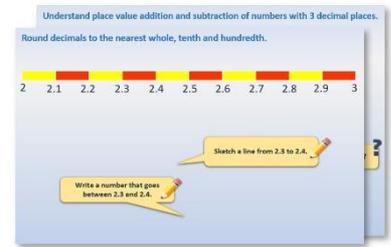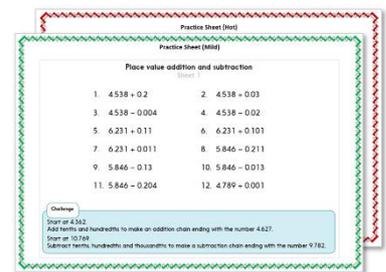# Week 11, Day 5
2-D shapes (2)

Each day covers one maths topic. It should take you about 1 hour or just a little more.
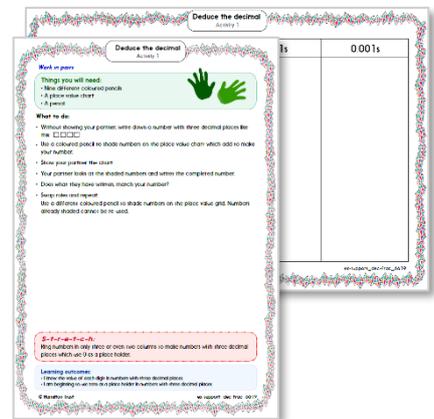
1. Start by reading through the **Learning Reminders**.
   They come from our *PowerPoint* slides.

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

Describe and name 2-D shapes.
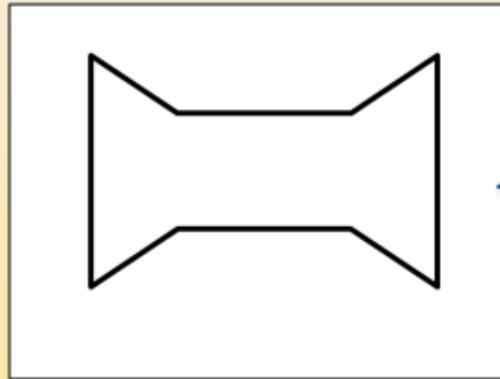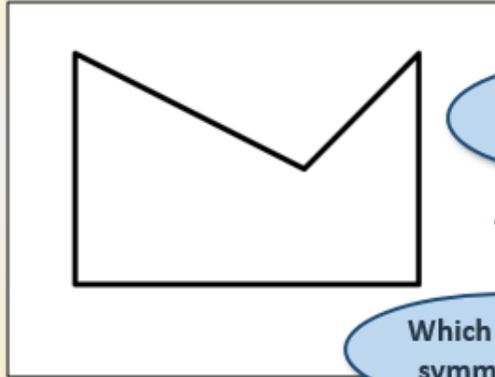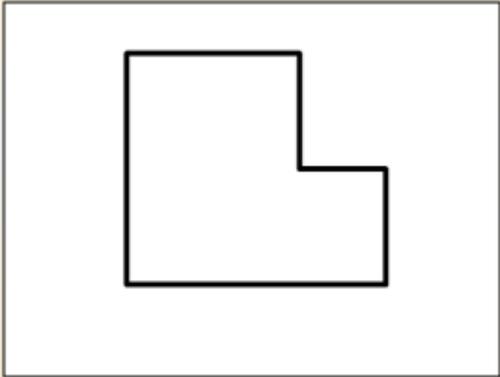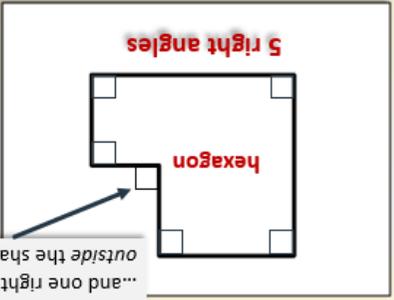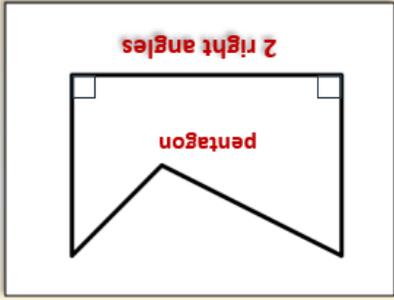

Name these shapes.

Which shape is symmetrical?

Which ones have 'square corners'?

Remember that these are called **right angles**.

