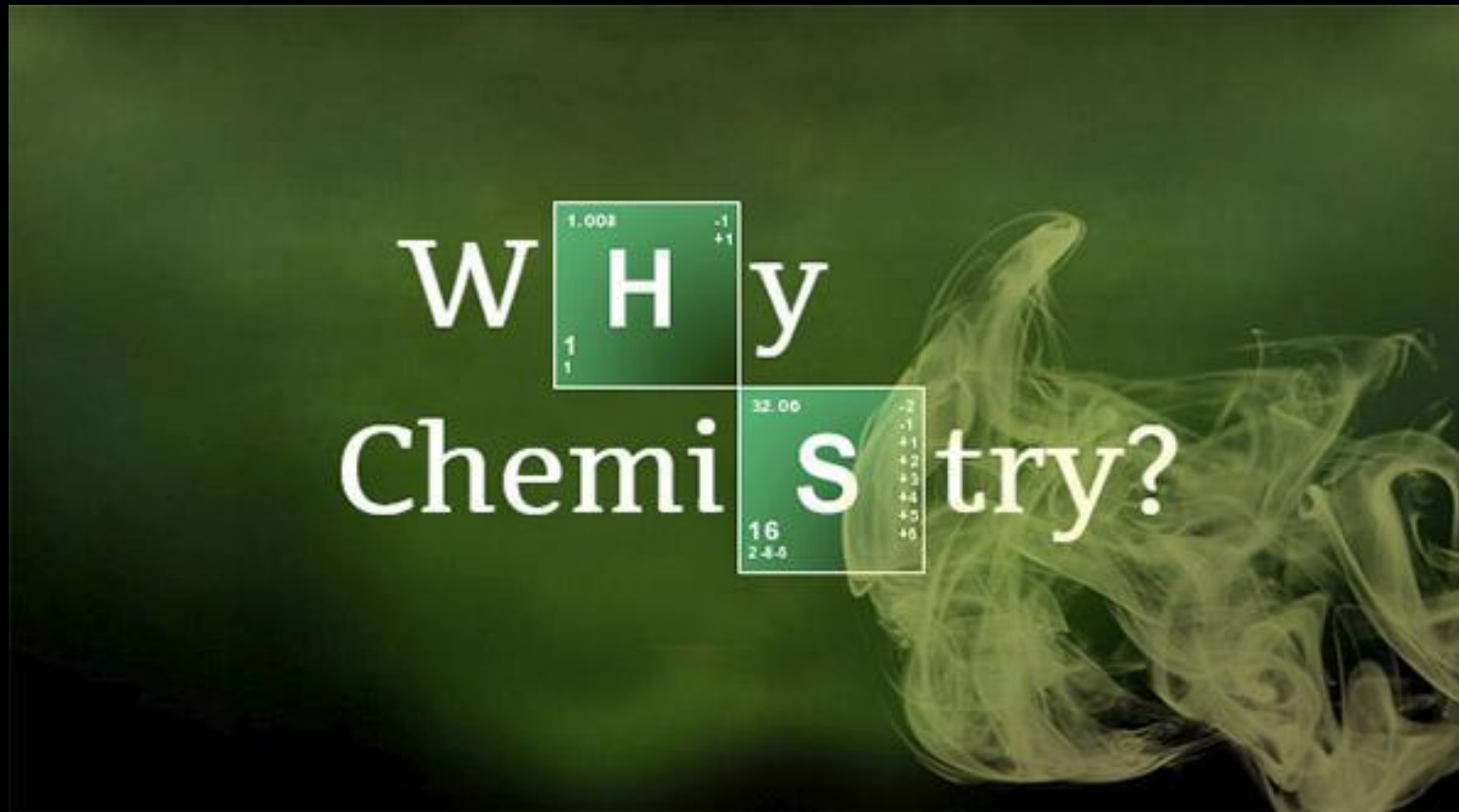


Chemistry is the study of the building blocks of our world

It opens doors for many career options such as medicine, pharmaceuticals, engineering, pharmacy etc.



Did you like Junior Cert. Chemistry?

Do you like Maths?

Do you enjoy doing experiments in the lab?



Courses that require Chemistry



Dentistry UCC
& RCSI

Human
Nutrition and
Dietetics TUD

Medical
Health
Sciences UCC

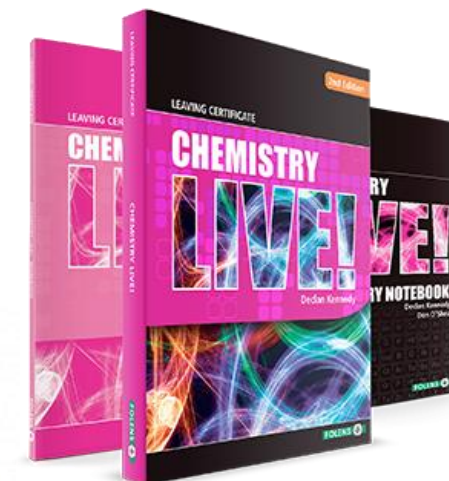
Medicine UCC

Pharmacy UCC

Veterinary
Medicine UCD

LC Chemistry

- Lots of practical work!
- 29 experiments and 4 research investigations.

