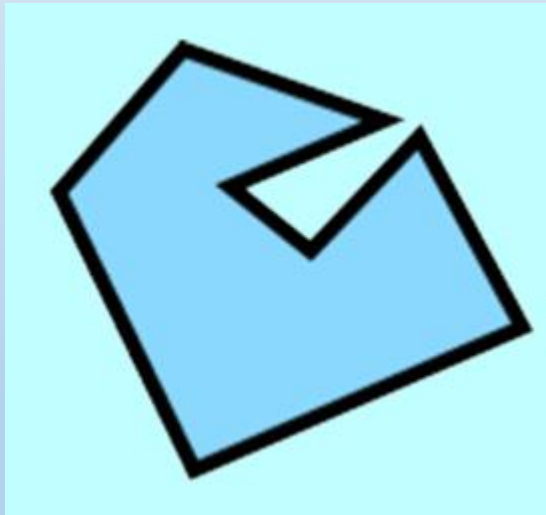# Maths – Friday 22nd January

WALT: Count vertices on 2D shapes

Retrieval practice:

Are all sides straight?
What can help you to count the sides accurately?
What shape is this?
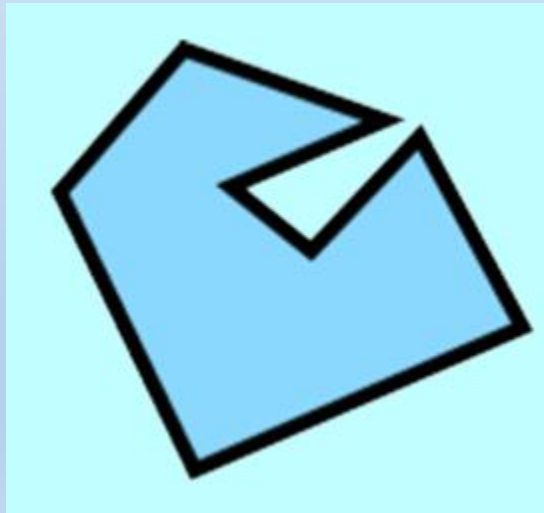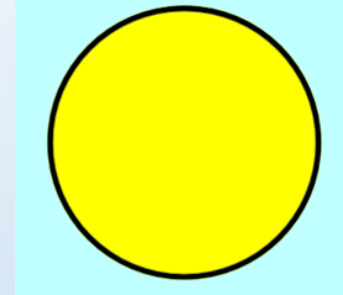
Retrieval practice:

Are all sides straight?
No. A circle is an example of a shape with a curved side.

