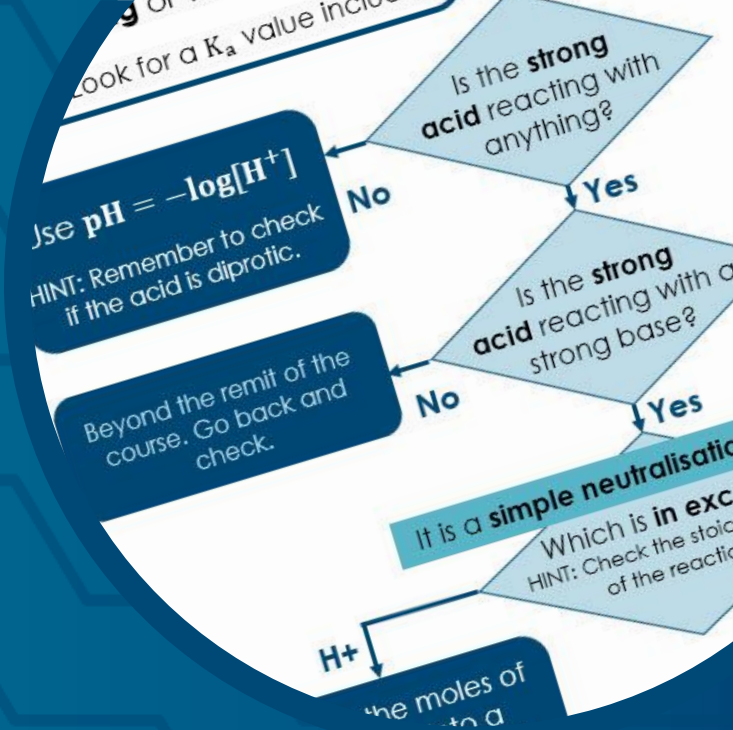


16–18 years

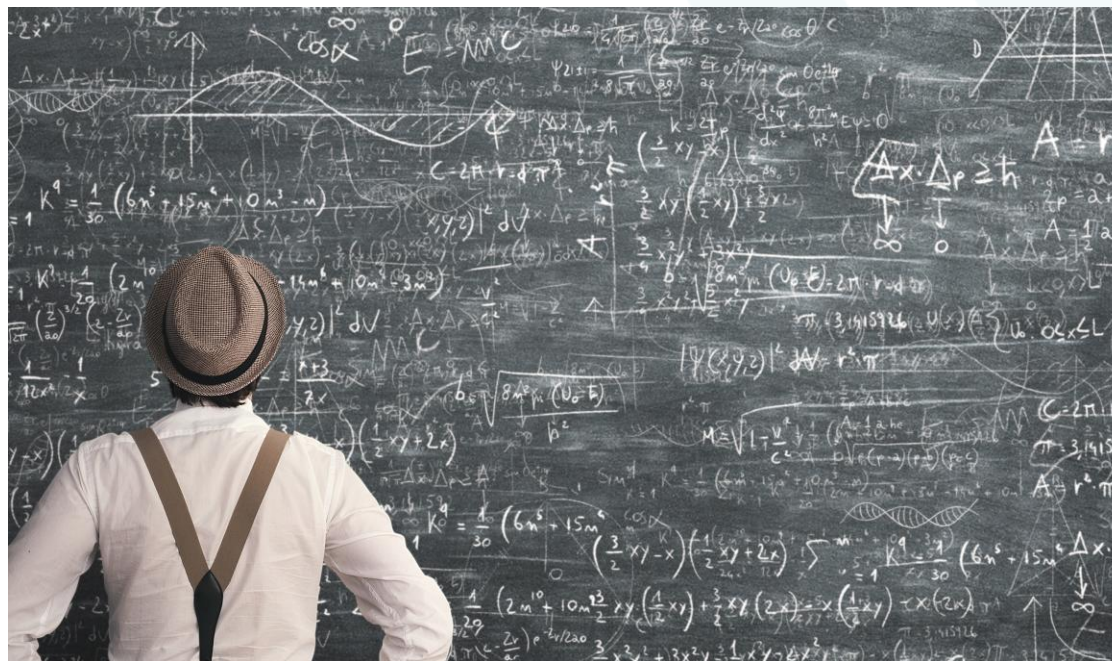
Decision tree: acid, base or buffer?



Which equation do I need?

