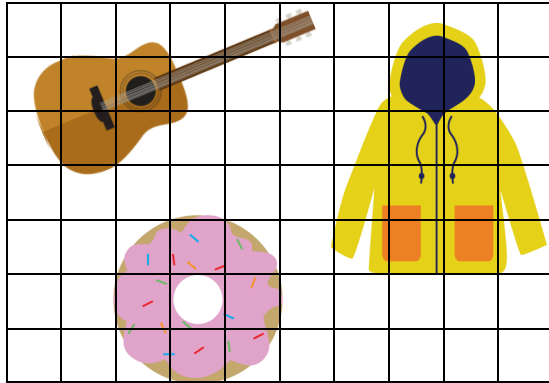




# YR5 PROGRESSION IN MASTERY LESSON PACK - AREA OF IRREGULAR SHAPES

## FLUENCY 1

Each square is 1cm<sup>2</sup>. Estimate the area of each object.

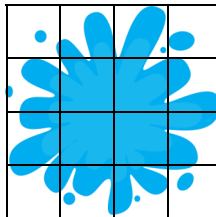
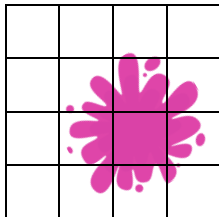
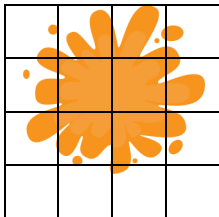


There are \_\_\_\_ whole squares. There are \_\_\_\_ part squares.

The \_\_\_\_\_ is approximately \_\_\_\_ cm<sup>2</sup>.

## FLUENCY 2

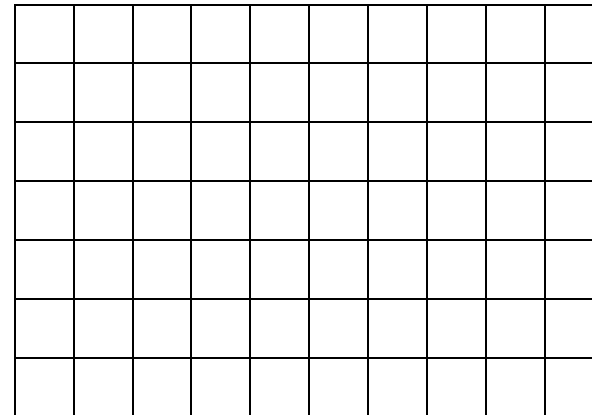
Each of the squares is 1cm<sup>2</sup>. Estimate the area of each splatter then order them from smallest to largest.



## FLUENCY 3

Each square is 1cm<sup>2</sup>.

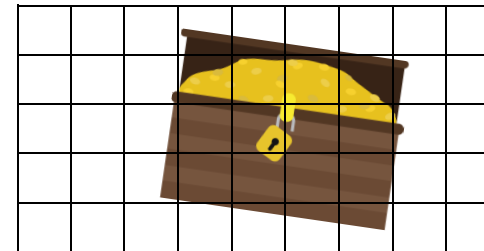
Draw a shape with an area of 23.5cm<sup>2</sup>.



## FLUENCY 4

Each square is 4cm<sup>2</sup>.

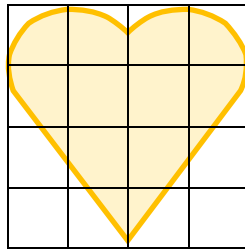
What is the area of the treasure chest?





REASONING 1

Each square on Darcey's grid is 1cm<sup>2</sup>.

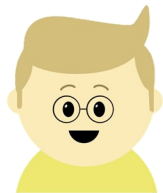


There are 2 full squares so the area of the shape is 2cm<sup>2</sup>.

Is Darcey's statement accurate? Explain why.

REASONING 2

Alfie has been learning to find the area of shapes.



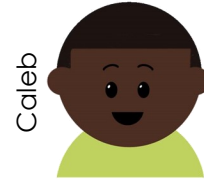
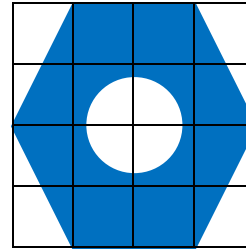
If I rotate an irregular shape on a grid, its area changes.

Do you agree with Alfie? Explain your reasoning!

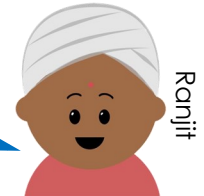
REASONING 3

Ranjit and Caleb have estimated the area of this shape.

Each square is 1cm<sup>2</sup>.



The area of the shape is approximately 10cm<sup>2</sup>.

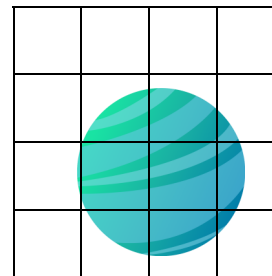


The area of the shape is approximately 12cm<sup>2</sup>.

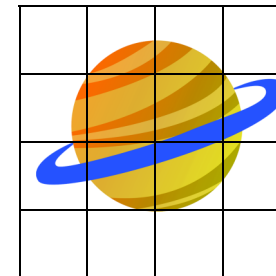
Who is correct? Convince me.

REASONING 4

Which planet has a larger area? Explain why.



Each square = 3km<sup>2</sup>



Each square = 4m<sup>2</sup>





**PROBLEM SOLVING 1**

Construct your own theme park on the grid.

Each square represents  $4m^2$ .

The theme park must contain the following features and be of the given measure:

A roller coaster with a total area of  $18m^2$

Three forests with a total area of  $27m^2$

River rapids with a total area of  $19m^2$

A picnic area with a total area of  $12m^2$

Two more features of your choice.

