

<b>Exam Board:</b>	AQA
<b>Subject:</b>	Chemistry
<b>Paper:</b>	Chemistry Paper 2
<b>Marks available:</b>	<b>70</b>
<b>Length of paper:</b>	75 minutes
<b>Topics:</b>	Rate and extent of chemical change, organic chemistry, chemical analysis, the atmosphere, using resources and skills

### Exam Information, guidance and hints

#### Command words:

- Complete - Fill in gaps/add labels
- Balance - Add large numbers only in front of chemical formula
- Give - Recall a simple fact
- Draw - Draw a symbol, diagram or graph
- Describe - Give details about an event, idea or a process
- Explain - Give reasons for an event, idea or process (use because/so)
- Define - write the meaning of a word or term
- Compare - Identify how things are similar/different
- Suggest - Use your own knowledge in an unfamiliar context
- Plan - Write a method for carrying out a practical
- Calculate - Use numbers in a formula
- Name - Recall the name of a piece of equipment or person
- Estimate - Use data and evidence to predict a value

#### Online Resources

- [Cognito past papers](#)

#### Hints/tips:

- Ensure you tick the right number of boxes on multiple choice questions
- Use a ruler for straight lines of best fit but not curved lines.
- For calculation questions, use the equations provided
- Ensure you give to answers to the stated number of significant figures or decimal places
- When asked about observations, refer to what you can see happening, not what you know is happening at a molecular level
- When comparing, use comparative language such as whereas, **larger**, **smaller etc**
- Ensure you refer to data in graphs and tables when asked to in order to support your explanations
- Uncertainty is calculated by dividing the range of the data by 2.
- Relative formula mass is the total mass of all the individual elements in the compound

#### Foundation Example Papers and Markschemes

#### Higher Example Papers and Markschemes

<a href="#">2018 F Paper</a>	<a href="#">Annotated P2</a>	<a href="#">2018 MS</a>	<a href="#">2018 H paper</a>	<a href="#">Annotated P2</a>	<a href="#">2018 MS</a>
<a href="#">2019 F Paper</a>	<a href="#">Annotated P2</a>	<a href="#">2019 MS</a>	<a href="#">2019 H Paper</a>	<a href="#">Annotated P2</a>	<a href="#">2019 MS</a>
<a href="#">2020 F Paper</a>	<a href="#">Annotated P2</a>	<a href="#">2020 MS</a>	<a href="#">2020 H Paper</a>	<a href="#">Annotated P2</a>	<a href="#">2020 MS</a>

### PLC Chemistry Paper 1 - Mock 1

Topic	Key information related to topic	Sparx Code	Resources/Information related to topic	How well do you understand this topic? RAG		
				Red	Amber	Green
Rates of Reaction	Describe what a reversible reaction and equilibrium are	R768	<a href="https://www.youtube.com/watch?v=ty9TczsW5ew">https://www.youtube.com/watch?v=ty9TczsW5ew</a>			
Rates of Reaction	Describe how to investigate rates of reaction by collecting gas	R280	<a href="https://www.youtube.com/watch?v=ssa3wh3RNt0&amp;t=34s">https://www.youtube.com/watch?v=ssa3wh3RNt0&amp;t=34s</a>			
Rates of Reaction	Explain the effect of increasing the concentration or temperature on the rate of a reaction	R895	<a href="https://www.youtube.com/watch?v=-4HXaUBbv04">https://www.youtube.com/watch?v=-4HXaUBbv04</a>			
Rates of Reaction	Explain the effect of adding a catalyst to a reaction	R601	<a href="https://www.youtube.com/watch?v=-4HXaUBbv04">https://www.youtube.com/watch?v=-4HXaUBbv04</a>			
Rates of Reaction	<b>HT ONLY:</b> Use Le Chatelier's principles to explain changes in reaction yields	R115	<a href="https://www.youtube.com/watch?v=IYyoncESnmQ">https://www.youtube.com/watch?v=IYyoncESnmQ</a>			
Organic Chemistry	Draw the displayed structure of hydrocarbons	R837	<a href="https://www.youtube.com/watch?v=CX2IYWggEBc">https://www.youtube.com/watch?v=CX2IYWggEBc</a>			
Organic Chemistry	Describe the structure of hydrocarbons	R837	<a href="https://www.youtube.com/watch?v=CX2IYWggEBc">https://www.youtube.com/watch?v=CX2IYWggEBc</a>			
Organic Chemistry	Describe how fractional distillation is used to produce different fractions	R205	<a href="https://www.youtube.com/watch?v=CjmriZq5xRo">https://www.youtube.com/watch?v=CjmriZq5xRo</a>			
Organic Chemistry	Describe the process of cracking	R240	<a href="https://www.youtube.com/watch?v=7AWwjKbRa_o">https://www.youtube.com/watch?v=7AWwjKbRa_o</a>			
Chemical Analysis	Describe how to test for different gases	R443	<a href="https://www.youtube.com/watch?v=bcRGfSIMIMw">https://www.youtube.com/watch?v=bcRGfSIMIMw</a>			
Chemical Analysis	Analyse and calculate R <sub>f</sub> values from chromatograms	R720	<a href="https://www.youtube.com/watch?v=TdJ57SQ6GAQ">https://www.youtube.com/watch?v=TdJ57SQ6GAQ</a>			

