Steppingstone activity

LO: To identify a quadrilateral

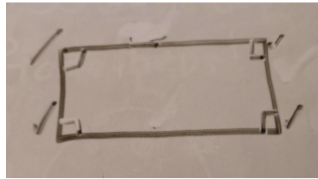**Success Criteria:**

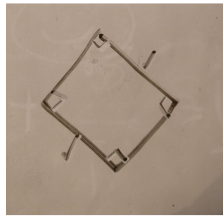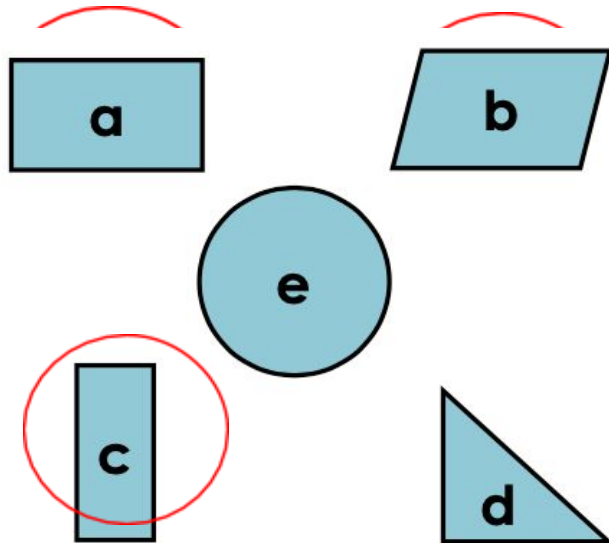| |
|---|
| 1. Look at your shapes |
| 2. Does it have 4 sides? |
| 3. Does it have right angles? |
| 4. Does it have parallel sides? |

Model
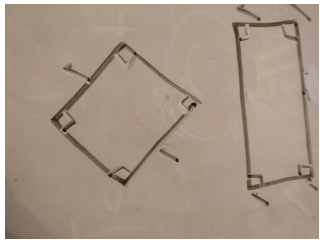
1.   2.   3.

3. Circle the quadrilaterals

a

b

e

c

d

1. This shape has **4** sides. It has **0** right angles.

2. This shape has **4** sides. It has **4** right angles.

Year 4 Maths

Lesson 04.06.20

LO: To identify a quadrilateral

Success Criteria:

1. **Look at your shapes**
2. **Does it have 4 sides?**
3. **Does it have right angles?**
4. **Does it have parallel sides?**

Model:

1.   2.   3.

Parallelogram   Rectangle   Rhombus

Square   Trapezium (UK)   Kite
              Trapezoid (US)
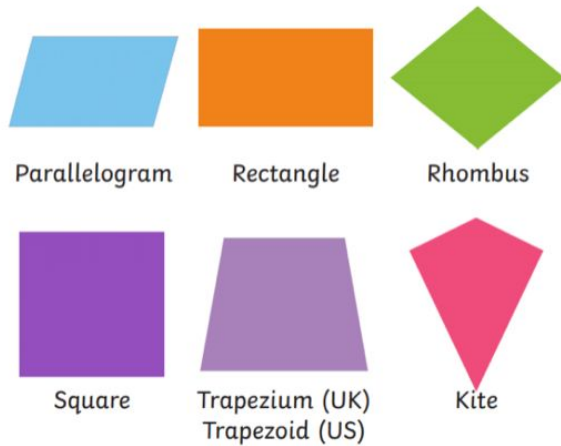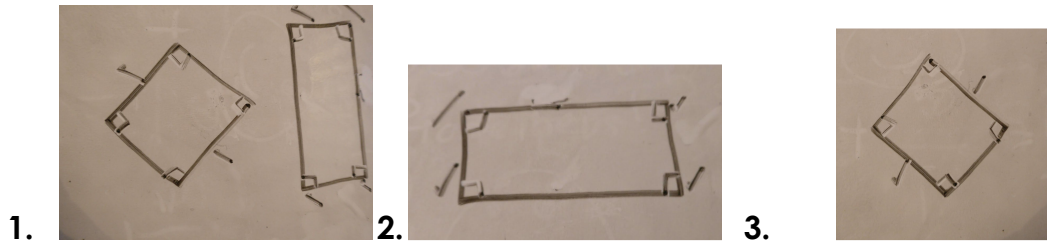
Year 4 Maths Main activity

Complete at least 2 columns, more if you can!

