

TOPIC 2 1 REACTION RATES

Summary

- State that the progress of chemical reactions can be followed by measuring changes in mass, volume and other quantities.
- Draw and be interpret graphs in terms of:
 - end-point of a reaction;
 - quantity of product;
 - quantity of reactant used;
 - effect of changing conditions.
- Describe how rates of reaction can be increased:
 - by increasing the temperature;
 - by increasing the concentration of a reactant;
 - by increasing surface area/decreasing particle size;
 - through the use of a catalyst.
- State that catalysts are substances that speed up chemical reactions but can be recovered chemically unchanged at the end of the reaction.
- Calculate the average rate of a chemical reaction, with appropriate units, using the equation: $\text{rate} = \frac{\Delta \text{quantity}}{\Delta t}$.
- Show that the rate of a reaction decreases over time by calculating the average rate at different stages of the reaction.