

# Year 10 Chemistry

## Learning Programme 5

Reading texts that pupils will study during the learning programme

Logic for LP5 is communication

The value we are learning about is **compassion**

Compassion - Sympathy and concern for the suffering or misfortunes of other

**What will I be learning about in this Learning Programme?**

Rates of reactions has previously been studied in year 8 chemical reactions topic.

**Where have I seen this learning before?**

Students have previously learnt about Energy changes, Quantitative chemistry and Periodic table which is required for this LP

**What could I use it for?**

This is an important part of the Chemistry GCSE so a good solid knowledge of the topics is important

Set text 1. reaction rates, Set text 2  
Temperature and pressure. Set text 3  
equilibrium

In LP5.1, I will know:	20/05/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
what is meant by the rate of a chemical reaction; how to calculate the mean rate of reaction at a specific time.			Temperature, pressure,	Knowledge organiser tasks
In LP5.2, I will know:	03/06/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how to use collision theory to explain the effect of surface area on reaction rate; the factors that can affect the rate of a chemical reaction.			Catalyst, rate, surface area	Knowledge organiser tasks
In LP5.3, I will know:	10/06/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how to use collision theory to explain how temperature affects the rate of reactions; how, and why, increasing the concentration of reactants in solutions affects the rate of reaction.  Extended Task			collision theory, head on, glancing blow.	Knowledge organiser tasks
In LP5.4, I will know:	17/06/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how and why, increasing the pressure of reacting gases affects the rate of reaction; what a catalyst is.			reacting gases, reactions rates.	Knowledge organiser tasks
In LP5.5, I will know:	24/06/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
why catalysts are important in industry; what a reversible reaction is; week 5 assessment.			Catalysts, reversible reactions.	Knowledge organiser tasks
In LP5.6, I will know:	01/07/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
how you can represent reversible reactions; what happens in the energy transfers in reversible reactions.  Extended Task			gases, temperature, catalysts,	Knowledge organiser tasks
In LP5.7, I will know:	08/07/24 - (WK 1)	PR Focus	Key Vocabulary	Homework
how a reversible reaction in a closed system can be at equilibrium; the composition of an equilibrium mixture can be altered by changing conditions; how changing the temperature affects reversible reactions.			Closes, open systems,	Knowledge organiser tasks
In LP5.8, I will know:	15/07/24 - (WK 2)	PR Focus	Key Vocabulary	Homework
experience week.			gases, alternating conditions.	
<b>Resources to support learning:</b> Kerboodle, BBC Bitesize, AQA textbooks				
<b>FFET Award Challenge for this Learning Programme:</b> Attend an extra-curricular club, represent the academy at an event, attend an enrichment day, receive a subject praise postcard, attend a day trip, attend a head of year breakfast or afternoon tea, achieve 100 positive points on class charts, receive a letter of commendation from SLT, be invited to a wonderful Wednesday, receive a principals letter or be invited to a principals lunch, attend a residential trip, achieve the Duke of Edinburgh bronze award.				

PRT Task 1

PRT Task 2