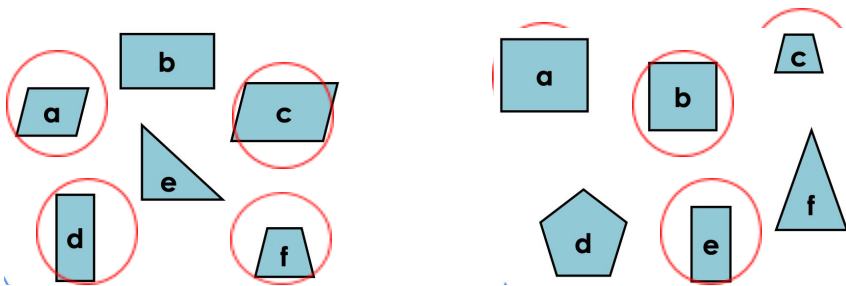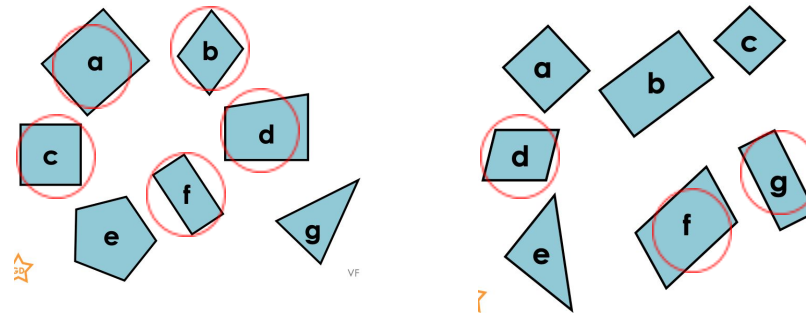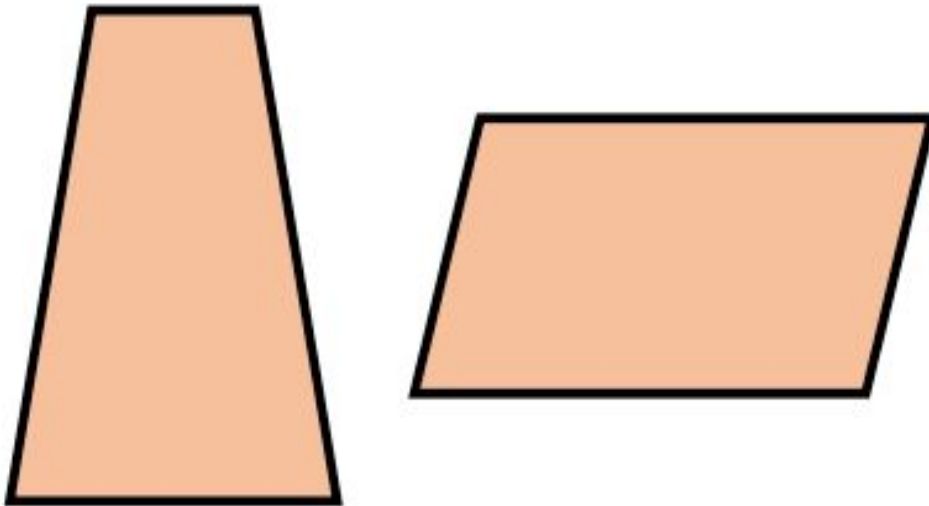| Task 1	Task 2
Practice: 1. **Fill in the blanks** **This shape has 4 sides. It has 0 right angles. It has 2 sets of parallel sides.** 2. **Circle the quadrilaterals** 3. **Draw the shape using the description below.** *The shape has:* ● ● *No right angles* *2 pairs of parallel lines* **This shape is Rhombus or parallelogram**	**Practice:** 1. **Fill in the blanks** **This shape has 2 pairs of equal length sides. It has 0 right angles. It has 2 pairs of parallel sides.** 2. **Circle the quadrilaterals** **Draw the shape using the description below.** ● 1 pair of equal sides ● 1 pair of parallel lines (unequal in length) ● No right angles **This shape is Trapezium**

Task 3

Reasoning
Explain your answers.

7a. What is the same about these two shapes? What is different?

9a. Sophie thinks that the shape matches her statement. Is she correct? Explain your answer.

This shape is a regular quadrilateral.

7a. Various answers, for example:
Same: 4 sides; no right angles.
Different: amount of pairs of parallel sides; length of sides.

9a. Sophie is incorrect as a regular quadrilateral must have all sides and angles equal and a rectangle does not have all sides equal.

Task 4

Problem solving

1. Robert is trying to design a robot using only quadrilaterals.

Here is the criteria for his design:

> The robot must include at least 5 different types of quadrilaterals.
>
> The arms of the robot must have 2 sets of parallel lines.
>
> The total design must not use more than 20 different quadrilaterals.

Investigate which designs would work. How many different designs can you create?

Various possible answers, for example: