

A student set up an experiment to investigate the relationship between the temperature of an acid and the rate of carbon dioxide production when reacted with a base. In each trial the student timed how long in seconds it took to produce 100 mL of carbon dioxide in a gas syringe. The results are shown below.

Temperature of acid (°C)	Time taken to produce 100 mL of carbon dioxide (s)
30	91
40	65
50	64
60	21

9. Which of the following substances would be the base used in this investigation?

- (a) sodium hydroxide
- (b) magnesium
- (c) calcium carbonate
- (d) copper oxide