Topic	Key information related to topic	Sparx Code	Resources/Information related to topic	How well do you understand this topic? RAG		
				Red	Amber	Green
Chemical Analysis	Define and give examples of formulations	R256	<a href="https://www.youtube.com/watch?v=-OtJI-R-4rU">https://www.youtube.com/watch?v=-OtJI-R-4rU</a>			
Atmosphere	Describe how the percentages of different gases in the atmosphere have changed over time	R225	<a href="https://www.youtube.com/watch?v=l0h_-3M0Pso">https://www.youtube.com/watch?v=l0h_-3M0Pso</a>			
Atmosphere	Identify and explain the effects of greenhouse gases	R728	<a href="https://www.youtube.com/watch?v=Z_b2A-d5hGY">https://www.youtube.com/watch?v=Z_b2A-d5hGY</a>			
Atmosphere	Describe the effects of atmospheric pollutants	R119	<a href="https://www.youtube.com/watch?v=2ri95j0cShg&amp;t=140s">https://www.youtube.com/watch?v=2ri95j0cShg&amp;t=140s</a>			
Resources	Describe the processes involved in producing potable water from groundwater and sewage	R898	<a href="https://www.youtube.com/watch?v=PDeiRIQvWnM">https://www.youtube.com/watch?v=PDeiRIQvWnM</a>			
Resources	Describe how to calculate the mass of salt found in a salt solution	R759	<a href="https://www.youtube.com/watch?v=DikcEq2wg8g&amp;t=167s">https://www.youtube.com/watch?v=DikcEq2wg8g&amp;t=167s</a>			
Resources	Evaluate the use of different materials and their impact on the environment	R228	<a href="https://www.youtube.com/watch?v=obb-ZHqBw10">https://www.youtube.com/watch?v=obb-ZHqBw10</a>			
Resources	Explain how to extract metals from their low grade ores	R403	<a href="https://www.youtube.com/watch?v=b5RVPauf4oM">https://www.youtube.com/watch?v=b5RVPauf4oM</a>			
Skills	Calculate relative formula mass	R195	<a href="https://www.youtube.com/watch?v=it_fmQu5ivg">https://www.youtube.com/watch?v=it_fmQu5ivg</a>			
Skills	Identify variables in an investigation	N/A	<a href="https://www.youtube.com/watch?v=nKbUbfadxRU">https://www.youtube.com/watch?v=nKbUbfadxRU</a>			
Skills	Draw a variety of different types of graph (bar, scatter)	R703 R148	<a href="https://www.youtube.com/watch?v=VM3i6-gvKSA">https://www.youtube.com/watch?v=VM3i6-gvKSA</a>			