What can help you to count the sides accurately?
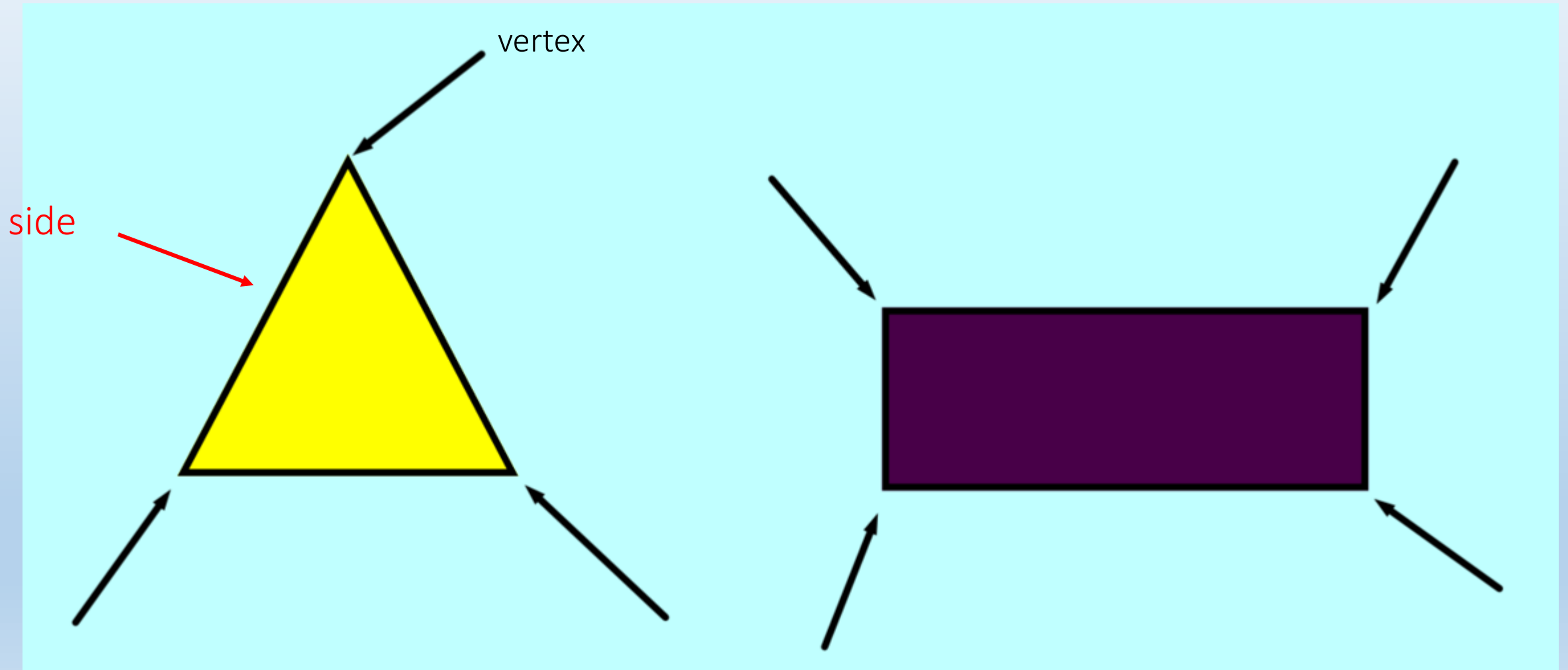Marking the sides as you count them.

What shape is this?
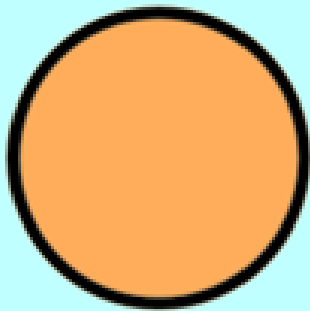An octagon because it has 8 sides. This is an irregular shape.

What are vertices?

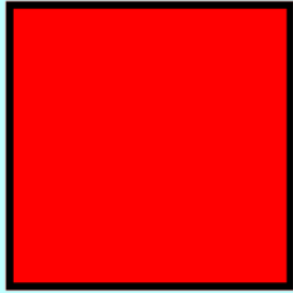A vertex is where 2 sides meet at a point. Often called a corner.

vertex

side

Can you think of a shape that would have no vertices?
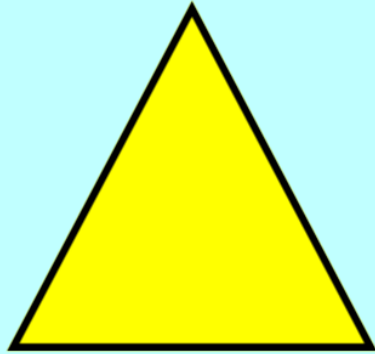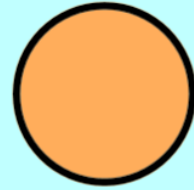
Can you think of a shape that would have no vertices?
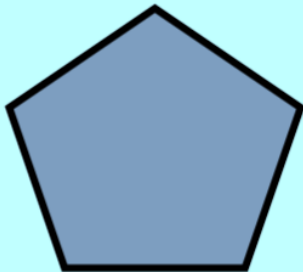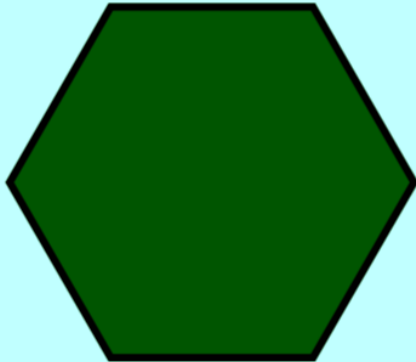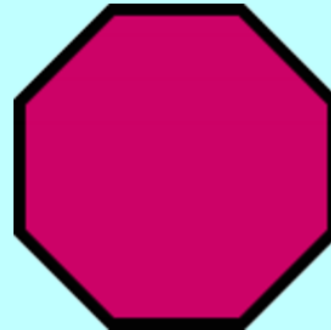
circle

