1) Name and identify the properties of these quadrilaterals:

Name: ***parallelogram***

Pairs of equal length sides: ***2***

Pairs of parallel sides: ***2***

Number of right angles: ***0***

Name: ***rectangle***

Pairs of equal length sides: ***2***

Pairs of parallel sides: ***2***

Number of right angles: ***4***

Name: ***trapezium***

Pairs of equal length sides: ***1***

Pairs of parallel sides: ***1***

Number of right angles: ***0***

2) Draw a quadrilateral with these properties:

- two pairs of equal length sides
- no right angles
- not a parallelogram

What could your quadrilateral be?
kite

What quadrilaterals could you definitely not draw from this description?
square, rectangle, trapezium, parallelogram

1) What do any of these shapes have in common?
Answers may include:
All have four sides and four vertices; the square and rectangle have two pairs of parallel sides and four right angles; the rectangle and kite have two pairs of equal length sides.

2) What is different about them?
Answers may include:
The kite only has one pair of equal angles; the trapezium has two pairs of equal angles; only two of the shapes have right angles.

3) Use isometric (dotty) paper to investigate how many quadrilaterals you can draw which have:

a) only one set of parallel lines;
Children may draw trapeziums.

b) no right angles;
Children may draw parallelograms, trapeziums, kites or any irregular quadrilateral fitting the description.

c) all sides of equal length.
Children may draw a square or a rhombus.

1) Bridie says:

> I can draw a quadrilateral with only two right angles and three sides of equal length.

Find out if she is correct by drawing or making quadrilaterals to see if any fit her description.

Is she correct?
No

Can you explain why?
Accept answers which show that if a quadrilateral has only two right angles, it cannot have three sides of equal length.

1) Name and identify the properties of these quadrilaterals:

Name:_____

Pairs of equal length sides:_____

Pairs of parallel sides:_____

Number of right angles:_____

Name:_____

Pairs of equal length sides:_____

Pairs of parallel sides:_____

Number of right angles:_____

Name:_____

Pairs of equal length sides:_____

Pairs of parallel sides:_____

Number of right angles:_____

2) Draw a quadrilateral with these properties:

- two pairs of equal length sides
- no right angles
- not a parallelogram

What could your quadrilateral be?

_____

What quadrilaterals could you definitely not draw from this description?

_____

1) What do any of these shapes have in common?

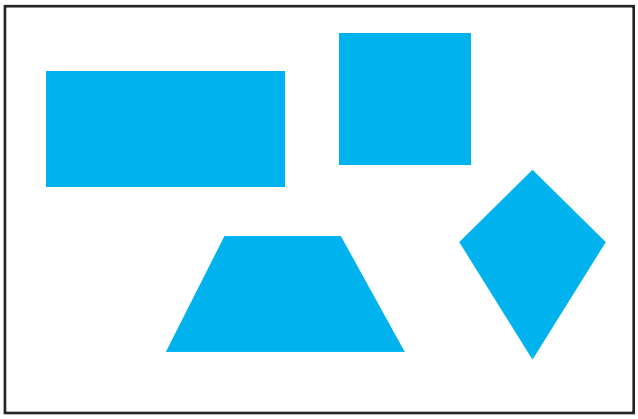
_____

_____

_____

What is different about them?

_____



2) Use isometric (dotty) paper to investigate how many quadrilaterals you can draw which have:

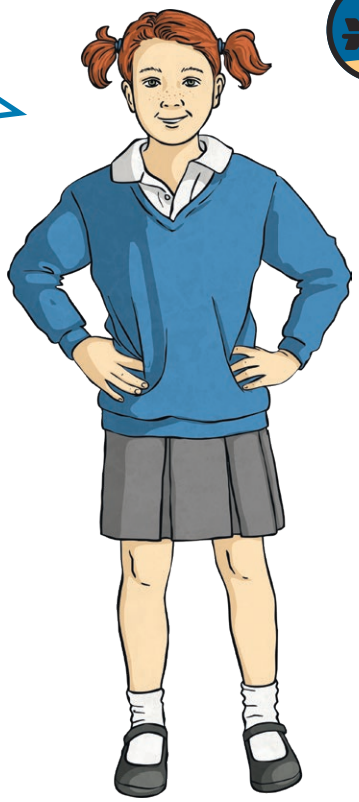
a) only one set of parallel lines;

b) no right angles;

c) all sides of equal length.

1) Bridie says:

I can draw a quadrilateral with only two right angles and three sides of equal length.



Find out if she is correct by drawing or making quadrilaterals to see if any fit her description.

Is she correct?_____

Can you explain why?

_____

_____


Diving into Mastery
Quadrilaterals

Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:


Diving


Deeper

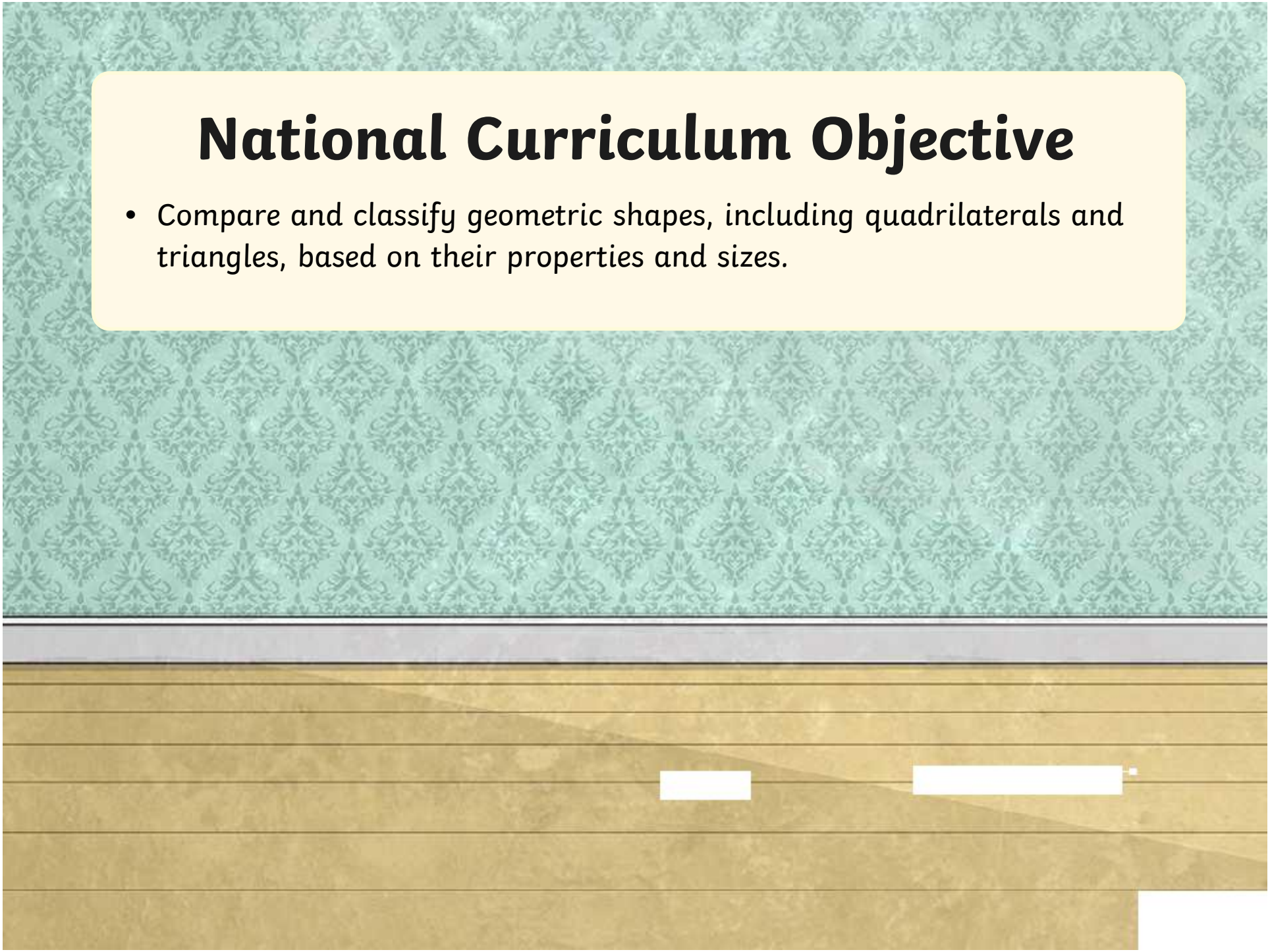

Deepest

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

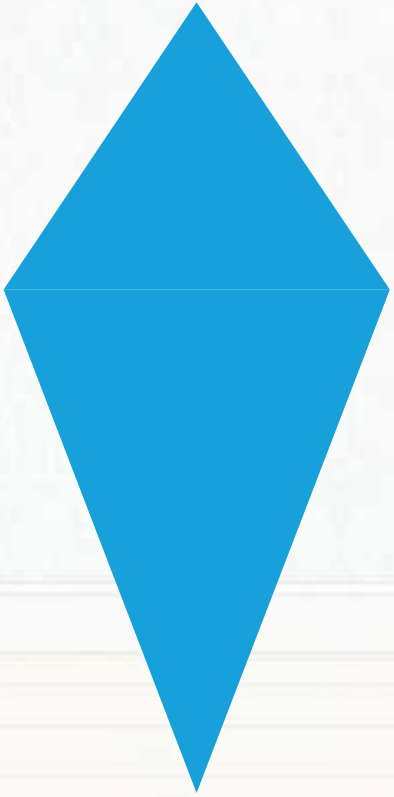
National Curriculum Objective

- Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes.



Quadrilaterals | **Diving**

Name and identify the properties of this quadrilateral:



Name:	*kite*
Pairs of equal sides:	2
Pairs of parallel sides:	0
Number of right angles:	0

