## Introducing loci

Mathematics

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## Try this

Take a piece of paper. Mark two points $A$ and $B$.
Fold the paper so that $A$ and $B$ coincide.
Do this again with different locations for $A$ and $B$.
What do you notice about the relationship between the fold lines and points $A$ and $B$ ?

Draw a line segment joining $A$ and $B$. What do you notice
 about the relationship between the fold line and the line segment?

## Connect

Locus

The word locus is used to describe the path a point can take

- Mark points on the fold line and measure distance to A and B - What do you notice?
- Draw a line connecting A and B. What do you notice?



## Independent task

Draw a locus of points that are equidistant from the points on each diagram


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## Explore

This shape is formed by joining two squares.
How many ways can you complete these sentences?

- The locus of points equidistant from $\qquad$ and __ passes through C and K
- The locus of points equidistant from E and $K$ passes through $\qquad$ and $\qquad$
- The locus of points equidistant from B and __ passes through $G$ and $\qquad$
- The locus of points equidistant from $\qquad$ and ___ doesn't pass through any
 marked points

Explore

$\underline{d}$

