## Friday- maths

## Power Up



Use the clues to work out an unknown number.

## Clues

- The number rounds to 2,840 when it is rounded to the nearest 10 .
- The number is odd.
- The number is a multiple of 5 .

I can work systematically using one clue at a time.

What is the number?
Round the number to the nearest 100 and the nearest $\mathrm{I}, 000$.

## Answers

It could be either
$\begin{array}{lllll}2835 & 2836 & 2837 & 2838 & 2839 \\ 2836 & 2841 & 2842 & 2843 & 2844\end{array}$
Take out the odd numbers...
Leaves you with $2835 \quad 2837 \quad 2839 \quad 2843$
It is a multiple of 5 so ones number will be 5
Only answer it can be is $\mathbf{2 8 3 5}$ !
Rounded to nearest 100 is $\mathbf{2 8 0 0}$
Rounded to nearest 1000 is $\mathbf{3 0 0 0}$

## LO: To compare area


a) Who is winning the game? How do you know?
b) Which is larger: the area of the board that is covered or the area of the board that is not?

## LO: To compare area

a) The more squares that fit inside a shape, the larger its area.

|  |  | 1 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | 2 |  |  |  |  |  |  |
|  | 3 | 4 |  |  |  | 1 | 2 |  |
|  | 5 | 6 |  |  | 3 | 4 | 5 |  |
|  | 7 | 8 |  |  | 6 | 7 | 8 |  |
|  | 9 | 10 |  |  | 9 | 10 | 11 |  |
|  | 11 | 12 |  |  | 12 |  |  |  |
| 13 | 14 | 15 |  |  | 13 | 14 | 15 |  |
|  |  | 16 |  |  |  | 16 | 17 |  |

Count the squares inside each shape.
Danny's red shape has an area of 16 squares.

Olivia's yellow shape has an area of 17 squares.
$17>16$, so Olivia is winning the game.
b)

total area of the board
$=9 \times 9$
$=81$

area of coloured squares
$=16+17$
$=33$

area of the white squares
$=81-33$
$=48$

## LO: To compare area

The area of the board that is covered is 33 squares. The area that is not covered is 48 squares.
$33<48$
The area of the board that is not covered is larger.
Which shape has the larger area?


Find the area of each of these letters.


## LO: To compare area

Fluency
Use the words 'greater than' and 'less than' to compare the rectilinear shapes.
Complete the sentence stems using < and >


Put the shapes in order from largest to smallest area.


Here is a shape.
Draw a shape that has a smaller area than this shape but an area greater than 7 squares.
Draw a shape that has an area equal
 to the first shape, but looks different.

LO: To compare area Reasoning


Look at the shapes. Can you spot the pattern and explain how the area is changing each time?

Draw the next shape. What is its area?
Can you predict what the area of the $6^{\text {th }}$ shape would be?

Can you spot any patterns in your answers?

## Problem Solving

Shape C has been deleted.
Area C > Area B
Area C < Area D
Can you draw what shape C could look like?

B


D
Shape $A$ is missing too.

- It has the smallest area.
- It is symmetrical.

Can you draw what it could look like?

## LO: To compare area <br> Reasoning <br> Problem Solving

The area increases by 2 each time.

The next shape will have an area of 9 .

The 6th shape will have an area of 13 .

The answers are all odd numbers and increase by 2 each time.

Shape B has an area of 18 squares.

Shape D has an area of 21 squares.

So Shape C can
be any shape that has an area
between 18 and 21
squares.
Shape A must
have area less
than 18 squares,
but can be any
symmetrical
design e.g. a 4 by
4 square.