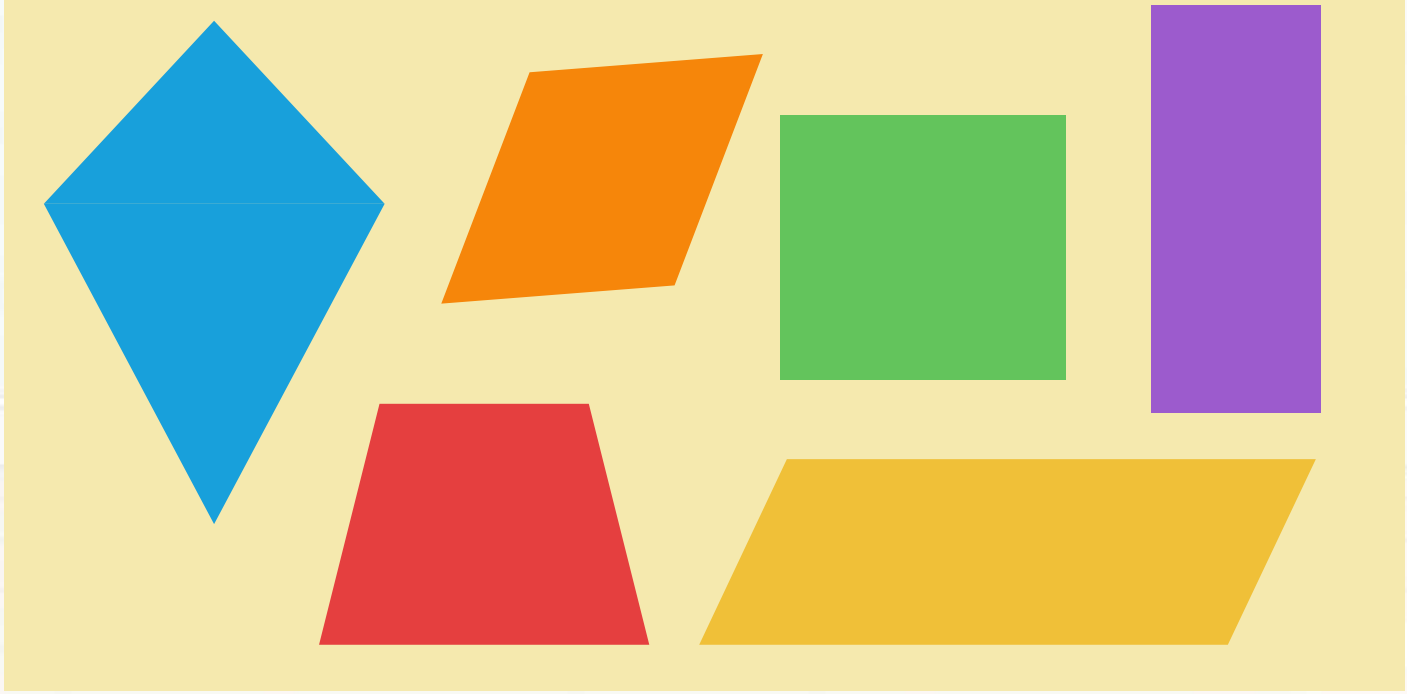
Quadrilaterals | **Diving**

Which quadrilateral:

- has 4 right angles;
- has 2 pairs of sides of equal length;
- is not a square?

Quadrilaterals **Deeper**

What do these shapes have in common?
