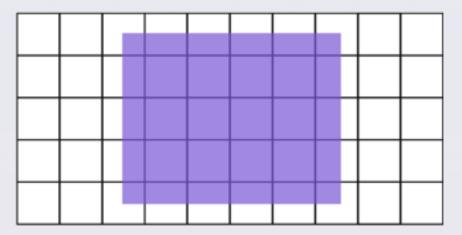
## AREA - DAY 2

# LO:I can estimate the area of irregular shapes

An irregular shape has sides and angles of any length and size.

#### Starter:

James says, "If each white square has an area of 1 cm<sup>2</sup>, then the purple rectangle has an area of 30 cm<sup>2</sup>."



Do you agree? Explain your answer.

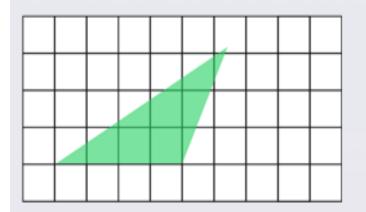
#### Starter:

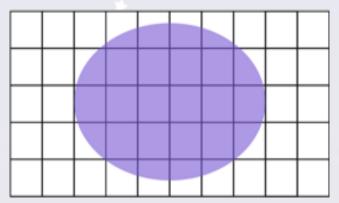
James says, "If each white square has an area of 1 cm<sup>2</sup>, then the purple rectangle has an area of 30 cm<sup>2</sup>."

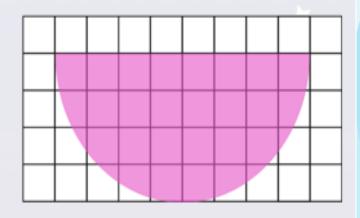
	1/4	1/2	1/2	1/2	1/2	1/4	
	1/2					1/2	
	1/2					1/2	
	1/2					1/2	
	1/4	1/2	1/2	1/2	1/2	1/4	

Although there is at least some of the purple rectangle within 30 of the white squares, many of them are not complete squares. In fact, a better estimate is 20 cm<sup>2</sup>.

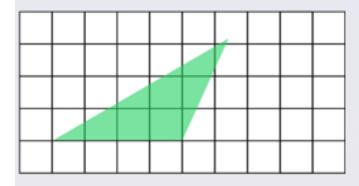
If each white square has an area equal to 1 cm<sup>2</sup>, what are the approximate areas for the shapes below?



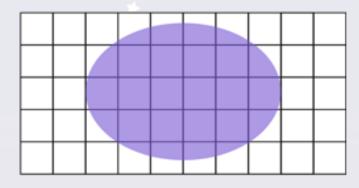




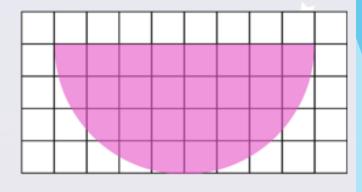
If each white square has an area equal to 1 cm<sup>2</sup>, what are the approximate areas for the shapes below?





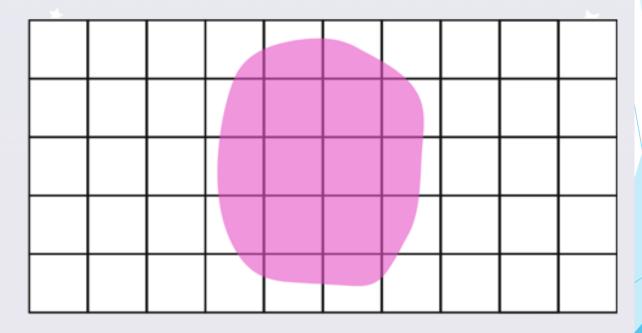


approx. 16 – 17 cm<sup>2</sup>



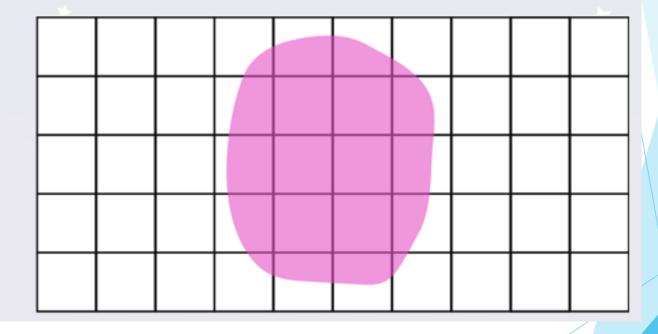
approx. 22 – 24 cm<sup>2</sup>

If each white square has an area equal to  $1\ cm^2$ , what is the approximate area for the stain on the grids below?

