

AQA GCSE Chemistry (Higher) - Specification Points to Learn for Summer 2022 Exams

Key

YES =	This will be a major focus of the paper.
Maybe =	This might be assessed in short answer questions or synoptic questions (questions which draw together multiple topics).
no =	This will not be assessed in the paper.

PPQs = Past paper questions

Note: this checklist is only for Paper 2, since Paper 1 has already taken place.

Paper 2H - Monday 20th June 2022

4.6 The rate and extent of chemical change

4.6.1 - Rate of reaction

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.6.1.1	Calculating rates of reactions	YES			
4.6.1.2	Factors which affect the rates of chemical reactions	YES			
4.6.1.3	Collision theory and activation energy	YES			
4.6.1.4	Catalysts	YES			

4.6.2 - Reversible reactions and dynamic equilibrium

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.6.2.1	Reversible reactions	YES			
4.6.2.2	Energy changes and reversible reactions	YES			

4.6.2.3	Equilibrium	YES			
4.6.2.4	The effect of changing conditions on equilibrium	YES			
4.6.2.5	The effect of changing concentration	YES			
4.6.2.6	The effect of temperature changes on equilibrium	YES			
2.6.2.7	The effect of pressure changes on equilibrium	YES			

4.7 Organic chemistry

4.7.1 - Carbon compounds as fuels and feedstock

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.1.1	Crude oil, hydrocarbons and alkanes	YES			
4.7.1.2	Fractional distillation and petrochemicals	YES			
4.7.1.3	Properties of hydrocarbons	YES			
4.7.1.4	Cracking and alkenes	YES			

4.7.2 - Reactions of alkenes and alcohols

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.2.1	Structure and formulae of alkenes	Maybe			
4.7.2.2	Reactions of alkenes	Maybe			
4.7.2.3	Alcohols	Maybe			
4.7.2.4	Carboxylic acids	Maybe			

4.7.3 - Synthetic and naturally occurring polymers

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.3.1	Addition polymerisation	Maybe			
4.7.3.2	Condensation polymerisation	Maybe			
4.7.3.3	Amino acids	Maybe			
4.7.3.4	DNA (deoxyribonucleic acid) and other naturally occurring polymers	Maybe			

4.8 Chemical analysis

4.8.1 - Purity, formulations and chromatography

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.8.1.1	Pure substances	Maybe			
4.8.1.2	Formulations	Maybe			
4.8.1.3	Chromatography	Maybe			

4.8.2 - Identification of common gases

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.8.2.1	Test for hydrogen	Maybe			
4.8.2.2	Test for oxygen	Maybe			
4.8.2.3	Test for carbon dioxide	Maybe			
4.8.2.4	Test for chlorine	Maybe			

4.8.3 - Identification of ions by chemical and spectroscopic means

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.8.3.1	Flame tests	Maybe			
4.8.3.2	Metal hydroxides	Maybe			
4.8.3.3	Carbonates	Maybe			
4.8.3.4	Halides	Maybe			
4.8.3.5	Sulfates	Maybe			
4.8.3.6	Instrumental methods	Maybe			
4.8.3.7	Flame emission spectroscopy	Maybe			

4.9 Chemistry of the atmosphere

4.9.1 - The composition and evolution of the Earth's atmosphere

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.9.1.1	The proportions of different gases in the atmosphere	YES			
4.9.1.2	The Earth's early atmosphere	YES			
4.9.1.3	How oxygen increased	YES			
4.9.1.4	How carbon dioxide decreased	YES			

4.9.2 - Carbon dioxide and methane as greenhouse gases

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.9.2.1	Greenhouse gases	no	- N/A -	- N/A -	- N/A -
4.9.2.2	Human activities which contribute to an increase in greenhouse gases in the atmosphere	no	- N/A -	- N/A -	- N/A -
4.9.2.3	Global climate change	no	- N/A -	- N/A -	- N/A -

4.9.2.4	The carbon footprint and its reduction	no	- N/A -	- N/A -	- N/A -
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4.9.3 - Common atmospheric pollutants and their sources

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.9.3.1	Atmospheric pollutants from fuels	Maybe			
4.9.3.2	Properties and effects of atmospheric pollutants	Maybe			

4.10 Using resources

4.10.1 - Using the Earth's resources and obtaining potable water

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.10.1.1	Using the Earth's resources and sustainable development	YES			
4.10.1.2	Potable water	YES			
4.10.1.3	Waste water treatment	YES			
4.10.1.4	Alternative methods of extracting metals	YES			

4.10.2 - Life cycle assessment and recycling

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.10.2.1	Life cycle assessment	Maybe			
4.10.2.2	Ways of reducing the use of resources	Maybe			

4.10.3 - Using materials

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.10.3.1	Corrosion and its prevention	Maybe			
4.10.3.2	Alloys as useful materials	Maybe			
4.10.3.3	Ceramics, polymers and composites	Maybe			

4.10.4 - The Haber process and the use of NPK fertilisers

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.10.4.1	The Haber process	YES			
4.10.4.2	Production and uses of NPK fertilisers	YES			