What is different about them?



Quadrilaterals **Deeper**

How many quadrilaterals can you think of which have two pairs of equal sides?

Quadrilaterals | **Deepest**

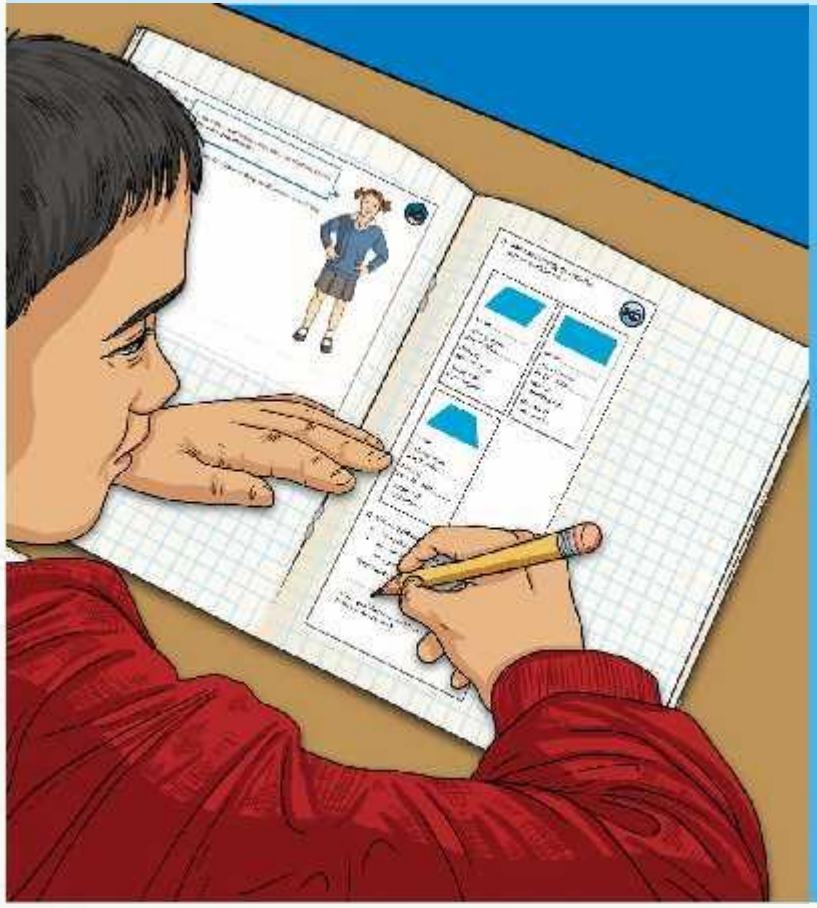
Maria says:

