

**Subject:** *BTEC National Extended Certificate  
in Applied Science*

**Exam Board:** *Pearson*

Welcome to BTEC Applied Science. We are delighted that you are considering this BTEC as an option in Year 12 and 13.

### *What is Applied Science?*

The BTEC Applied Science course is for learners who want to continue their education through applied learning. It provides a vocational context in which learners can develop the knowledge and transferable skills required for employment or higher education. These include: reading scientific and technical texts, effective writing, analytical skills and practical skills.

The course will cover fundamental elements of biology, chemistry and physics, practical laboratory skills as well as how to carry out a scientific investigation.

### *Skills you will have learnt upon completion of Applied Science:*

- How to research, present and reference an extended piece of written work
- How to be competent and confident when carrying out practical laboratory skills
- How to present a practical report
- How to interpret, analyse and evaluate higher level responses to scientific questions

### *Learning Objectives:*

1. Learn how to carry out mole calculations and complete examples of questions on this topic.
2. Carry out a titration and use mole calculations to determine the concentration of solutions

## Transition tasks to be completed:

To demonstrate your commitment to the course and prepare you for September, you must complete the following compulsory tasks by **Friday 15<sup>th</sup> July**. We expect you spend at least 3-4 hours completing the tasks outlined in this pack and will help you to begin to develop some of the key skills you will need:

Task 1: Work through the PowerPoint on a titrations and complete the accompanying relevant mole calculations

Task 2: Watch the following YouTube clips from a bank of resources on Applied science. For each video you will need to answer the questions at the end and submit your answers

Atomic structure: [https://www.youtube.com/watch?v=RQCVe\\_E6KJk](https://www.youtube.com/watch?v=RQCVe_E6KJk)

Answer the questions at the end of the video

Communicating with waves: [https://www.youtube.com/watch?v=ByR\\_fF5i1-w](https://www.youtube.com/watch?v=ByR_fF5i1-w)

Choose 2 of the six mark questions at the end of the video and answer them

Blood vessels: <https://www.youtube.com/watch?v=eBj0hKzgoEM>

Answer the questions at the end of the video

Contacts for Support:

Mrs North: [north@tahs.net](mailto:north@tahs.net)

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# *Summer Bridging Work 2023*

*Opportunity Progress Individuality*

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