

<p>The Becket School</p> <p><b>CHEMISTRY DEPARTMENT</b></p>	<p><b>Name:</b></p>
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# CHEMISTRY

## AS LEVEL TRANSITION

### Introduction

Welcome to the Becket School and AS Level Chemistry. As an introduction to some of the ideas and content of the course, a 'transition' topic has been devised. The purpose of this topic is to help you prepare for year 12.

The transition topic also includes a research task to allow you to revise and review your learning on the key types of structures and bonding in Chemistry.

This transition topic and the research task will be due for completion **by the end of the first week of your studies** at the Becket School.

The transition work consists of four tasks

1. Transition booklet including research task
2. Chemical competencies- starter for ten
3. Maths in chemistry- starter for ten
4. Practical Skills- starter for ten

The work will be due for completion **by the end of the first week of your studies** at the Becket School. You should aim to complete all the tasks and self assess task 2 to 4. Please bring all the work with you at the end of the first week. **As a minimum you must complete this transition booklet** but the more work you do now the easier you will find Year 12 when it starts.

The content of this topic is taken from aspects of GCSE Chemistry that overlap with the A Level, as well as some new knowledge from A level. Therefore, there may be areas that you struggle with, and that is fine, but it is expected that you research, read and find out at least something about each area.

For your information, the course that you will be following is AQA GCE Chemistry. You will also be given an AQA textbook and the opportunity to buy a CGP revision guide (at less than the retail price) in the first few weeks to help you with your studies.

Good luck!

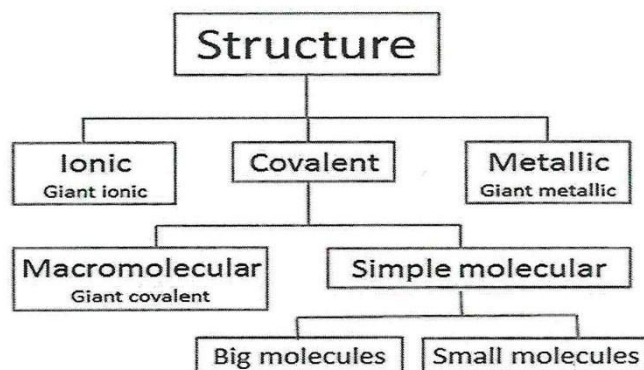
# Research Task: Types of Structures

## Review of prior GCSE knowledge and understanding

In chemistry we are interested in different type of structures and bonding because it has a big impact on the properties of a chemical. The key structures are shown below and you should have met these at GCSE.

### Prior Knowledge:

- Ionic bonding involves electrostatic attraction between oppositely charged ions in a lattice.
- A single covalent bond contains a shared pair of electrons.
- Metallic bonding involves attraction between delocalised electrons and positive ions arranged in a lattice.



### Task:

You will be expected to know about each of these structures throughout the A level Chemistry course. In preparation for this we would like you to create a resource that summarises your knowledge of these **four key structures**:

- **Giant ionic structures**
- **Giant covalent structures**
- **Simple covalent molecules**
- **Giant metallic structures**