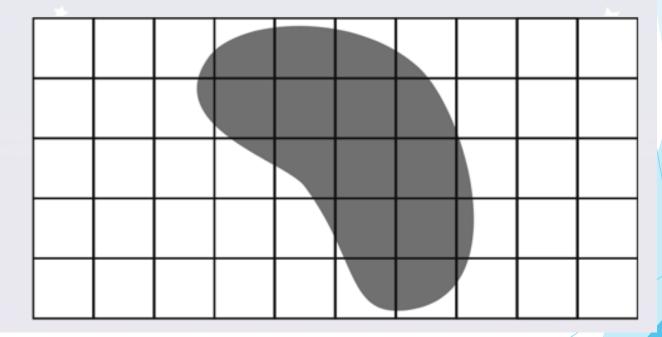


If each white square has an area equal to 1 cm<sup>2</sup>, what is the approximate area for the stain on the grids below?

approx. 10 cm<sup>2</sup>

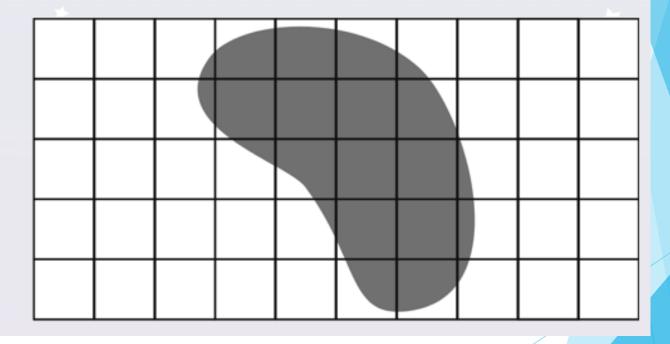


If each white square has an area equal to 1 cm², what is the approximate area for the stain on the grids below?

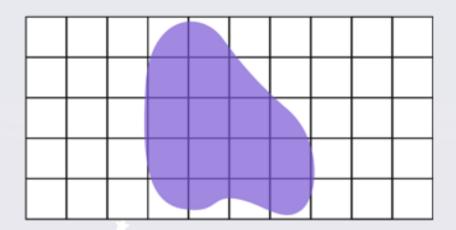


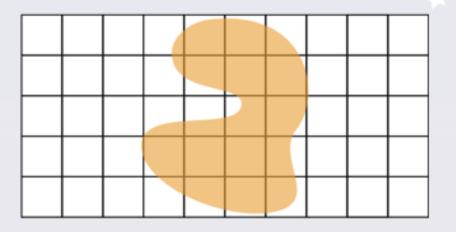
If each white square has an area equal to 1 cm<sup>2</sup>, what is the approximate area for the stain on the grids below?

approx. 11 - 12 cm<sup>2</sup>

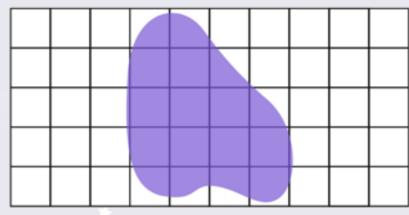


If each white square has an area equal to 1 cm<sup>2</sup>, what are the approximate areas for the stains on the grids below?

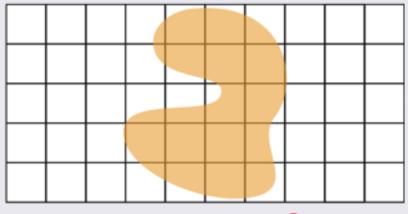




If each white square has an area equal to 1 cm<sup>2</sup>, what are the approximate areas for the stains on the grids below?