Count the **right angles** in each shape.

symmetrical octagon
0 right angles

pentagon
2 right angles

hexagon
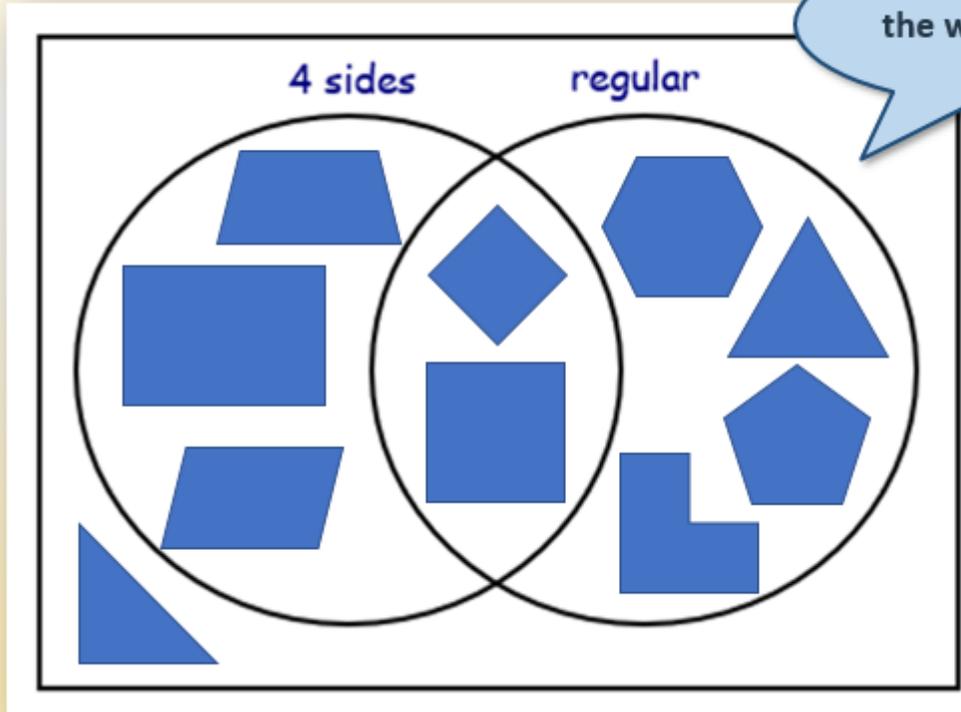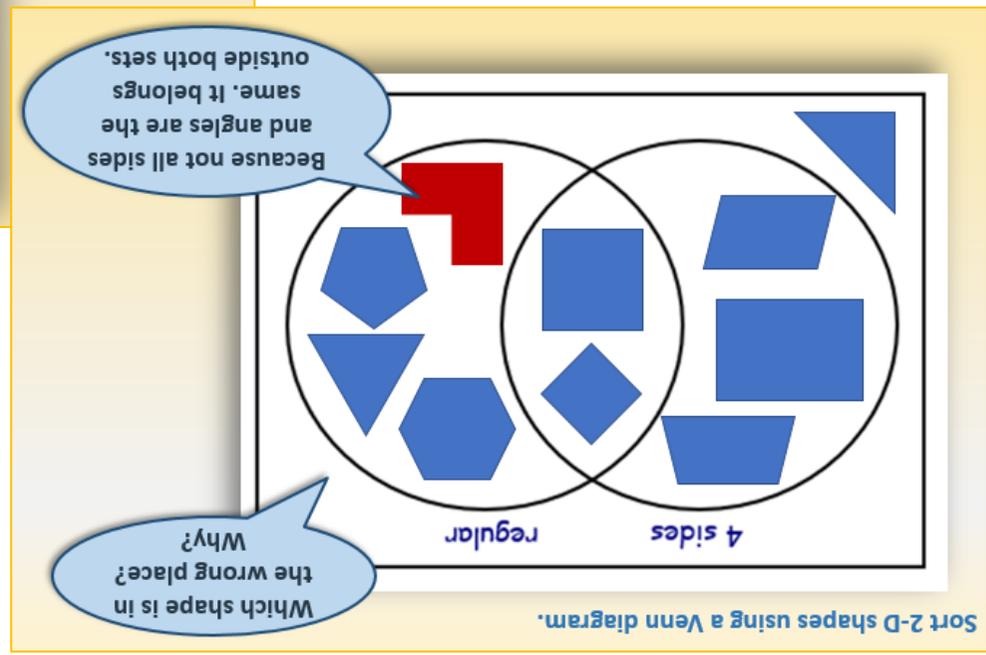5 right angles

...and one right angle here, *outside* the shape.

Learning Reminders

Sort 2-D shapes using a Venn diagram.

4 sides   regular

Which shape is in the wrong place? Why?

Sort 2-D shapes using a Venn diagram.

4 sides   regular

Which shape is in the wrong place? Why?

Because not all sides and angles are the same. It belongs outside both sets.

Practice Sheet Mild
Sorting 2-D shapes

Draw at least one shape in each set.
Can you draw one shape in the overlap and one shape outside both sets?

