



**E1** Sketch labelled diagrams to show the following:

- why enzymes have a particular shape
- why enzymes are specific to a particular substrate
- what happens when an enzyme is **denatured**.

The diagrams below show the shapes of two enzymes and a substrate molecule for one of the enzymes. There are also some blank labels. Cut out the diagrams and labels.

- Select the appropriate diagram(s) and write your own labels to answer the question: Why do enzymes have a particular shape? Give each of your labels a number and note down which diagrams and labels are used to form your answer.
- Select the appropriate diagram(s) and write your own numbered labels to answer the question: Why are enzymes **specific** to a particular substrate? Note down which diagrams and which labels you used.
- Select the appropriate diagram(s) and write your own numbered labels to answer the question: What happens when an enzyme is denatured? Note down which diagrams and which labels you used.
- Exchange all your diagrams and labels with a partner, and use what your partner gives you to answer questions **1** to **3**. When you have answered all questions, check you have used the same answers as your partner.
- Choose a set of diagrams and labels for one of the answers, and suggest how the labelling could be changed to improve the explanation.

enzyme 1	enzyme 2	substrate
		