Solving mathematical problems

## Challenge

1 million steps

Measure the length of your step to the nearest centimetre.

How many steps would it take you to travel 1 km? 10 km? 12 km? 25 km? 100 km?

If you could take 1 million steps, approximately how many kilometres would you travel?

Show all of your working out.

## You will need:

- measuring equipment
- map or distance chart giving distances between various cities or landmarks



You don't need to come up with an exact number of steps or kilometres, so you might want to round the length of your step up or down slightly to give you a 'friendly' measurement to work with.



Once you have worked out how many steps it would take you to travel 1 km, use this to help find the number of steps you would take for the other distances.

## What if?

Birmingham

160	60 Bristol					out the dist approximat		
190	72	Cardi	,TT	urgh			ake to ti	
470	601	635	Edinb	jui 0	OW			
466	597	631	75	Glase		ngham		
82	225	259	452	484	Notti	(16.	100-	
160	292	326	358	354	179	Liver	bos	
204	190	244	667	663	210	357	London	

Distances are in km

Look at a map or distance chart (or use the one provided here) to find the distance between cities or landmarks. Choose two locations and find ut the distance between them. Then work out tely how many steps you would need ravel from one location to the other.

> When you've finished, turn to page 80.

