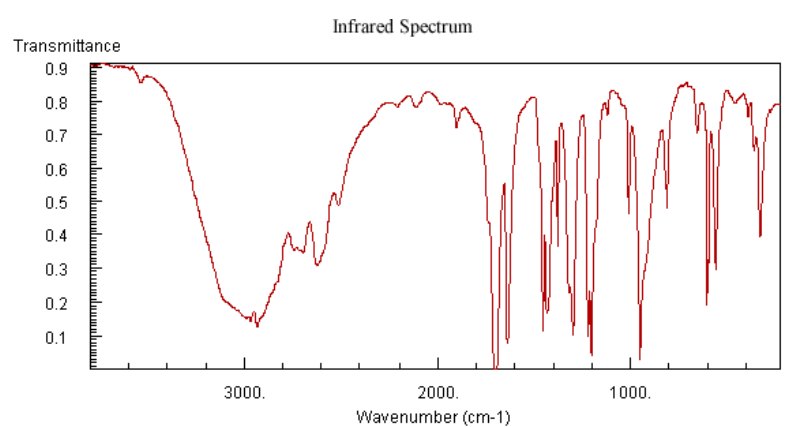
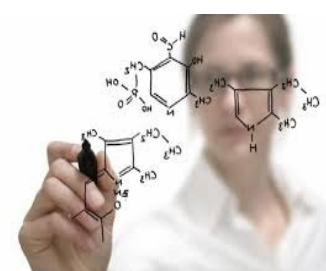
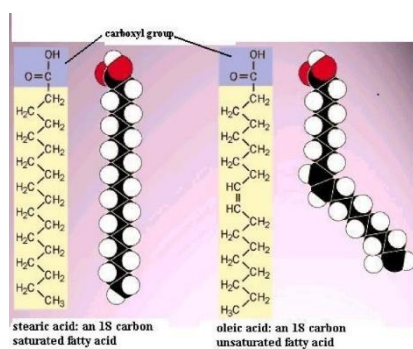
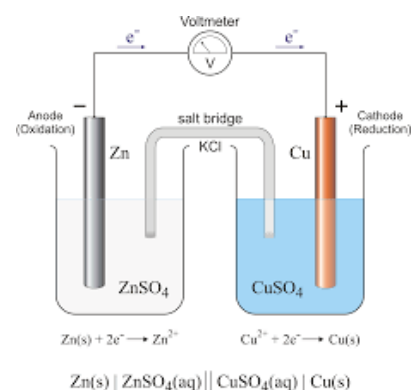
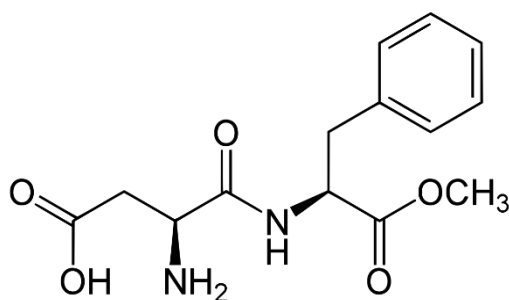
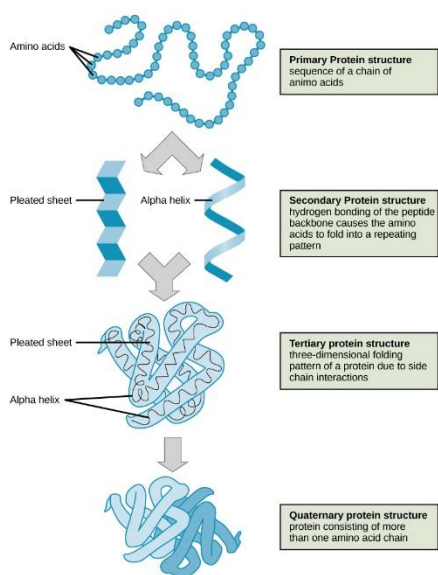




VCE Transition Package 2022

Units 3 and 4

CHEMISTRY



Welcome to Year 12 Chemistry

We have stressed to you the importance of understanding the Chemistry concepts this year to make next year as easy as possible, have you done that? Did you see your teacher for help when you first had these issues? You must do this for Year 12, do not leave any concerns until later. See your teachers out of class because in class your time is limited.

