

Summer Tasks 2021

YEAR 12 into 13 CHEMISTRY



TASK A – REVISION Year 12 content

(weak areas as identified in June 2021 assessments)

- **Exam technique using past papers with markschemes**
- Your OWN bank of revision resources – flashcards especially definitions
- Crash Course in Chemistry DVD clips – free online
- KnockHardy PowerPoints / Pixl KnowIT – on google classroom
- OCR Revision Guide – commercially available
- OCR Textbook – commercially available: focus on exam tips & definitions

TASK B – UpLearn (focus on Y13 new content)

- August 31st 2021 will be audit 5 with expected progress of >800 XP points and a minimum of 10-12 hours invested time.
- Annual accumulative total: 4000 XP points and an expected minimum of 50-58 hours.

TASK C – PAG Revision Maps

Practical Skills in written examinations

The work you have completed for the Practical Endorsement has been excellent preparation for your public exams in Year 13.

It has been clear from the new specification exam papers, practice and specimen papers that the practical activities completed form significant part of all three papers especially paper 3.

Questions have focussed on the following key areas:-

- **Planning** – can you describe practical activity including Identification of equipment – you are expected to be able to draw a scientific diagram of the equipment and annotate as appropriate.
- **Risk Assess** – identify both the generic and specific dangers in each experiment. Be able to propose ways to minimise the dangers and outline any action required in the event of an accident. You are recommended to use CLEAPS, and other online resources, to research and reference your risk assessment.

- **Variables** – Independent, dependent, control – identify as appropriate.
- **Analysis** – Link between scientific understanding and anticipated results.
- **Processing** – Can you present your results in a well-designed data table and/or graphically. Do you know what to do with the data in terms of calculations required? Do you support your work by using balanced equations and/or ionic equations.
- **Evaluation** – What are the limitations of your experiment? How do you minimise uncertainty and errors? How could you improve your experiment? Can you constructively criticise a proposed method/diagram in order to improve or make safe the procedure?

For the PAGs 1.1, 2.1, 3.1, 4.1, 5.1 and 6.1, please produce a MIND MAP that addresses all areas above. You will find the related PAG resources in your google classroom.

*The expectation is that you produce an A4 or A3 mind map for each Year 12 PAG listed above. **PRINT your six mind maps and bring to your first Yr13 chemistry lesson.***

Exemplar from AS physics:

<h1>Physics Practicals</h1>		
<h2>Investigating Boyle's Law</h2>		
Equipment		Independent Variable
Pressure gauge, Tubing, Valve (for safety), Foot pump		Pressure applied
Method		Dependent Variable
Set Up equipment as in diagram, The pressure on the oil is increase b pumping the foot pump, The volume of the air in the tube can be measured from the scale. P plotted against 1/V to check pV= constant. If they are proportional, then the graph will be straight line through the origin. Wear eye protection in case of explosion. Plot p/v will give a $p_1V_1 = p_2V_2$ Plotting p against 1/v is easier to identify Boyle's law		Volume of air
		Control Variables
		Equipment, Amount of oil,
		Improvements
		Securer connections

