

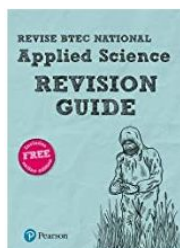
Applied Science

Welcome to Applied Science In order to give you the best possible start to your vocational study at Level 3, here are a few resources and tasks to help you build your knowledge and confidence ready for your next steps in the study of science.

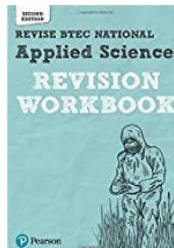
Recommended Reading:



ISBN-13: 978-1292134093
ISBN-13: 978-1292134130



ISBN-13: 978-1292150048
ISBN-13: 978-1292258171



Tasks to complete :

Task 1 - Unit 1 Principles & Applications of Science I

<https://senecalearning.com/en-GB/>

Topic areas covered:

- Cell Structure, Function and Specialisation
- Tissue Structure and Function
- Structure and Bonding
- Properties of Substances
- Working with Waves
- Waves in Communication

This unit is an exam unit and builds on the knowledge and skills you developed in GCSE Science.

You can use Seneca, an online learning platform, in order to become familiar with the topics covered in this unit. In order to access this resource, you need to do the following:

1. Click the link in the box on the left.
2. Sign up to Seneca and create an account.
3. Once you have created an account, you need to join the 'Lvl 3 Applied Science Unit 1 Intro' class. To do this, go to 'classes & assignments --> join class' and enter in the following class code: **vg9mb7yv6x**
4. Once you have joined the class, you can access the content for this unit.

Task 2 - Practical scientific Procedures and Techniques

<http://www.rsc.org/learn-chemistry/resources/screen-experiment/titration/experiment/2>

(use in Chrome or Safari)

Topic areas covered:

- Volumetric analysis techniques e.g. preparing standard solutions, undertaking an acid/base titration;

One of the first skills you work on developing in Year 1 is volumetric analysis using titration. It is important you understand the principles behind this laboratory technique.

There are 4 levels to complete - approx 30 mins each.

At the end of each level there is a review section for students to reflect on their progress

<ul style="list-style-type: none"> - Amount of substance calculations e.g. converting mass to number of moles and determining concentration. - pH curves, equivalence points and indicator selection; - dilution calculations and units. - redox titrations (KMnO₄/Fe²⁺); - determining ionic equations. 	<p>and draw conclusions. This is another important skill as you progress through your study with us.</p> <p>This will really help support your understanding for the first assignment in this unit.</p>
<p>Task 4 - Physiology of the human body</p> <p>In order to prepare yourself for these units, please complete the following tasks:</p> <p>Musculoskeletal System: Human skeleton to label and colour Video to help (using subtitles might help)</p> <p>Osteoporosis is a medical disorder of the musculoskeletal system. Research the condition and its symptoms and explain how and why these occur? How is it diagnosed? What treatments are available and how these help the disorder?</p> <p>This will support assignment work in this unit - approx a page and a half A4 font size 12 needed.</p>	<p>Unit 8 - Physiology of Human Body Systems Unit 9 - Human Regulation and Reproduction</p> <p>Most students really enjoy these units.</p> <p>You will learn about the systems of the body and how they are regulated.</p>

If you have any questions about this course please email a.mccrerie@burnley.ac.uk