

8 Rate of reaction – Part 1 — Answers

Answers

Work through these after trying the questions yourself.

8.1 How fast reactants turn into products (the change in concentration or amount per unit time).

8.2 Enough energy, and the correct orientation (direction).

8.3 More particles in the same volume collide more often, so there are more effective collisions each second.

8.4 $\text{rate} = 48/24 = 2.0 \text{ cm}^3 \text{ s}^{-1}$.

8.5 Higher pressure packs the gas particles closer together, so they collide more often, giving more effective collisions per second.

8.6 Powder has a much larger surface area than chips of the same mass, so many more acid particles can collide with the marble at once. This gives more effective collisions per second, so the reaction is faster.