The most important and best way of improving your chemistry understanding is by **attempting practice questions**. There is nothing else that can give you the same feedback and learning experience than answering questions. This allows you to identify those concepts/style of question that you struggle with and get help with them. **Don't leave learning this lesson until your exam period at the end of next year.**

Aside from learning the chemistry concepts **one of the most important tasks for you in Year 12 is to learn the ability of self-marking your work**. Hopefully you will be attempting lots of questions and your teachers simply won't have the time to mark them all. Solutions will be made available to you, through Google classroom, for all the Never-ending question sheets and worksheets, check these and if the solutions still don't make sense then see your teacher.

My job as your teacher is to provide you with all the resources you need to reach your full potential, I cannot give you the motivation to use them that must come from you.

You are competing against approximately 10,000 students who are also attempting Year 12 Chemistry next year.

'Study scores' will provide a ranking of all of the approximately 10,000 students who will undertake Units 3 and 4 Chemistry. Of those **10000** students

- approximately **20 will get a study score of 50**
- approximately **200 will receive a study score of 45 or higher**
- approximately **800 will receive a study score over 40**

Chemistry is not easy. I hope that you are here to do your best and work hard

Good luck,

Ms Bird, Ms Richards and Mr Sanders

birdk@vermontsc.vic.edu.au

richardsj@vermontsc.vic.edu.au

sandersm@vermontsc.vic.edu.au

Materials

Text – it is expected that you will bring your text book to each class. You may also find it handy to upload the electronic copy of the text which is on the disk supplied with the text book.

Class Notes – these will be provided at the start of each area of study and will be linked to the in-class PowerPoint coverage.

Calculator – you will require a scientific calculator – programmable / graphic calculators are not permitted in VCE Chemistry examinations.

Log book – a bound exercise book (preferably A4) in which all practical exercises and SAC tasks will be recorded.

Data Book – you will be supplied with a copy of the VCAA Chemistry Data Book at the start of the course and are expected to bring this to every lesson and use it to access data required for calculations, etc

Folder – You will be given PowerPoint notes and Never Ending Questions sheets through-out the year. A folder will help you keep this all organized and in one place.

Satisfactory completion of the Unit

To satisfactorily complete each unit, you must be able to demonstrate achievement of the designated outcomes associated with each area of study.

To achieve each outcome you will be required to draw on the key knowledge prescribed for the related area of study and the key skills listed on page 12 of the study design.

Key Dates/Timelines of Topics, Outcomes and Activities Assessment dates 2022

Unit 3- How can chemical processes be designed to optimize efficiency?

Task	Date
Outcome 1 compare fuels quantitatively with reference to combustion products and energy outputs, apply knowledge of the electrochemical series to design, construct and test galvanic cells, and evaluate energy resources based on energy efficiency, renewability and environmental impact. SAC 1 – 8% A report on a laboratory investigation and extended response to discussion questions under test conditions. Completed over 2 sessions.	Term 1 Approx. Week 7
Outcome 2 Apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised, and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries. SAC 2 - 8% Two reports on Laboratory Investigations and test style questions. Completed over 3 sessions.	Term 2 Approx. Week 4
Outcome 3 (UNIT 4 moved into UNIT 3) SAC 3 – 8% Design and undertake a practical investigation related to energy and/or food, and present methodologies, findings and conclusions in a scientific poster. Completed in class over 6-8 lessons	End of Term 2 Approx Week 5-7

Unit 4 – How are organic compounds categorised, analysed and used?