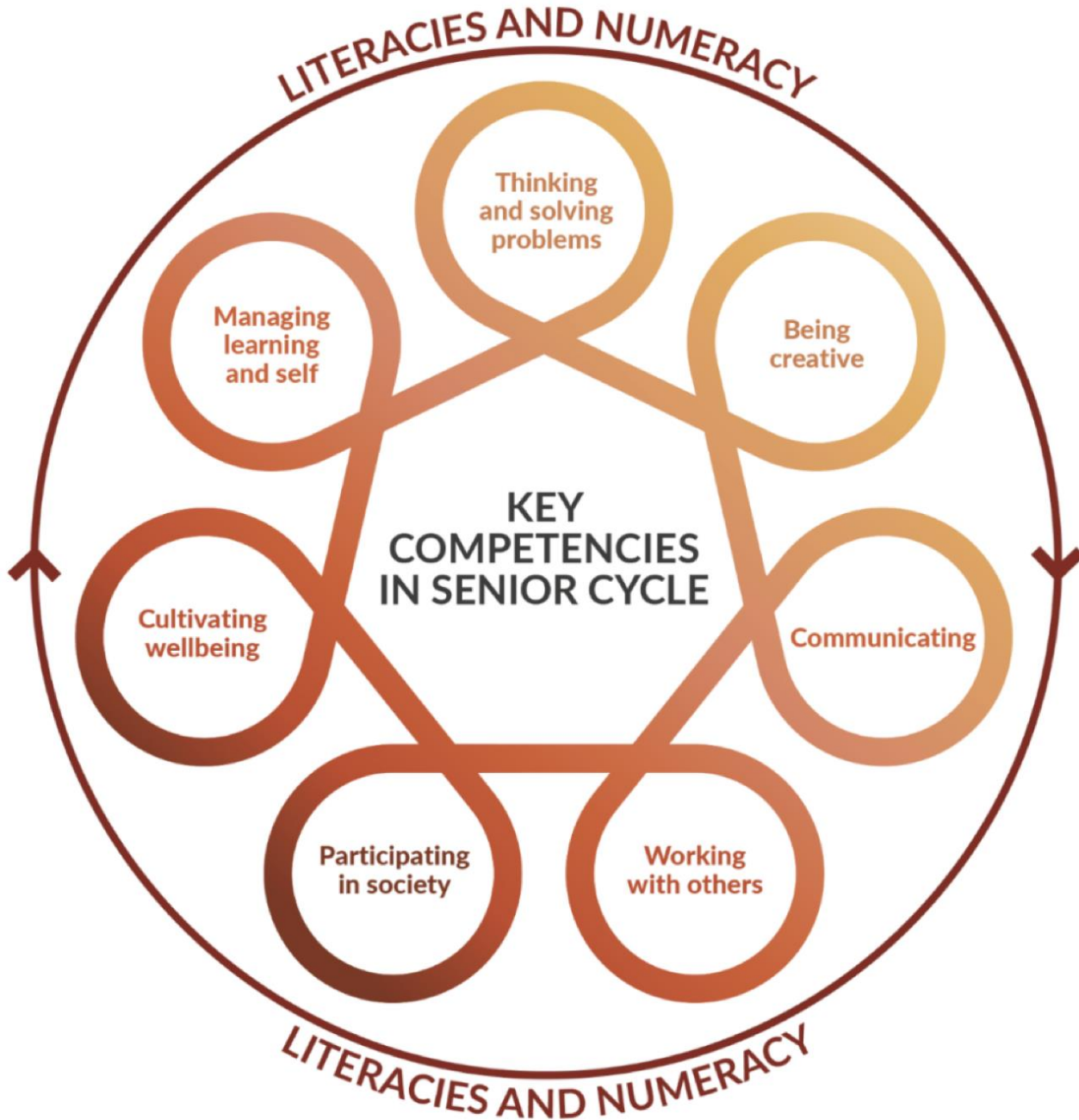


Topics

- | | |
|--|---|
| <ul style="list-style-type: none"> • Acids and Bases • pH • Atomic Structure • Periodic Table • Solutions and Concentrations • Organic Chemistry | <ul style="list-style-type: none"> • Fuels and Heats of Reaction • Water • Chemical Equilibrium • Rates of Reaction • Radioactivity • Properties of Gases |
|--|---|

