

## Working as an architect: Teacher notes

### Whole class introduction (about 10 minutes)

Ask the students what they know about working as an architect, drawing out their understanding using questions such as:

- *Does anyone know an architect?*
- *What do architects do?*
- *What skills do they need?*

### Classwork and discussion: Responding to the video (about 10 minutes)

Hand out the student handout *Working as an Architect Student Sheet*. Briefly explain that you will be showing them a video and introduce their first task: as they watch the video, to note down questions, thoughts and something new they have learned.

Now show the video *Working as an architect*. Ask the students to fill in the table (Question 1) as they watch the video.

Hold a five minute discussion about the students' responses to the video.

### Pair work: Designing a car park (about 40 minutes)

Now introduce Part 2 of the student handout *Working as an Architect Student Sheet*. Read through the information and tell the students that you would like them to work in pairs, taking the role of a junior architects. They should produce a design for the car park and then compile a report for their boss.

### Individual work: Working as an architect (about 15 minutes)

Briefly discuss the process of mathematical modelling, perhaps by asking some questions such as:

- *When you were designing the car park, what did you know and what did you have to assume?*
- *What calculations did you have to make?*
- *Do you know what we call the process of moving between the real world and the world of mathematics? [modelling]*

Now ask students to answer Part 3 (questions 4 and 5) on the student handout *Working as an Architect Student Sheet*.

### Finishing off (about 5 minutes)

Hold a short discussion. Ask students to share some of their responses to the final two questions.