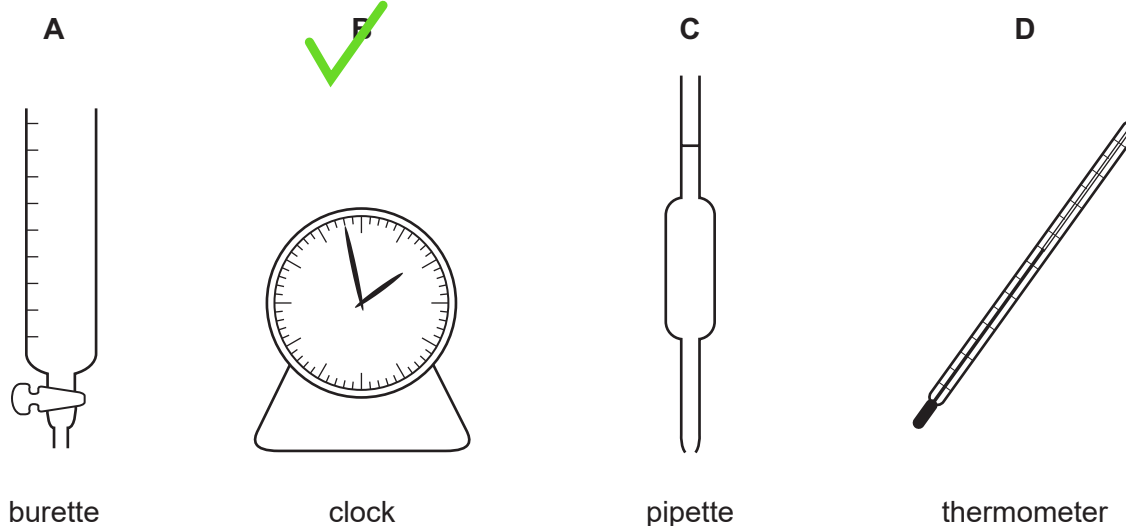


APPARATUS FOR ENDOTHERMIC AND EXOTHERMIC REACTIONS

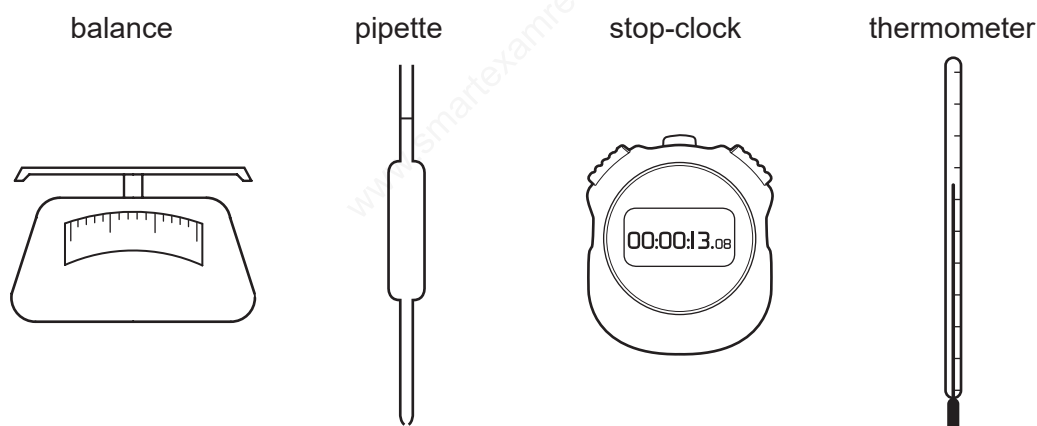
- 1 A student mixes 25 cm^3 samples of dilute hydrochloric acid with different volumes of aqueous sodium hydroxide.

In each case, the student measures the change in temperature to test if the reaction is exothermic.

Which piece of apparatus is **not** needed?



- 2 The diagrams show four pieces of laboratory equipment.

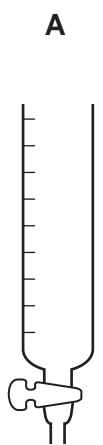


Which equipment is essential to find out if dissolving a salt in water is an exothermic process?

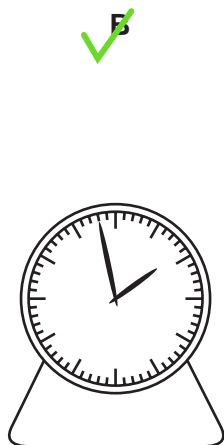
	balance	pipette	stop-clock	thermometer
A	x	x	x	✓
B	✓	x	x	✓
C	x	✓	x	✓
D	✓	x	✓	x

- 3 A student mixes 25 cm^3 samples of dilute hydrochloric acid with different volumes of aqueous sodium hydroxide. Each time, the student measures the change in temperature to test if the reaction is exothermic.

Which piece of apparatus is **not** needed?



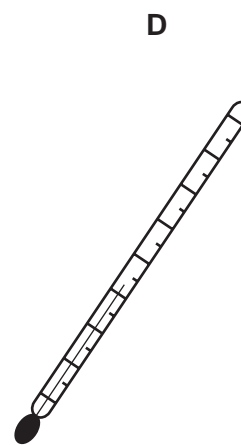
burette



clock



pipette



thermometer