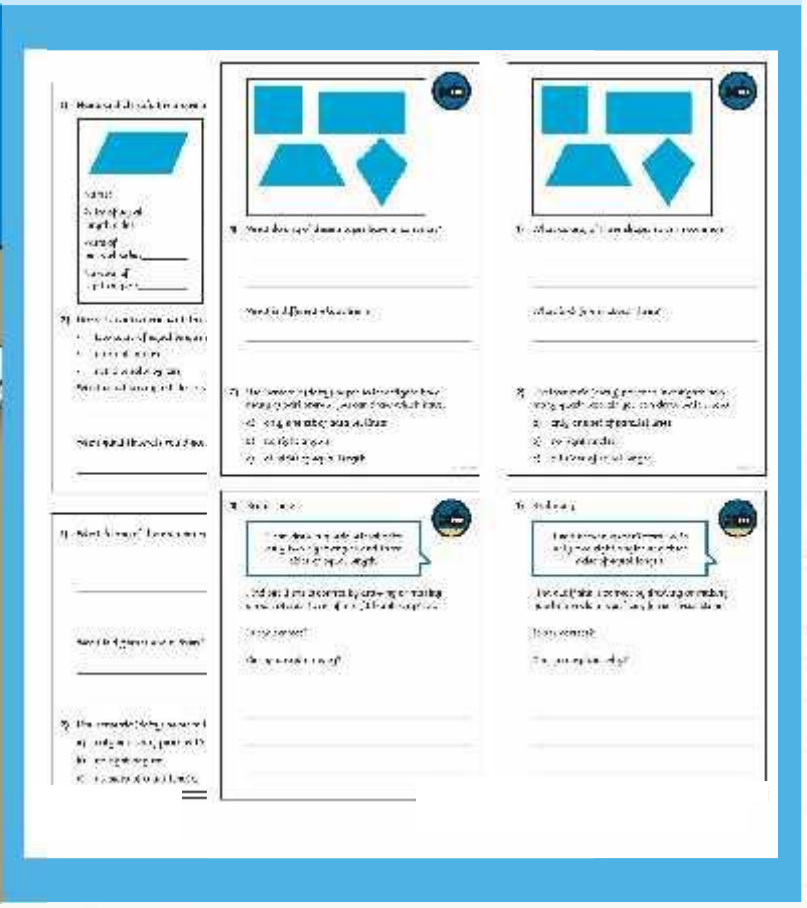
I can draw a quadrilateral with four equal length sides that is **not** a square.

