



CHEMISTRY: BRIDGING ACTIVITY

Development Tasks

These tasks are to be completed so that you are ready for the challenge of A Level Chemistry. These tasks will not be needed to be handed in, however at the start of the course they will be checked to see the work you have completed. Therefore, you will need a folder/organiser for your work.

First: Complete the following

1. Some level transition maths skills, complete questions then mark. (answers at end)
http://fdslive.oup.com/www.oup.com/oxed/secondary/science/Science_A_Level_Transition_Pack_Chemistry.pdf

Then: Choose from the activities below

2. Search on amazon.co.uk “New Head Start to A-level Chemistry” this is a free Kindle book to practise key skills.
3. Look at the free courses here and select at least one that interests you and complete. <https://www.open.edu/openlearn/free-courses/full-catalogue>

Research Task – Hand in at the start of the course.

Research the bonding, structure and properties of the following materials, then write 1,500 words about each material.

1. Kevlar
2. Self-cleaning glass
3. A biodegradable plastic of your choice.

Structure of the task - For **each** material, follow the structure below on how to present your work.

- **Introduction** – Give an introduction to the type(s) of bonding found in this material and include the uses of the material.
- **Main section** – this will be several paragraphs including diagrams/pictures which:
 - Describe in detail how electrons are involved in the bonding between atoms.
 - Describe in detail the macromolecular structure of each material.
 - Relate the macromolecular structure to the properties.
 - Relate the properties to the uses.
- **Conclusion** - what are your overall conclusions about the material and its uses, give your own opinion here.
- **References/bibliography** – record references of where you found your research you should have at least 2 or 3 different references per material.

You should be ready to present your work to the class and hand in a copy of your research at the start of the course. We look forward to reading your essays!