



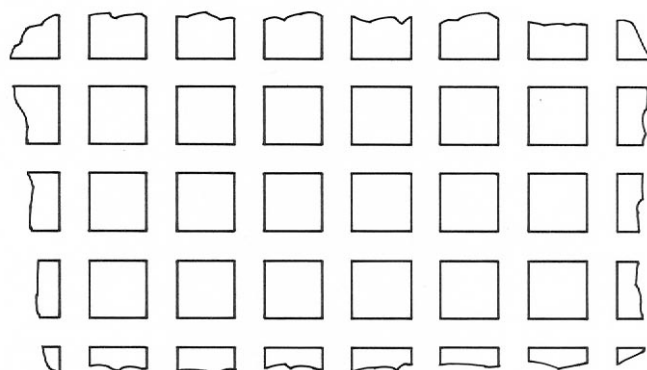
FLASH INTERACTIVE

PDF INTERACTIVE



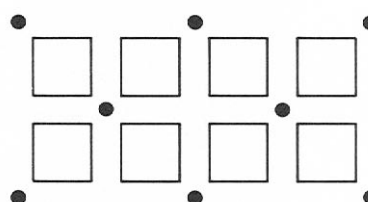
**Firefighters use hydrants to connect their hoses to water mains**

Imagine a city where all the streets are laid out on a rectangular grid and all the blocks are 100m square. The fire department has hoses that are 100m long, so they don't need a hydrant on every street corner.



For a 4x2 grid, the fire department could arrange their hydrants like this, so that every part of the grid could be reached.

This arrangement uses 8 hydrants.





See if you can find an arrangement that uses fewer hydrants. Investigate the minimum number of hydrants required for this and for other grids.



## Fire hydrants



## Flash interactive

Choose settings, and click 'Set grid' to begin.

No. of columns   

No. of rows   



# Fire hydrants worksheet