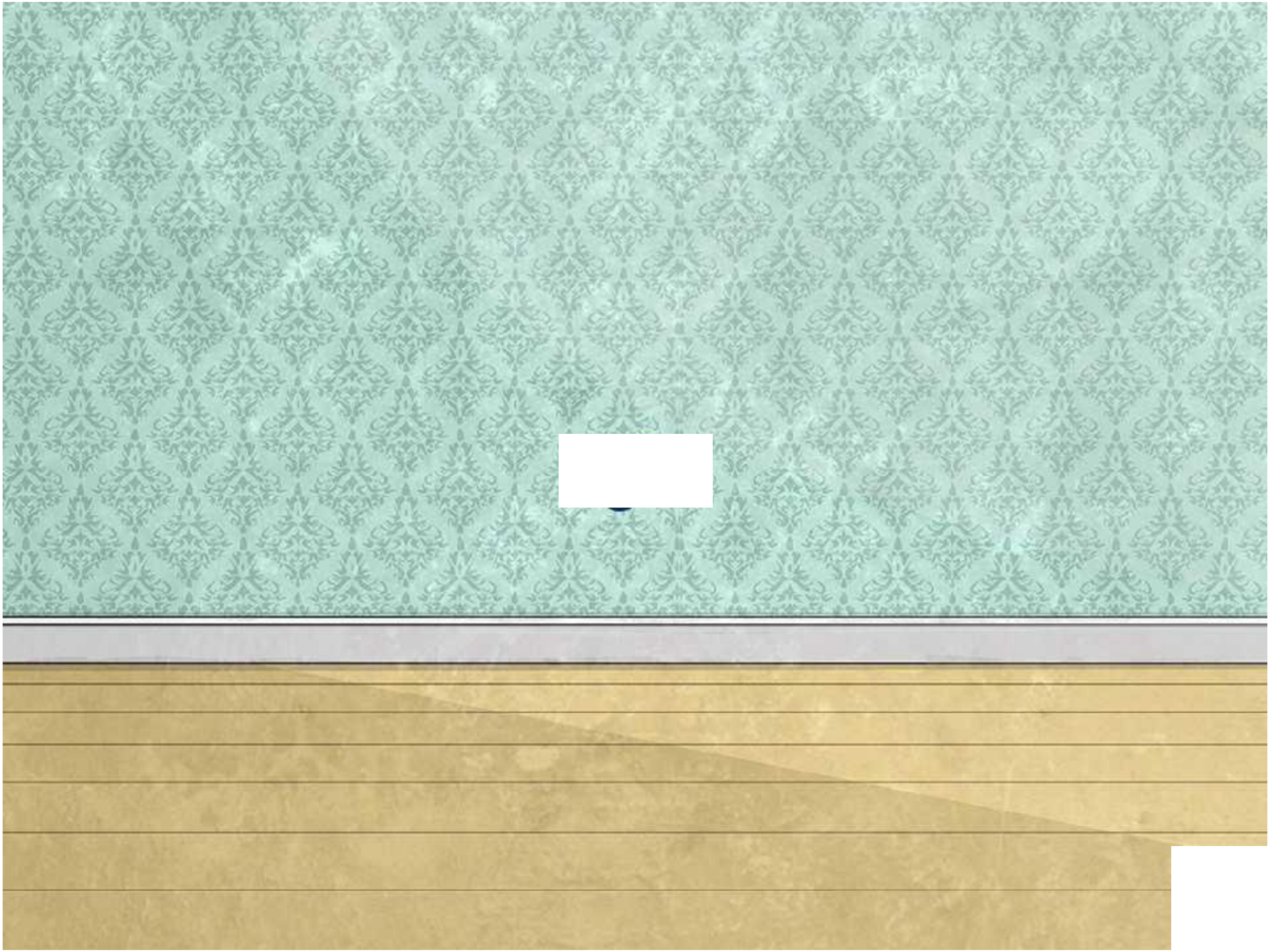
Is she correct?

Quadrilaterals

Dive in by completing your own activity!







1) For each of these quadrilaterals, write the name, number of equal sides, right angles and pairs of parallel sides.

a)  b)  c) 

2) Draw a quadrilateral with these properties:

- two pairs of equal length sides
- no right angles
- not a parallelogram

What could your quadrilateral be?

What quadrilaterals could you definitely not draw from this description?

1) What do any of these shapes have in common?

What is different about them?

2) Use isometric (dotty) paper to investigate how many quadrilaterals you can draw which have:

a) only one set of parallel lines;

b) no right angles;

c) all sides of equal length.

1) Bridie says:

> I can draw a quadrilateral with only two right angles and three sides of equal length.

Find out if she is correct by drawing or making quadrilaterals to see if any fit her description.

Is she correct?

Can you explain why?

1) For each of these quadrilaterals, write the name, number of equal sides, right angles and pairs of parallel sides.

a)  b)  c) 

2) Draw a quadrilateral with these properties:

- two pairs of equal length sides
- no right angles
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