

### What are we learning about?

This topic will look at the different ways we can change the rates of reactions. We will also look at interpreting rates of reactions using practical's and graphs.



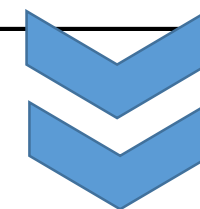
### Why are we learning about it?

This unit lets you predict ways of changing the speeds of reactions. In a wider application it will allow you to explain how self heating cans and how airbags in cars work!



### What new KNOWLEDGE will I gain?

Formal definitions of collision theory, equilibria and rate. You will be able to calculate rate and describe graphs of reactions in more detail. You will also learn HOW temperature, catalysts, concentrations and surface area affect rate.



## The rate and extent of chemical change: Learning Journey

### How does this build on the SKILLS I already have?

You can already explain the shapes of graphs, this unit will allow you to develop that skill in terms of changing gradients. You will also have the chance to develop your practical bench skills.



### What new SKILLS will I develop?

You will be able to perform a required practical; in particular this will test your observation skills and your powers of prediction. You will also develop your graph analysis skill as we begin to talk about tangents!



### How does this build on the KNOWLEDGE I already have?

You already have an understanding that if you heat things up/grind them into powers that reactions are faster. You will also build on you ability to calculate from experimental data.