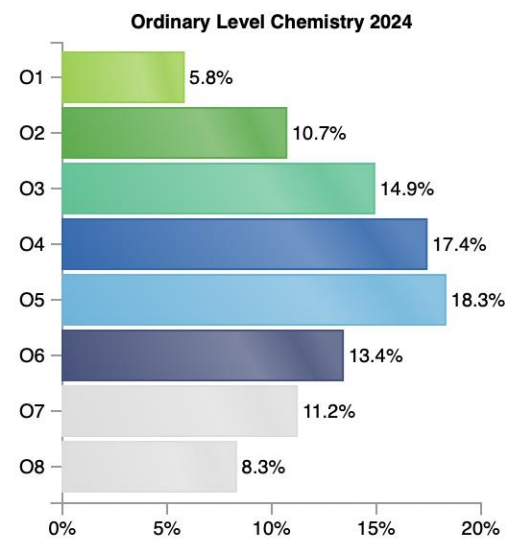
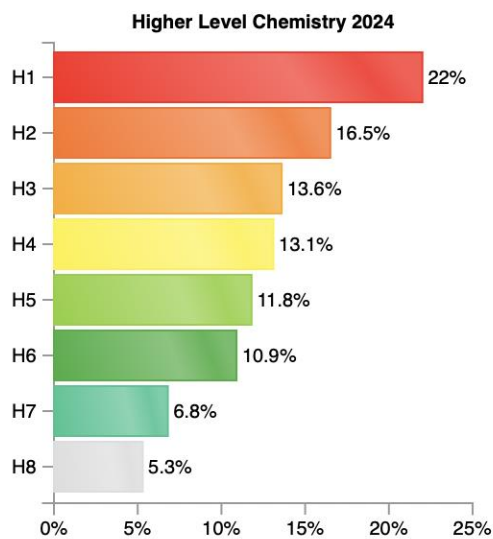
Periodic Table of the Elements

1 H Hydrogen 1.008	2 He Helium 4.003																	3 Li Lithium 6.941	4 Be Beryllium 9.012																	5 B Boron 10.81	6 C Carbon 12.011	7 N Nitrogen 14.007	8 O Oxygen 15.999	9 F Fluorine 18.998	10 Ne Neon 20.180
11 Na Sodium 22.990	12 Mg Magnesium 24.305																	13 Al Aluminum 26.982	14 Si Silicon 28.086	15 P Phosphorus 30.974	16 S Sulfur 32.06	17 Cl Chlorine 35.45	18 Ar Argon 39.948																		
19 K Potassium 39.098	20 Ca Calcium 40.078	21 Sc Scandium 44.956	22 Ti Titanium 47.88	23 V Vanadium 50.942	24 Cr Chromium 51.996	25 Mn Manganese 54.938	26 Fe Iron 55.845	27 Co Cobalt 58.933	28 Ni Nickel 58.693	29 Cu Copper 63.546	30 Zn Zinc 65.38	31 Ga Gallium 69.723	32 Ge Germanium 72.63	33 As Arsenic 74.922	34 Se Selenium 78.96	35 Br Bromine 79.904	36 Kr Krypton 83.80																								
37 Rb Rubidium 85.468	38 Sr Strontium 87.62	39 Y Yttrium 88.906	40 Zr Zirconium 91.224	41 Nb Niobium 92.906	42 Mo Molybdenum 95.94	43 Tc Technetium 98.906	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.905	46 Pd Palladium 106.42	47 Ag Silver 107.868	48 Cd Cadmium 112.411	49 In Indium 114.818	50 Sn Tin 118.710	51 Sb Antimony 121.757	52 Te Tellurium 127.6	53 I Iodine 126.905	54 Xe Xenon 131.29																								
55 Cs Cesium 132.905	56 Ba Barium 137.327	57-71 Lanthanides and Actinides	72 Hf Hafnium 178.49	73 Ta Tantalum 180.948	74 W Tungsten 183.84	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.222	78 Pt Platinum 195.084	79 Au Gold 196.967	80 Hg Mercury 200.59	81 Tl Thallium 204.38	82 Pb Lead 207.2	83 Bi Bismuth 208.98	84 Po Polonium 209	85 At Astatine 210	86 Rn Radon 222																								
87 Fr Francium 223	88 Ra Radium 226	89-103 Lanthanides and Actinides	104 Db Dubnium 261	105 Sg Seaborgium 266	106 Bh Bohrium 264	107 Hs Hassium 277	108 Mt Meitnerium 268	109 Ds Darmstadtium 271	110 Rg Roentgenium 272	111 Cn Copernicium 285	112 Nh Nihonium 284	113 Fl Flerovium 289	114 Lv Livermorium 293	115 Mc Moscovium 288	116 Ts Tennessine 289	117 Og Oganesson 294	118 Og Oganesson 294																								
		57 La Lanthanum 138.905		58 Ce Cerium 140.12		59 Pr Praseodymium 140.908		60 Nd Neodymium 144.24		61 Pm Promethium 144.913		62 Sm Samarium 150.36		63 Eu Europium 151.964		64 Gd Gadolinium 157.25		65 Tb Terbium 158.925		66 Dy Dysprosium 162.50		67 Ho Holmium 164.930		68 Er Erbium 167.259		69 Tm Thulium 168.930		70 Yb Ytterbium 173.054		71 Lu Lutetium 174.967											
		89 Ac Actinium 227.028		90 Th Thorium 232.038		91 Pa Protactinium 231.036		92 U Uranium 238.029		93 Np Neptunium 237.048		94 Pu Plutonium 244.064		95 Am Americium 243.061		96 Cm Curium 247.070		97 Bk Berkelium 247.070		98 Cf Californium 251.080		99 Es Einsteinium 252.083		100 Fm Fermium 257.105		101 Md Mendelevium 258.10		102 No Nobelium 259.108		103 Lr Lawrencium 260.105											
		Alkaline Earths		Alkaline Earths		Transition Metals		Transition Metals		Transition Metals		Transition Metals		Transition Metals		Transition Metals		Transition Metals		Halogens		Halogens		Halogens		Halogens		Halogens		Halogens											