Has 4 sides   Is a square

Has at least 1 right angle   Is a triangle
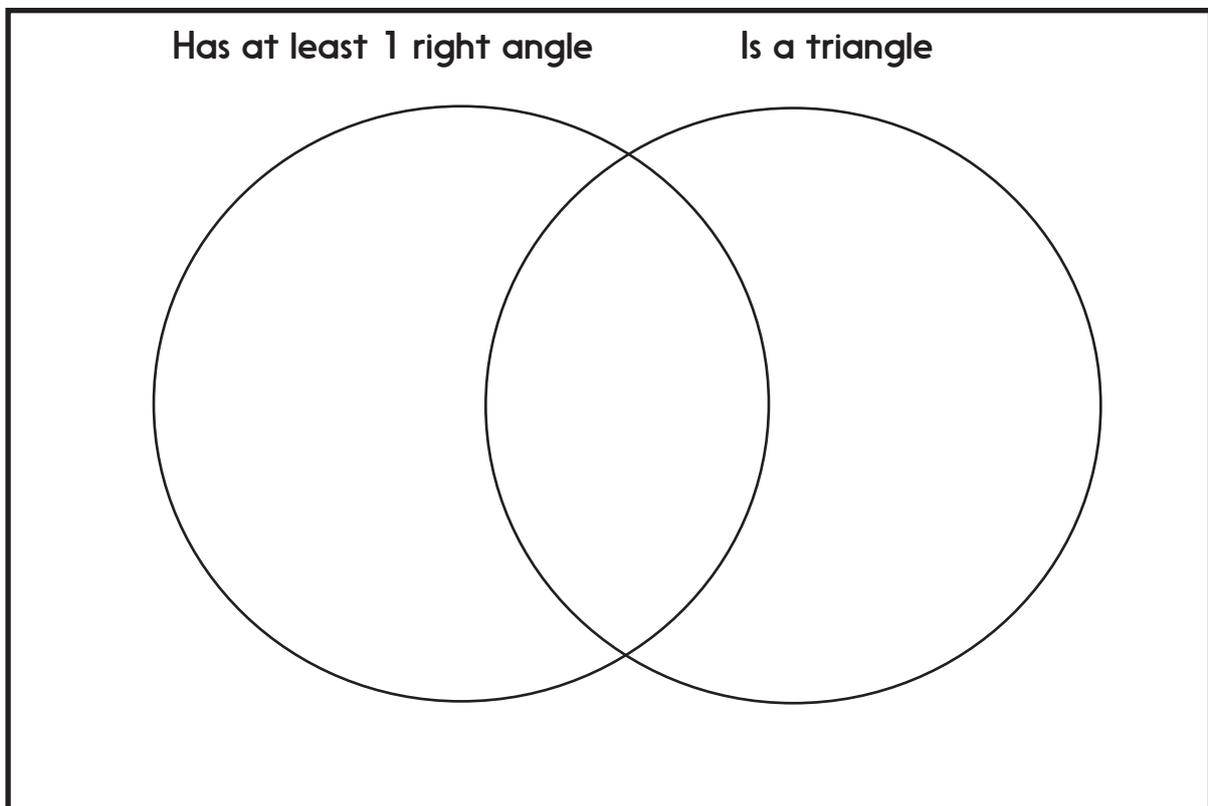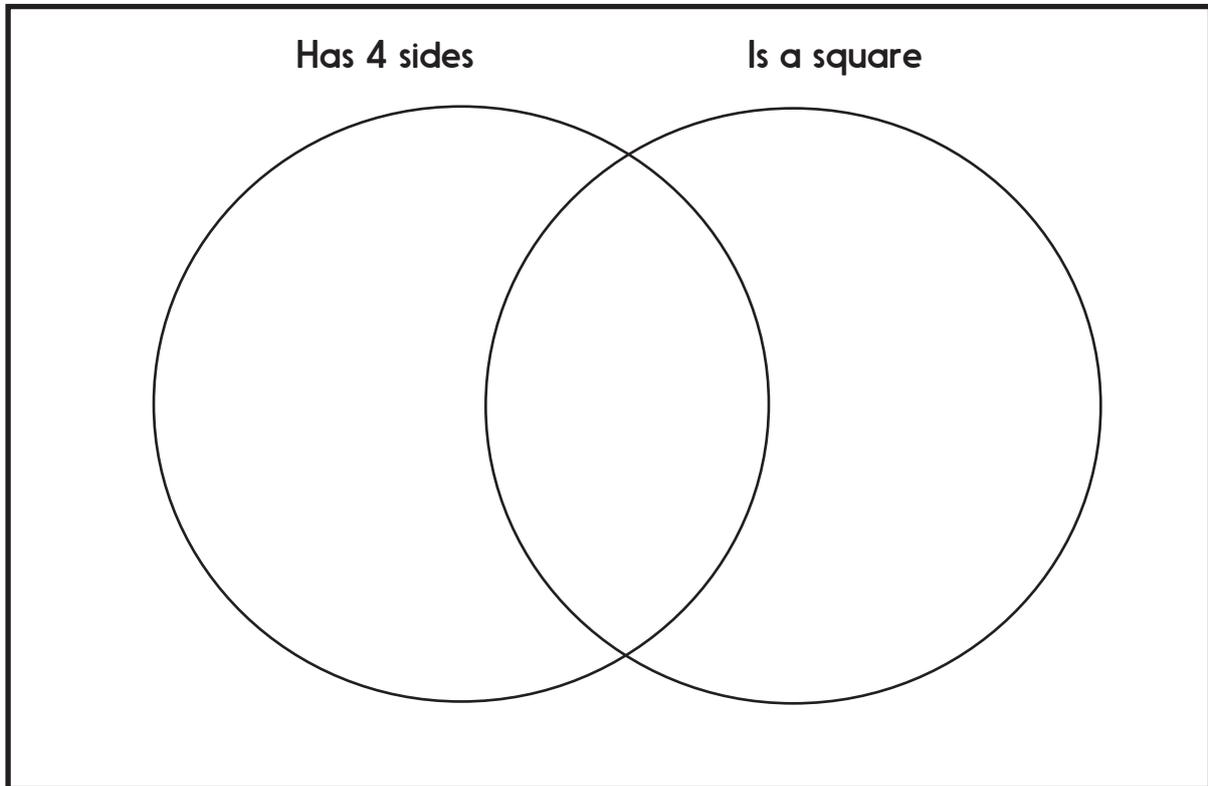