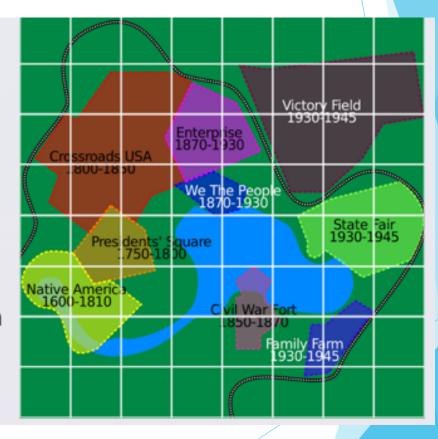
approx. 12 - 13 cm<sup>2</sup>



approx. 10 cm<sup>2</sup>

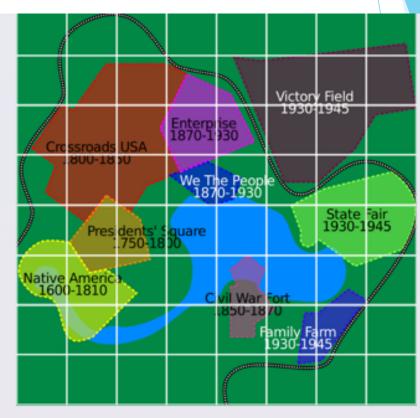
If each white square within the Theme Park map covers 100 m<sup>2</sup>, estimate:

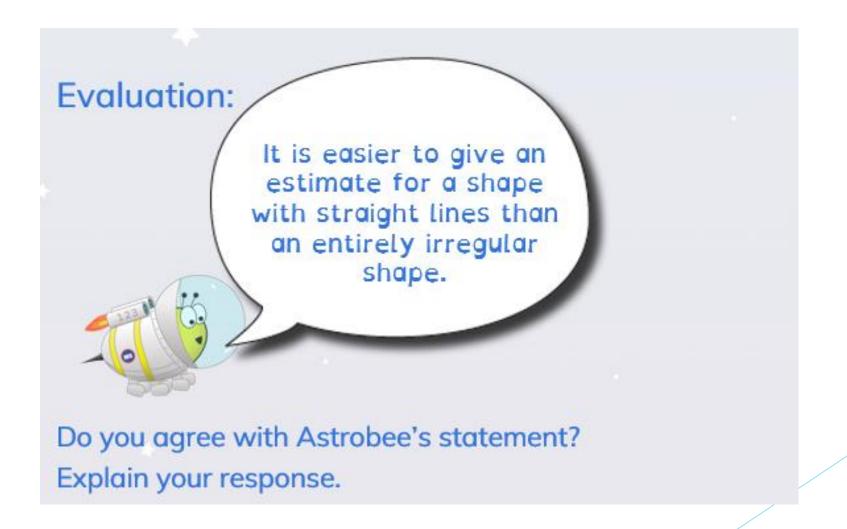
- a) the area Presidents' Square covers...
- b) the area State Fair covers...
- c) which three sections cover the least area...
- d) which is the largest section and by how much it is larger than the second largest section...

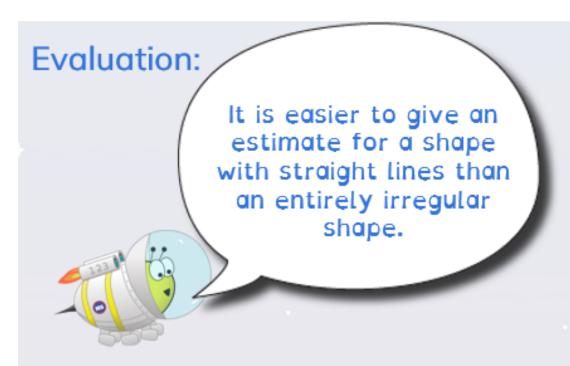


If each white square within the Theme Park map covers 100 m<sup>2</sup>, estimate:

- the area Presidents' Square covers...
  approximately 200 m<sup>2</sup>
- the area State Fair covers... approximately 300 – 350 m<sup>2</sup>
- which three sections cover the least area...
  We The People, Family Farm and Civil War
- d) which is the largest section and by how much it is larger than the second largest section... Crossroads USA is approximately 500 m<sup>2</sup> Victory Field is closer to approx. 550 600 m<sup>2</sup>







I would have to agree with Astrobee – when trying to make an estimate of the fraction of a square that is being covered, it is easier to make that call when the segment is a straight-line segment rather than a curved or irregular line.

### Your Task...

Choose which of the following tasks you wish to complete.

Each group's work will appear on Herons Home Learning page (week 4)

