

Year 4 maths 11.1.21

Recall:

Use the written method demonstrated last week

$$9 \text{ divided by } 3 =$$

$$44 \text{ divided by } 4 =$$

$$18 \text{ divided by } 6 =$$

**LO: I understand
what is meant by
area**

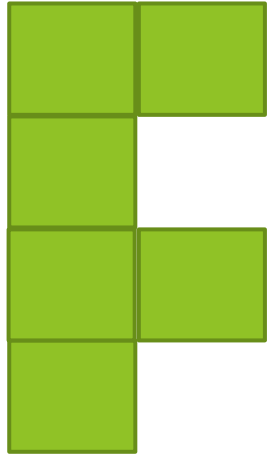
Guided practice

Which of the two shapes covers most surface?



How do you know?

What about these 2 shapes?



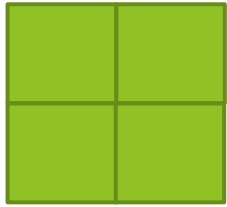
Whilst the shapes looked different, they both used the same amount of squares to be created. This means that they both covered the same amount of surface. We call this the **area of a shape.**

Intelligent Practice:

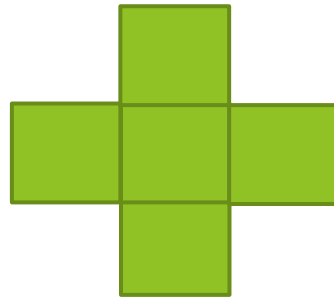
1) What is the surface area of these shapes in squares?



a)



b)



c



2) Which 2 shapes have the same surface area?

3) Which shape has the smallest surface area?



Answers

1) $A = 4$ $B = 5$ $C = 5$

2) B and C

3) A



This is a square sticky note.



Estimate how many sticky notes you need to make these shapes?





Answers:

Blue = 2 sticky notes

Peach = 4 sticky notes

Green = 3 sticky notes

Yellow = 3 sticky notes

Pink = 4 sticky notes



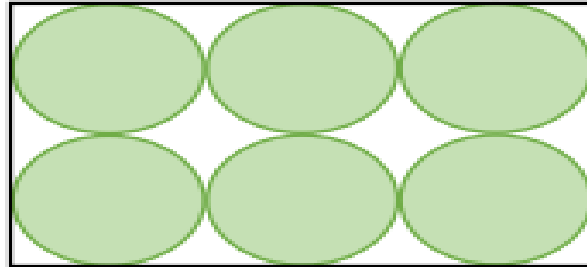
If possible, find something square like a sticky note or cup mat and use it to estimate the surface area of some objects in the classroom, or your home if working at home. Write your estimates in the table below.

Object name	Estimate of surface area

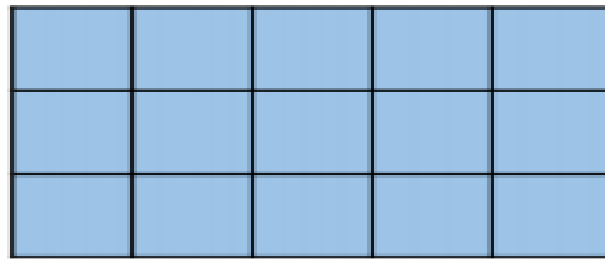
Dive deeper 1:

Teddy and Eva are measuring the area of the same rectangle.

Teddy uses circles to find the area.



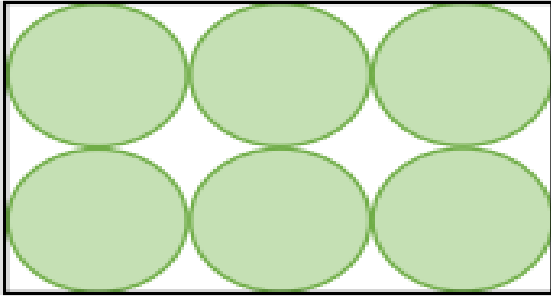
Eva uses squares to find the area.



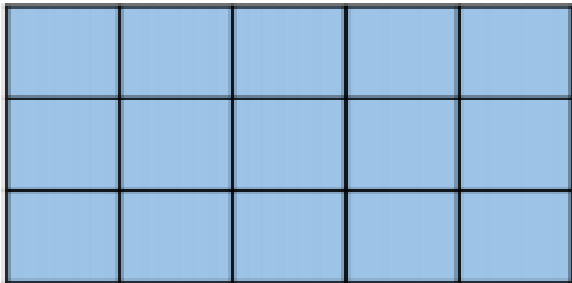
Whose method do you think is more reliable?
Explain why.

Teddy and Eva are measuring the area of the same rectangle.

Teddy uses circles to find the area.



Eva uses squares to find the area.



Whose method do you think is more reliable?

Explain why.

Possible answer:

Eva's method is more reliable than Teddy's because her squares cover the whole surface of the rectangle whereas the circles leave some of the surface uncovered.

Dive deeper 2:

Two children have measured the top of their desk. They used different sized squares.



Dora

The area of the table top is 6 squares.

The area of the table top is 9 squares.



Alex

Who used the largest squares?
How do you know?

Two children have measured the top of their desk. They used different sized squares.



Dora

The area of the table top is 6 squares.

The area of the table top is 9 squares.



Alex

Who used the largest squares?
How do you know?

Dora needed fewer squares to cover the space, so her squares must have been the larger ones. If the squares are smaller, you need more of them.