## I can reflect a shape.

17.12.20

What's changed?
What's stayed the same?



Have a think




## KEY QUESTIONS...

How is reflecting different to translating? Can you reflect one vertex at a time? Does this make it easier to reflect the shape? Which axis are you going to use as the mirror line?

## Question 1

Reflect the trapezium in the $x$-axis and then the $y$-axis.
Complete the table with the new coordinates of the shape.


|  | Reflected in the <br> $x$-axis | Reflected in the <br> $y$-axis |
| :---: | :--- | :--- |
| $(1,2)$ |  |  |
| $(4,2)$ |  |  |
| $(2,4)$ |  |  |
| $(3,4)$ |  |  |

## Question 2

Translate the shape 4 units to the right. Then reflect the translated shape in the $y$-axis.


Create reflective symmetry by shading the squares on the sheet you have been given. The mirror line is represented by a dotted line. Look carefully and check with a mirror if you aren't sure.


## Challenge by choice...



B

Q1. Here is a shaded square on a grid.
Shade in $\mathbf{3}$ more squares so that the design is symmetrical in both mirror lines.
4
, mirror line


## C



Write the co-ordinates of point $\mathbf{A}$ and point $\mathbf{B}$.
4 $A_{\text {is }}() \quad$,$B is ($,

## To finish...



Annie has reflected the shape in the $y$-axis.
Is her drawing correct? If not explain why.


