

# Year 11 shape and space revision lesson

## Possible foci

- focusing revision work effectively
- using stimulating approaches to aspects of shape and space

## Background

It is important to find new ways to stimulate mathematical thinking in Year 11 even when the topic has been taught before. It is not always helpful to revisit a topic using the kind of activities which the pupils have met many times before. Dora, the teacher in the video *Year 11 shape and space revision lesson*, has developed and adapted activities from *Teaching mental mathematics from level 5: shape and space* (DfES 0009-2006DCL-EN). She uses these ideas to engage a class of Year 11 pupils in thinking around shape and space examination questions. Almost all the pupils had difficulties with a Pythagoras question in the mock examination.

## Stimulus

From the DVD *Year 11 shape and space revision lesson* show sequence *All episodes: parts of a discussion and a lesson* which lasts 10 minutes. Note that we see only excerpts from the full lesson and that the edit has been designed to give a flavour of the planned sequence of tasks along with an impression of the pupils' responses. As you watch it, you may wish to make notes which will inform the prompts for discussion below.

## Prompts for discussion

Following the viewing, consider whether there are aspects of this lesson which could inform your thinking on:

- how to plan and teach so that pupils think more deeply about concepts in shape and space;
- how to plan and teach so that Year 11 students are able to rethink aspects of mathematics which are causing difficulties.

## Action points

Choose a focus for the collaborative work. This could involve shape and space lessons and/or Year 11 revision lessons.

Arrange to work collaboratively with one or two other teachers to plan, teach and review a lesson or a sequence of lessons using ideas from the discussion. Establish partnerships in the department and agree dates and deadlines.

The outcome of this should be a few key lesson plans designed to be shared and incorporated into the departmental scheme of work.