

Classifying examination questions

Focus

Identifying the mathematics involved in tackling contextualised problems

Background

Pupils are often able to answer questions on a particular topic when they are working through an exercise. In examinations, however, they may fail to apply the correct technique because they do not recognise the demands of the question. In the video sequence *Year 11 shape and space revision lesson*, for example, some of the pupils' solutions to the Pythagoras question involved an inappropriate attempt to use trigonometry. Discussion revealed that many pupils were confused by the relative complexity of the diagram.

Stimulus

- 1 Make a collection of shape and space questions and ask colleagues to classify them. This should give a flavour for the task. A set of such questions is provided in the pack.
- 2 Use the DVD *Year 11 shape and space revision lesson* and the prompts below which focus on the third (3 minute) sequence, *Classifying examination questions*. However, you may wish to set this in a context by showing *All episodes: parts of a discussion and a lesson* which lasts 10 minutes.

Prompts for discussion

In the sequence you hear several pupils discussing how to classify the questions.

- What is important about the set of examination questions selected for the classification activity?
- There are advantages in asking pupils to decide their own criteria for classification as it allows them to reveal their thinking. How did the pupils decide on the criteria?
- How was the activity structured to enable pupils to draw on their prior knowledge?

Action points

Following analysis of the Year 11 mock examinations, choose an area of general weakness. Consider using a database of examination questions to create a set that could be used for a classifying activity.

Work together with one or two colleagues to plan, teach and review a lesson that could be included in the revision programme for late spring or early summer term.