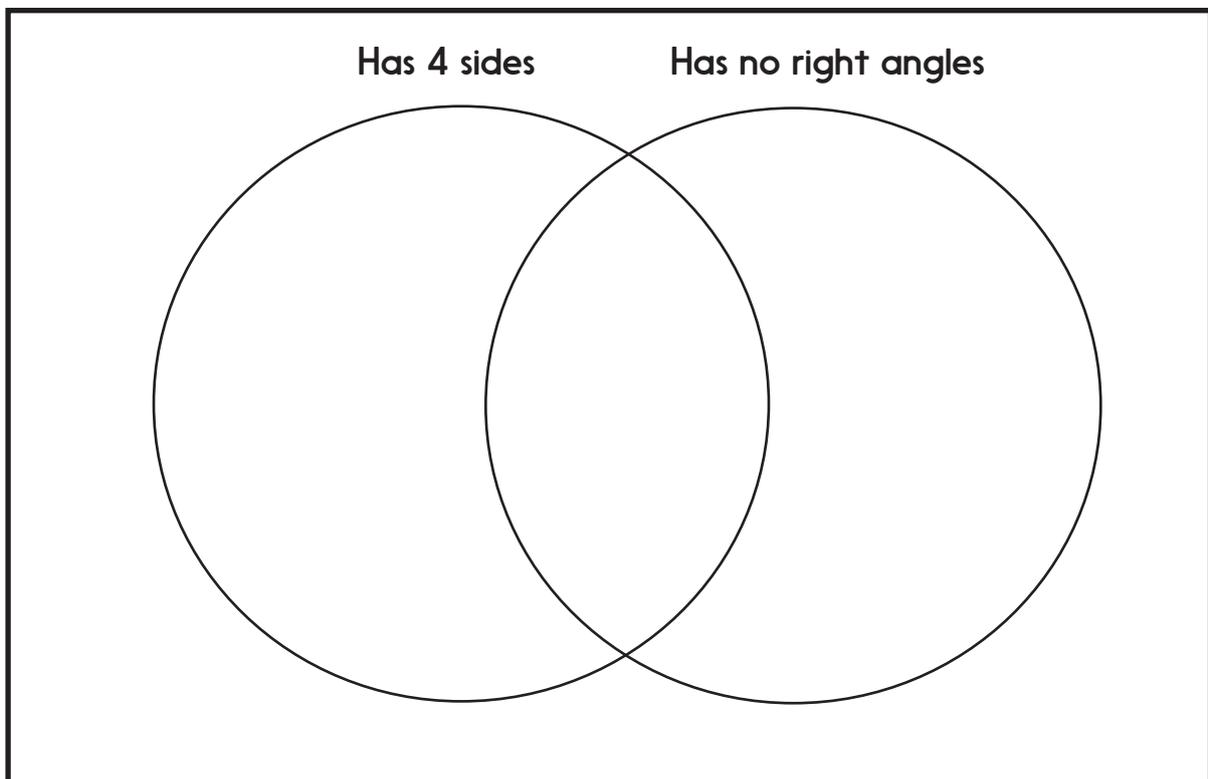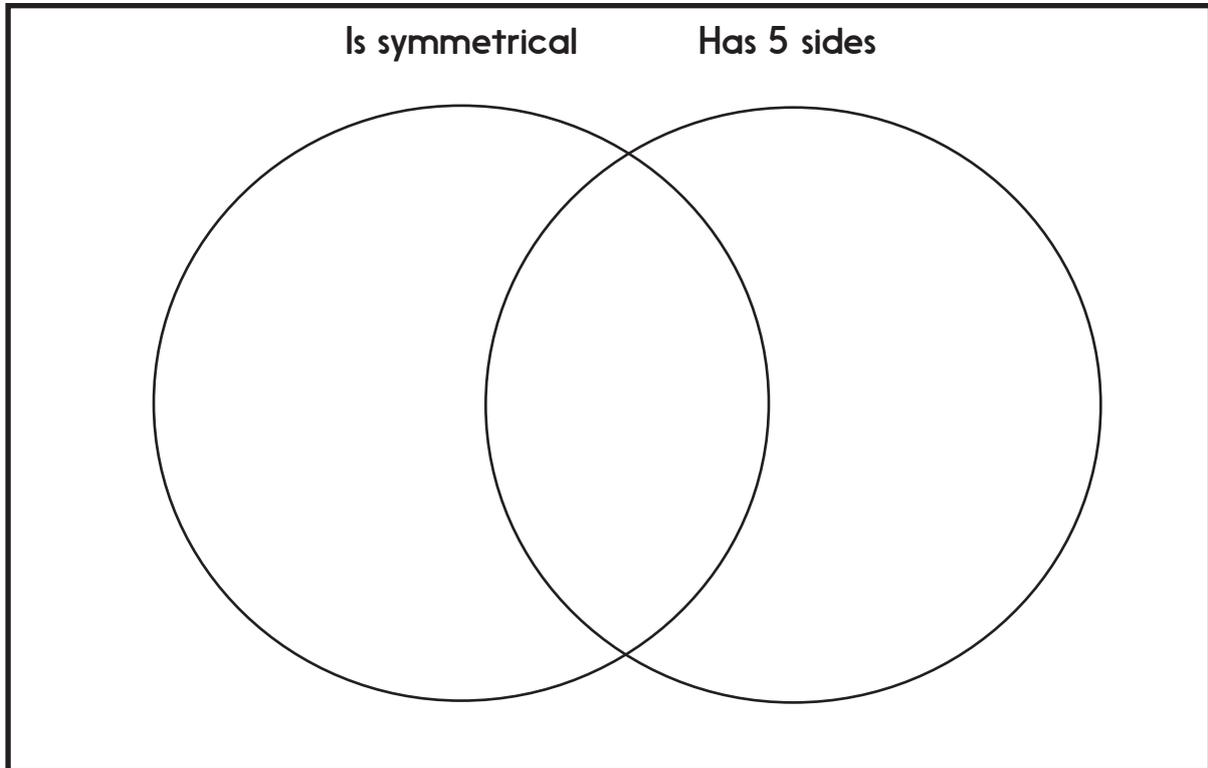
Practice Sheet Hot
Sorting 2-D shapes

