

OCR (B) Chemistry A-Level

DM5 - Energy and Matter

Flashcards

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What is a colorimeter?



What is a colorimeter?

- A colorimeter measures the intensity of light passing through a solution i.e. it measures the absorbance of light.



What is a visible spectrophotometer?



What is a visible spectrophotometer?

It measures the amount of light transmitted or reflected, when incident on a solution, as a function of wavelength.



How can you use a colorimeter/visible spectrophotometer to measure the concentration of a transition metal solution?



How can you use a colorimeter/visible spectrophotometer to measure the concentration of a transition metal solution?

- First, create a series of solutions of known concentration with the transition metal ion. Measure their absorptions using a colorimeter or visible spectrophotometer.
- Create a 'calibration curve' which is a graph of absorption (y-axis) against concentration (x-axis).
- This curve can then be used to identify unknown concentrations of transition metal solutions by their absorptions.

