

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

7. Which of the following is the dependent variable?

- (a) temperature of the acid
- (b) time to heat the acid
- (c) volume of carbon dioxide produced
- (d) time to produce 100 mL of carbon dioxide