Draw at least one shape in each set.
Can you draw one shape in the overlap and one shape outside both sets?

Is symmetrical   Has 5 sides

Has 4 sides   Has no right angles

Practice Sheet Answers

Sorting 2-D shapes (mild)
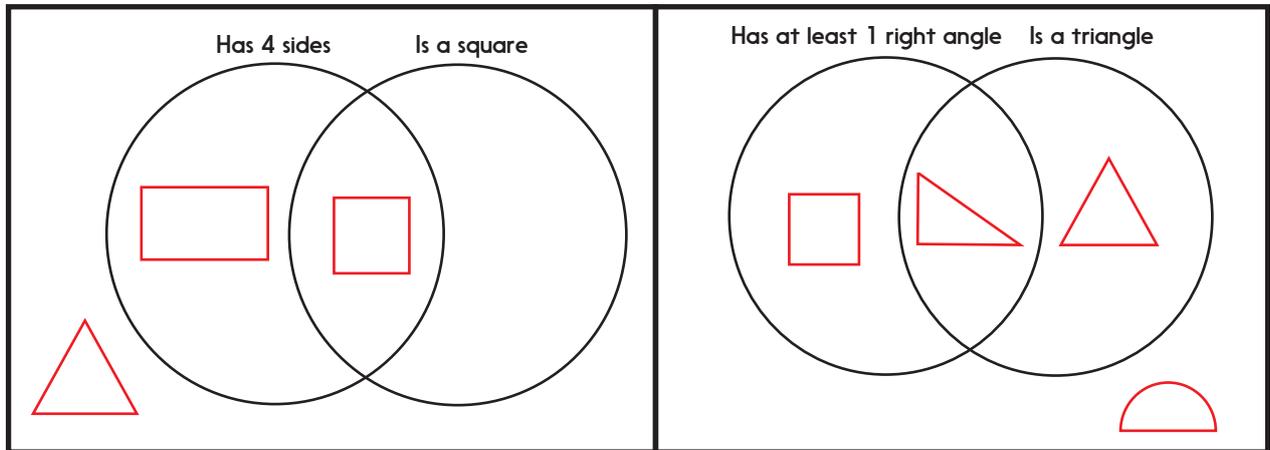
Sorting 2-D shapes (hot)

