

## 2024 Higher Chemistry Paper 1 - Q24

Section: Researching Chemistry

Topic: General Practical Techniques (Titration)

Question summary (Q24):

A student was carrying out a titration. Which of the following would help the student to accurately observe the end-point?

Worked Solution:

- A: Repeating the titration → improves reliability, not visibility.
- B: Using a white tile under the flask → makes the colour change easier to see. □
- C: Rinsing the flask between titrations → good practice, but does not affect observing the end-point.
- D: Disregarding the rough titre → improves accuracy, but not visibility.

Final Answer: B — Using a white tile under the flask

Revision Tips:

- White tile: enhances contrast for colour change.
- Rough titre: done first to find approximate end-point.
- Concordant titres: within  $\pm 0.1 \text{ cm}^3$  for reliability.
- Always swirl the flask while adding from the burette to mix solutions thoroughly.