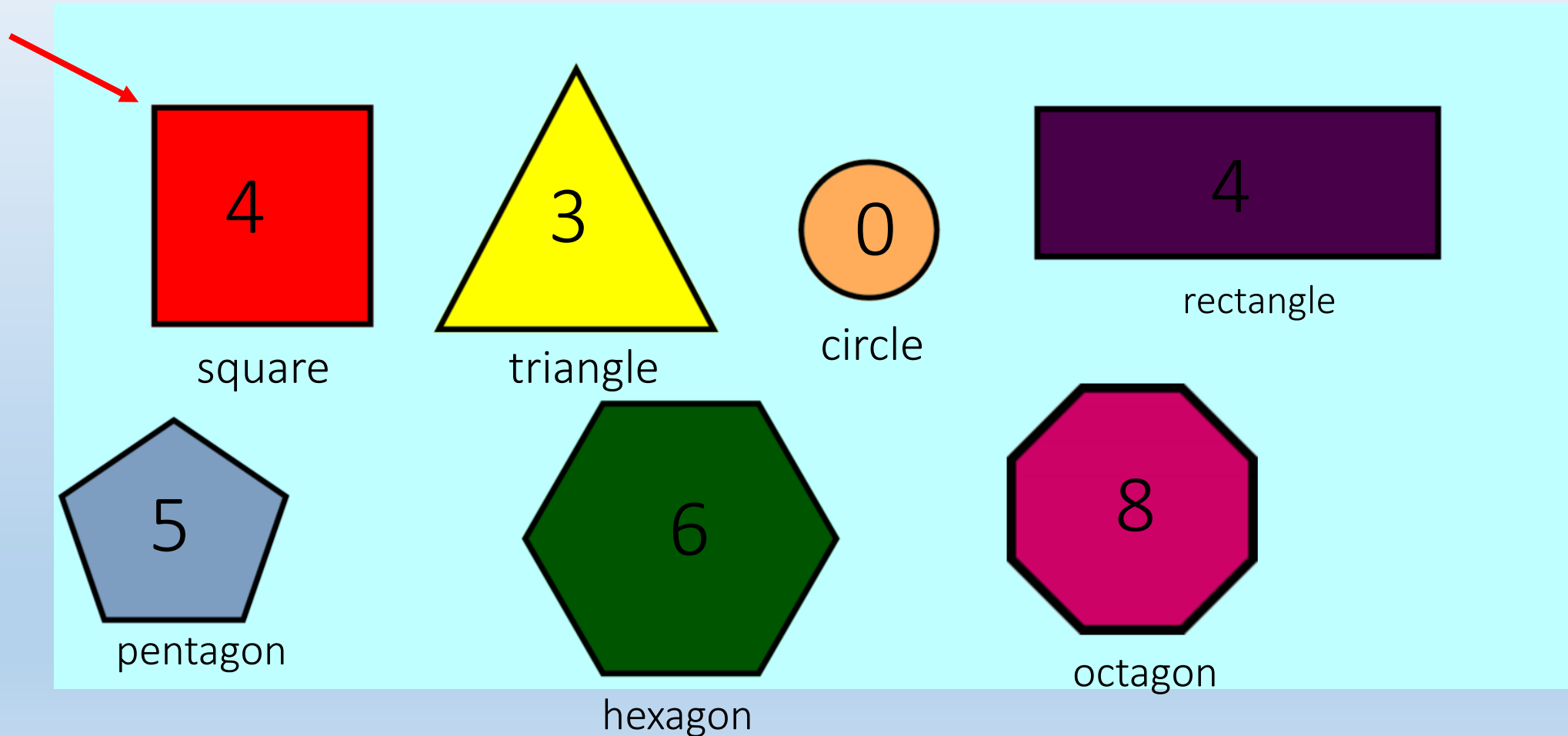# Properties: Vertices

square

triangle

circle

rectangle

pentagon

hexagon

octagon

Properties: Vertices

What do you notice about the number of sides and vertices?

4

square

3

triangle

0

circle

4

rectangle

5

pentagon

6

hexagon

8

octagon

One to discuss

Amir says:

My shape has half the number of vertices as an octagon.

What shape could he have?

One to discuss

Amir says:

My shape has half the number of vertices as an octagon.

What shape could he have?

Square
Rectangle

Your task today
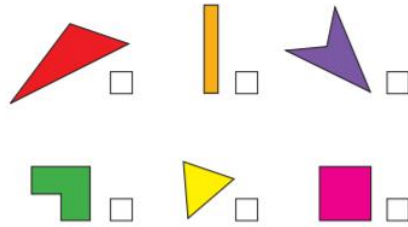
1 Complete the sentences to describe the shapes.

a)

A pentagon has ☐ vertices.

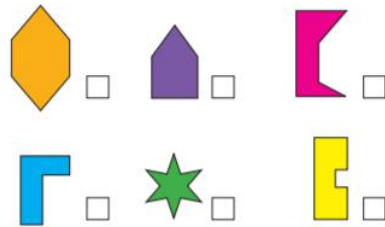b)

A triangle has ☐ vertices.

c)

A _____ has ☐ vertices.

d)