A Bit Stuck?
Who am I? Shapes

Can you create clues for each shape? The first one has been done for you:

I have 4 sides.
I have 4 right angles.
2 of my sides are shorter than the other 2.
I have 2 lines of symmetry.

A Bit Stuck?
Who am I? Shapes continued

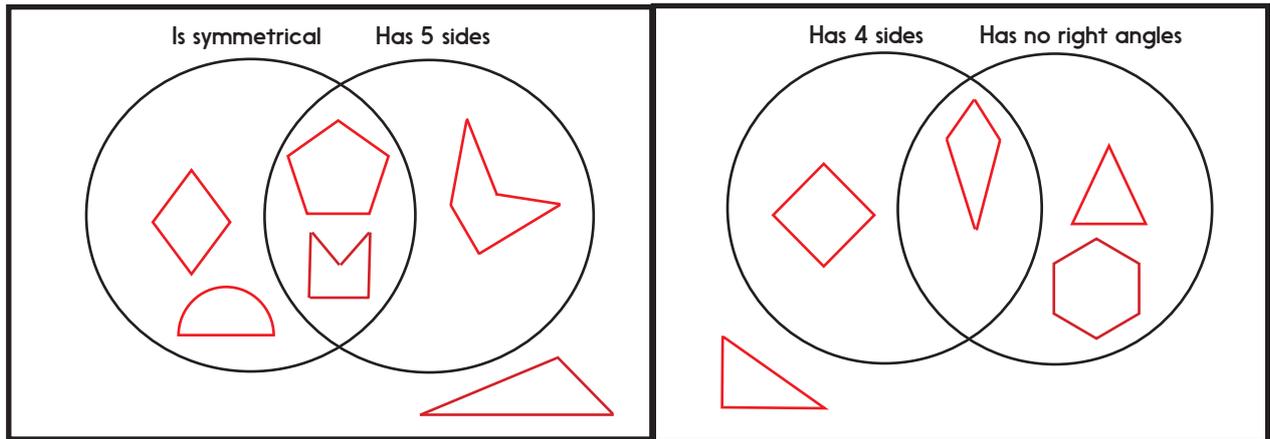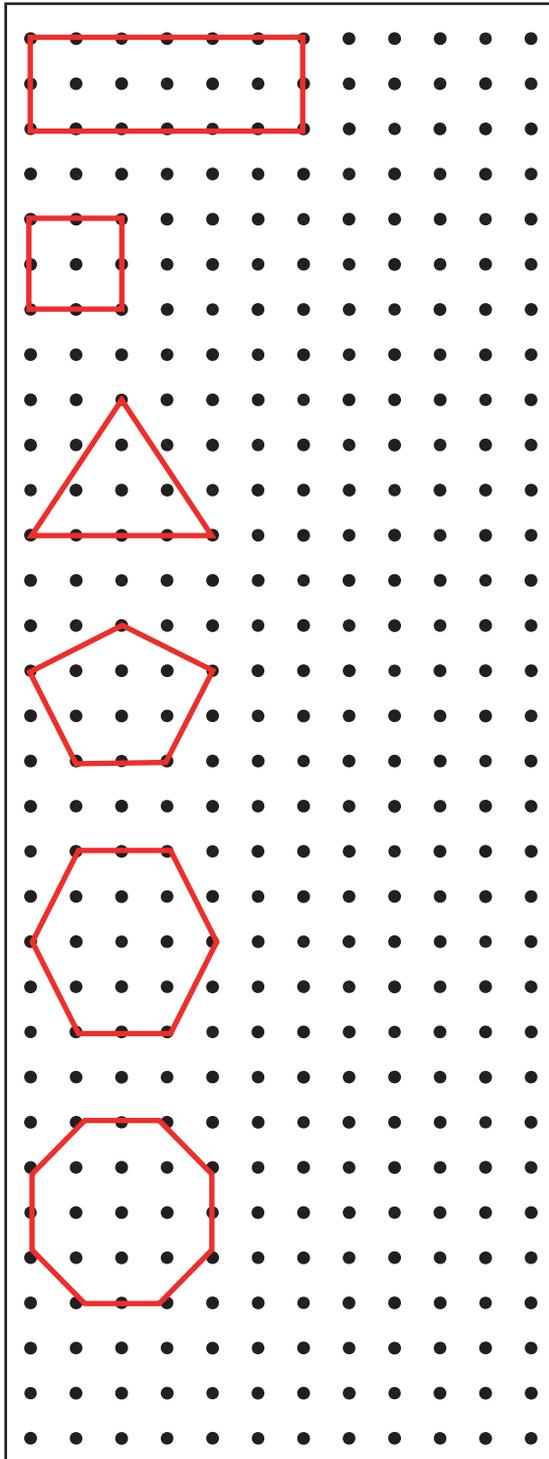- After you have written clues, fold the sheet of paper so the shapes are on one side and the clues on the other.