Task	Date
<p>Outcome 1 Compare the general structures and reactions of the major organic families of compounds, deduce structures of organic compounds using instrumental analysis data, and design reaction pathways for the synthesis of organic molecules.</p> <p>SAC 4 – 8% A report on a Practical Investigation and test style questions. Completed over 2 sessions.</p>	<p>Term 3 Approx. Week 6</p>
<p>Outcome 2 Distinguish between the chemical structures of key food molecules, analyse the chemical reactions involved in the metabolism of the major components of food including the role of enzymes, and calculate the energy content of food using calorimetry.</p> <p>SAC 5 – 8% Response to test questions</p>	<p>Term 3 Approx. Week 9</p>

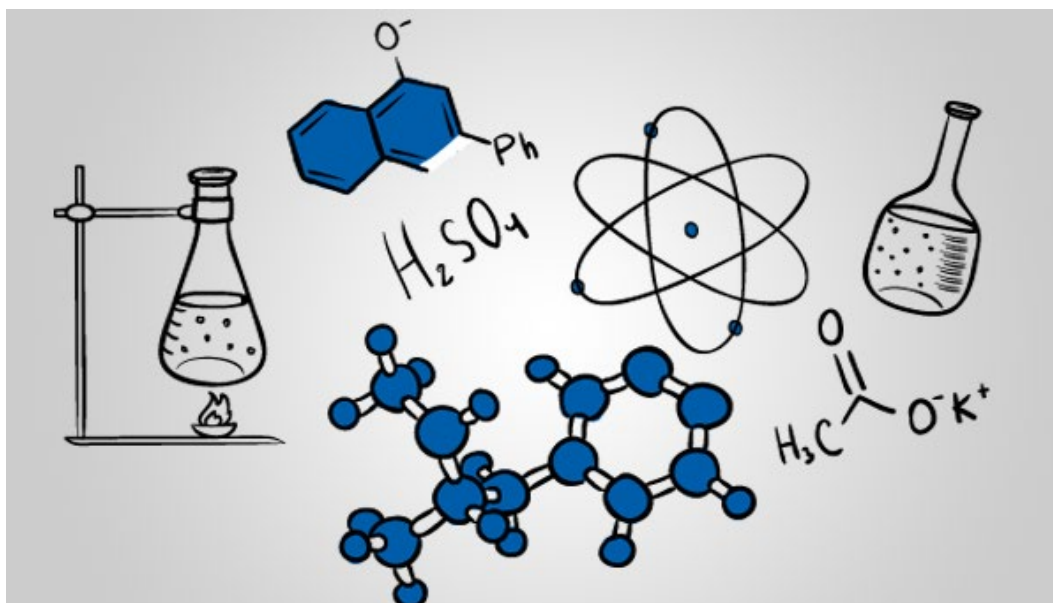
Please note only the approximate week of the assessment task is listed. Confirm the dates with your teacher during the year. It is subject to changes.

HOLIDAY WORK

Your holiday homework for the holidays is:

1. 'How Much Have You Forgotten' test for you to complete and submit at the start of your first lesson in **2022**.
2. Chapter 3 textbook questions (See PowerPoint for specific questions).
3. Summary notes for Unit 3 in your exercise books.
4. Complete the fuels section of edrolo. Watch the videos, do the questions and correct them.

<https://edrolo.com.au/s/349074/>



How to excel in Chemistry

In order to do well in VCE there are a few things you can do:

1. Get organised! Have a folder to keep your notebook, logbook and to file any worksheets/homework in
2. Know the Curriculum!!! Keep a copy of the study design at the front of your folder and refer to it regularly.
3. Make and maintain a study space
4. Set high standards for yourself
5. Make a study group. Or ask questions/start discussions in the class fb page
6. Revise regularly. Below are some suggestions for how you can do this through-out the year.
7. Sign up to google Classrooms. Read regularly and submit work here.

Each week YES EVERY WEEK!!	In preparation for a SAC	In preparation for the exam
Make summary notes, mind maps, flashcards etc Review notes at home after each lesson. Identify areas of concern and see teacher for assistance Never ending question sheets Edrolo Videos Chapter questions and worksheets (and correct them)	Review summary notes and study design AOS review questions in textbook Edrolo practice questions Edrolo practice tests Checkpoints/study on questions See teacher for assistance!!	Review study design Identify gaps in knowledge Complete practice questions (edrolo, checkpoints, study on) Do practice sample exams (NEAP, TSSM, Lisa Chem etc) Do VCAA past exams