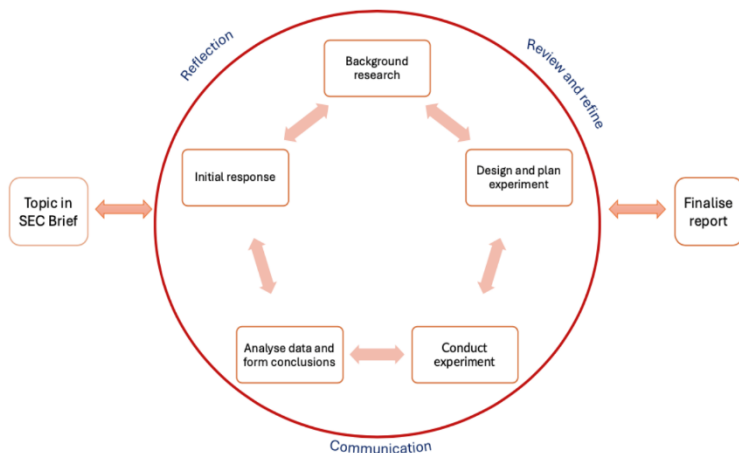


- You will need to keep a learning journal.
- These skills will appear on the exam.

Grades Awarded



Higher Level Grades	Higher Level Points	% Bands	Ordinary Level Grades	Ordinary Level Points
H1	100	90-100%	O1	56
H2	88	80-89%	O2	46
H3	77	70-79%	O3	37
H4	66	60-69%	O4	28
H5	56	50-59%	O5	20
H6	46	40-49%	O6	12
H7	37	30-39%	O7	0
H8	0	0-29%	O8	0



The Chemistry in Practice Investigation (CIP)

Your final LC Chemistry grade is a combination of two results. You will sit a Leaving Certificate exam at the end of sixth year which is worth 60% and you will complete an additional assessment component (an AAC) which is worth 40%. For Chemistry, the AAC is called the Chemistry in Practice Investigation (or CIP).

The CIP involves two main parts:

- 1. Conduct scientific research** on an issue related to the brief (an investigation brief will be published annually by the SEC in **term 2 of fifth year**). You will gather, process and evaluate information from secondary sources, and use the knowledge to inform your experimental work.
- 2. Conduct an experiment.** You will generate a hypothesis, plan, and design your experiment. You will carry out a laboratory-based experiment and gather primary data. Once you have gathered your primary data, you will analyse the data and form conclusions.

This brief will:

- Include stimulus material to set a context for the investigation.
- Allow you to develop your thinking and ideas on areas that you would like to pursue, related to the brief.
- Allow you to begin your investigative log (once the brief is published you should note down anything you learn in class (or outside of class) that is linked to the topic in the brief).

The NCCA (National Council for Curriculum and Assessment) has suggested a rough timeline of approx. 20 hours of class time. You can also work on this report at home. However, this must be **your work**. **Your teacher will have to sign off on your work to say that it is authentically your work** (and not the work of your parents, guardians, siblings, aunts or uncles!). **If your teacher has doubts about this, they will not sign off on your CIP and you will receive 0%.**

More detailed
information available
on request!

