

Mathematics in the World of Work: Architecture

Part 1: Working as an architect: thinking about careers

1. Watch the video *Architecture*, and write down what you think under these headings.

Questions	Thoughts	Something new
Questions about any of the mathematics that you would like to know more about.	Thoughts about the information provided by the video, the people, the places, what a career in architecture would be like.	Any information, concepts or events you learned about for the first time.

Part 2: Working as an architect: parking in the basement

In designing a block of apartments, the architect has to work out how to distribute the parking spaces in the design of the basement car-park.

Some constraints:

- There should be two spaces for disabled people
- There should be six spaces for motorbikes
- There has to be a 5m x 5m stairwell
- There needs to be a ramp by which cars enter and exit. The maximum gradient of the ramp is 25%.

The diagram (overleaf) shows a plan drawn to scale of the space available. All measurements are in metres.