A _____ has ☐ vertices.

2 Tick the shapes with 4 vertices.
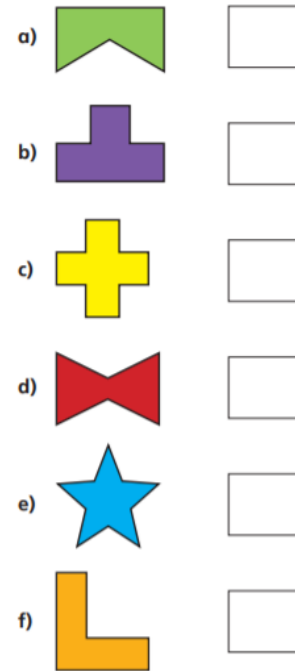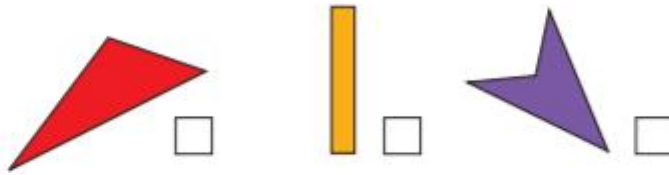
☐   ☐   ☐

☐   ☐   ☐

Compare answers with a partner.

3 Tick the shapes with 6 vertices.

☐   ☐   ☐

☐   ☐   ☐

Talk to a partner about your answers.

4 How many vertices does each shape have?

a) ☐

b) ☐

c) ☐

d) ☐

e) ☐

f) ☐

How did you count the vertices?

5 My shape has more vertices than a triangle, but fewer than a hexagon.

What shape could Ron have? _____

Compare answers with a partner.

6 Rosie is making a pattern out of shapes.

a) How many vertices are in each term of her pattern?

b) What do you notice?

c) How many vertices will the next term have?

d) Create your own pattern with shapes.

Count the number of vertices in each term.