- Choose a shape but keep it secret.

- Hold the paper so that a partner can see the shapes, but only you can see the clues.

- Read the clues for your chosen shape, pausing after each clue to allow your partner to have a guess.

- How many clues does it take for your partner to work out which shape you chose?!

- How could you make it harder/ easier for them?

- Repeat with other shapes.

Who am I? Shapes

Children are not expected to include all of these points in their descriptions. They will also use their own words to describe each feature. Encourage them to use the appropriate vocabulary through your feedback.

I have 4 sides.
I have 4 right angles.
2 of my sides are shorter than the other 2.
I have 2 lines of symmetry.

I have 4 sides.
I have 4 right angles.
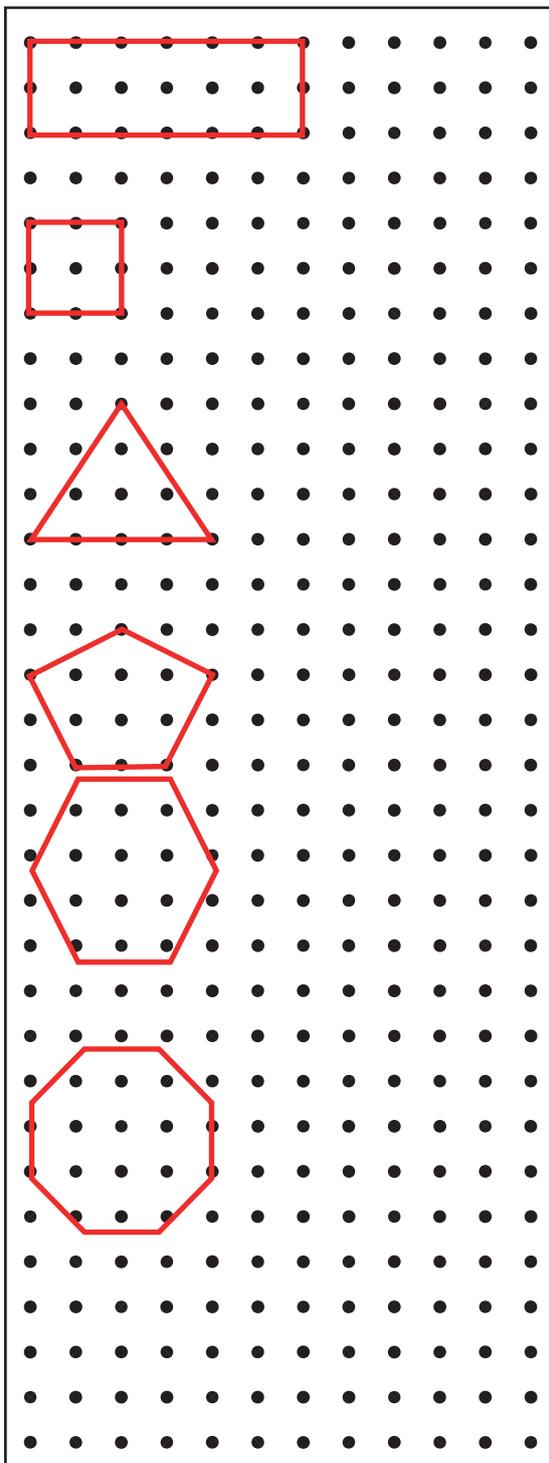All my sides are the same ength.
I have 4 lines of symmetry.

I have 3 sides.
I have 3 corners.
Two of my sides are the same length.
I have 1 line of symmetry.

I have 5 sides.
2 pairs of sides have equal length.
I have 1 line of symmetry.

