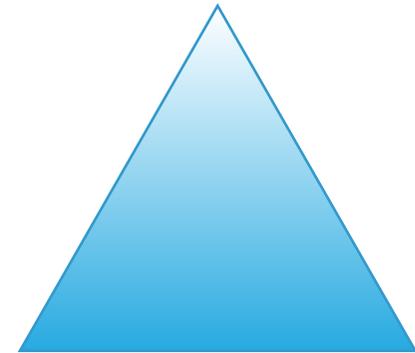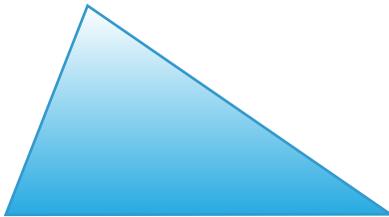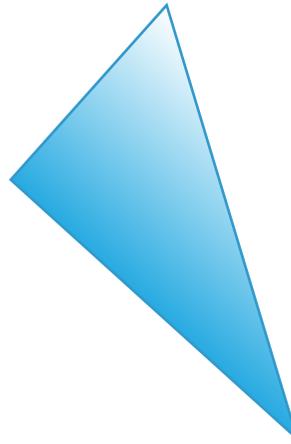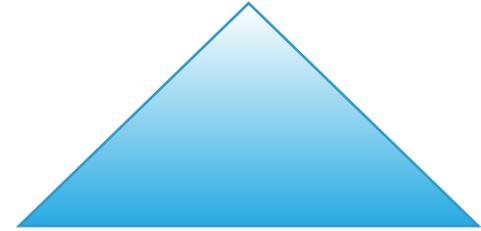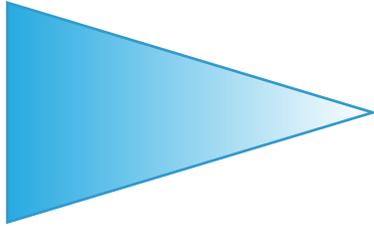• Repeat with each triangle, one at a time.
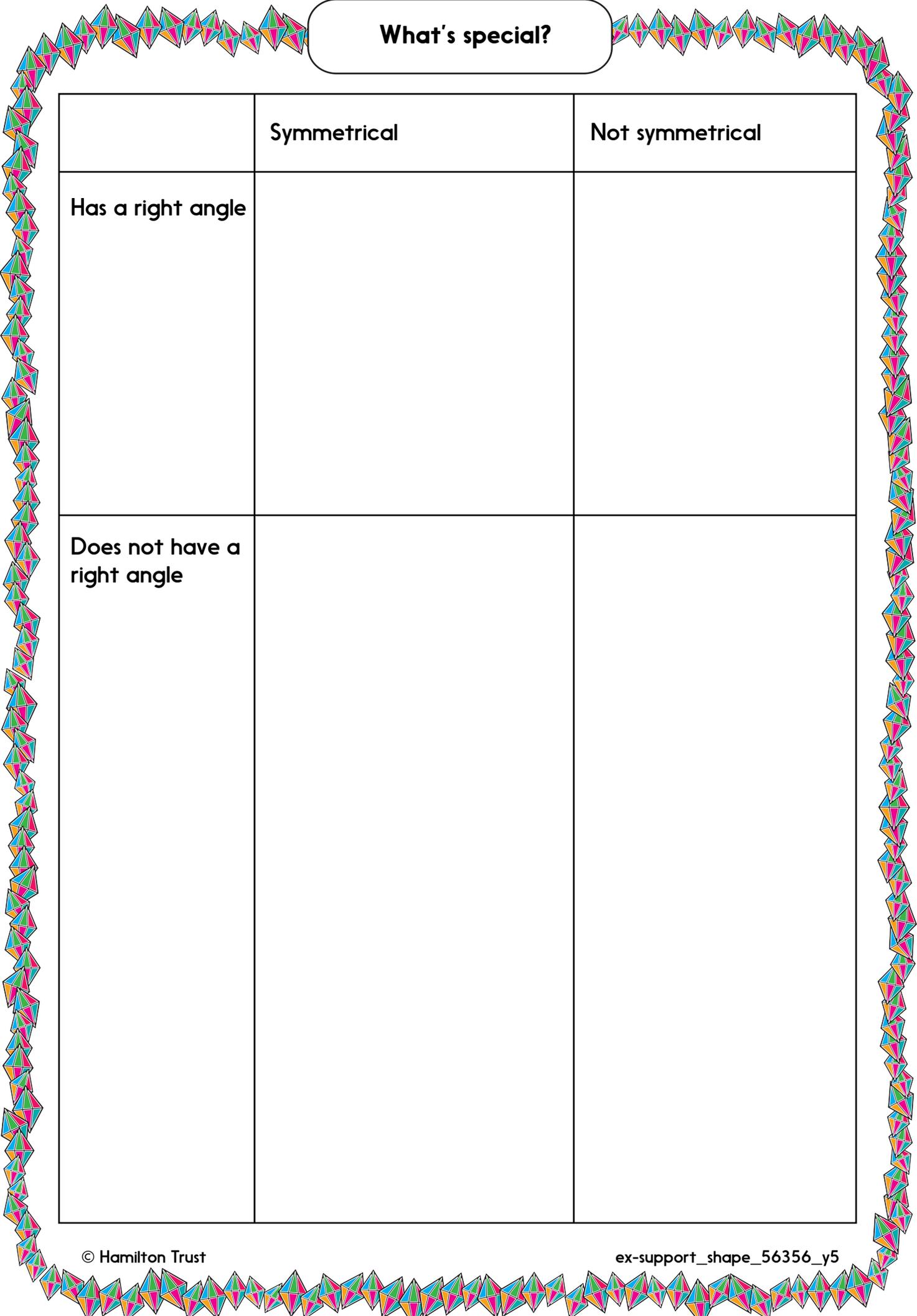
S-t-r-e-t-c-h:
Choose a different way to sort the triangles.

Learning outcomes:
• I can identify and describe properties of triangles.
• I can sort triangles according to their properties.
• I am beginning to find my own way to sort triangles.

What's special?

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	Symmetrical	Not symmetrical
Has a right angle		
Does not have a right angle		