



## Useful enzymes

Enzymes such as pectinase can be used to speed up the breakdown of larger molecules into simple sugars. This makes the fruit softer and juicier. A fruit juice company uses a variety of different treatments and enzymes to increase the amount of juice produced.

1 Process the data you have collected and plot a graph of the results of your investigation into the effect of temperature on the activity of pectinase.

2 Describe any patterns or trends in your results. Comment on any unexpected results.

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3 Compare the different treatments and enzymes used by fruit juice companies from your research (Part 1) with your own investigation (Part 2).

Comment on any similarities and differences. Suggest possible reasons for any differences.

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5 Do your results from Part 2 support the hypothesis you suggested? Explain your answer.

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6 The company would need different treatments and enzymes to make different types of juice, for example lemon juice and mango juice.

Suggest why, using your knowledge of enzymes, information from your research (Part 1) and your investigation (Part 2).

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