I have 6 sides.
4 sides have equal length.
The other two sides are equal.
I have 6 corners.
I have 2 lines of symmetry.

I have 8 sides.
I have 8 corners.
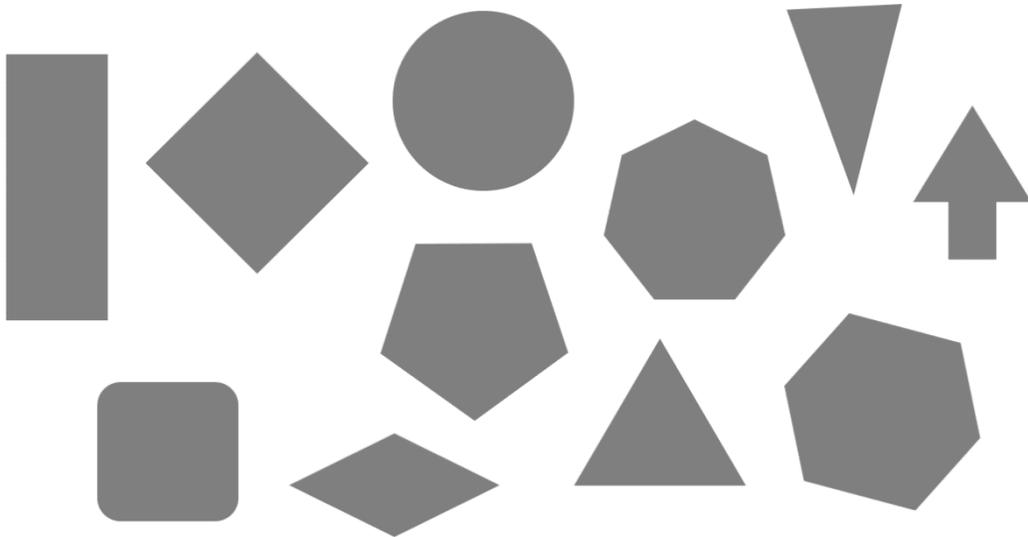I have 4 lines of symmetry.
I have no right angles.

Check your understanding
Questions

Can you draw a…

- 4-sided shape with exactly 2 right angles?

- Hexagon with every side a different length?

- Regular octagon?

Draw a ring around any regular polygons:
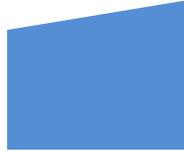
Answers on next page

Can you draw a…

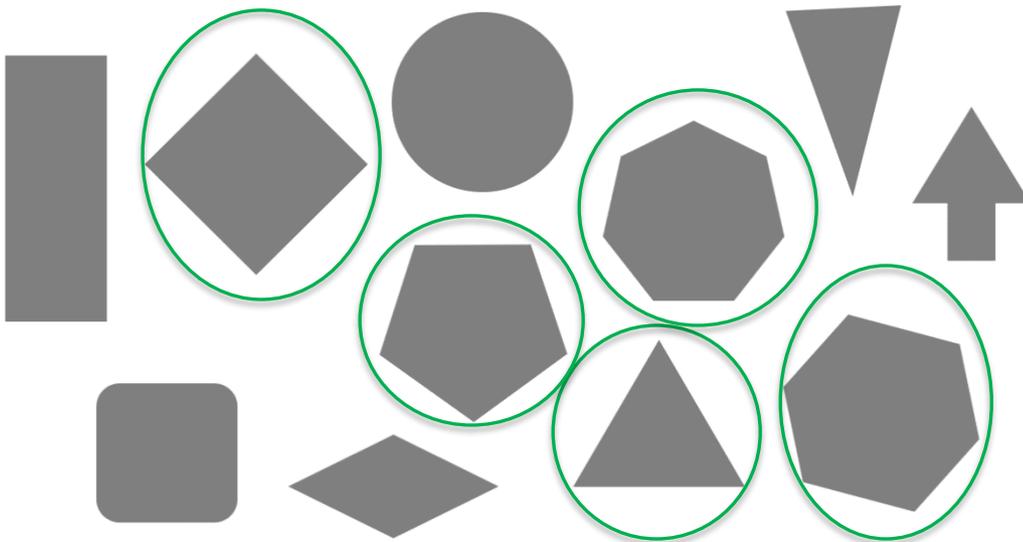- 4-sided shape with exactly 2 right angles?
  Yes, various possibilities, e.g.

- Hexagon with every side a different length?
  Yes, various possibilities, check.

- Regular octagon?
  Yes, all sides and angles should be equal.

Draw a ring around any regular polygons:

Note that a circle and an oblong are NOT regular polygons. A circle because it does not have straight sides and an oblong because the sides are not all the same length. Another misconception is to think that shapes with symmetry – e.g. the isosceles triangle – are regular polygons.