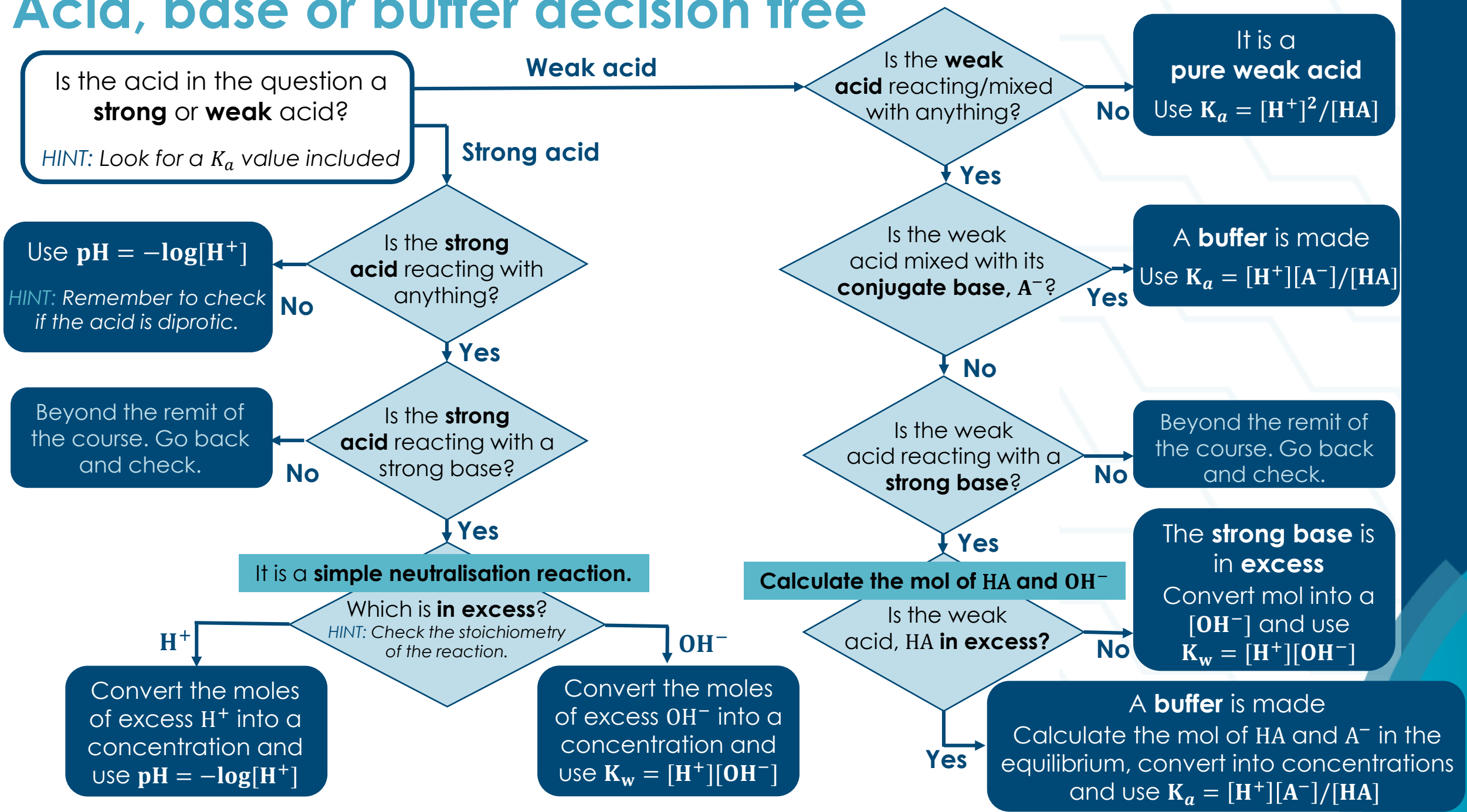
25.0 cm³ of a 0.400 mol dm⁻³ solution of NaOH is added to 25.0 cm³ of a 1.00 mol dm⁻³ solution of ethanoic acid. **How can you calculate the pH of the solution formed?**

A **decision tree** is a visual representation of the route you take to find an answer. It plans out thinking and breaks it down into a series of decisions to make.



Source © Fran_kie/Shutterstock

Acid, base or buffer decision tree



How to use this resource

A decision tree is a visual representation of the schema an expert might use to find the answer to a question. It can support learners by scaffolding that thinking to help them access the knowledge they need to answer questions.

- Try using this pre-prepared decision tree to aid with questions on the challenging topic of acids, bases and buffers.
- Introduce the decision tree – try using it for an example problem.
- Be prepared to modify it, add hints or recap learning if any sticking points arise.
- Gradually remove the scaffold the decision tree provides by using spaced retrieval activities carefully designed to support retention of the key decisions or knowledge.

Read more about how to make and use decision trees in **Scaffold learning with decision trees** by Catherine Smith available from: rsc.li/4khWoGC.

A decision tree for bonding at rsc.li/3SrcX6G includes animation to show it in use.