


# BTEC Engineering Applied Science Level 3

## Bridging Work

This is a fantastic opportunity to expand your understanding of Applied Science as you prepare for enrolment and start at Franklin in September.

Please complete the work and bring a copy to your enrolment, either printed or electronically.

The work will take around **4 hours**, so plan your time to best suit you.

<b>How do I complete and submit my task?</b>	<p>Complete the tasks on paper/handwritten or digitally and bring a copy either paper or electronically to your enrolment appointment, also take this to your first lesson in September.</p> <p>If you did not attend the Taster Day don't worry – this isn't essential for completing this work but, please ensure that you have completed this bridging work.</p>
<b>Introduction to your Bridging Task</b>	<p>This first task relates to 'Chemical Quantities' which is part of both the examined unit - Unit 1: Principles and Applications of Science I coursework unit - Unit 2: Practical Scientific Procedures and Techniques</p> <p>The second task This task relates to 'Electrical Circuits' which is part of both the examined unit - Unit 3: Scientific Investigative Skills and the coursework unit - Unit 15: Electrical Circuits and their Applications.</p>
<b>Task details</b>	<p><b>Task 1:</b> <b>Complete the Rf calculations and questions in the work sheet below.</b></p> <p><a href="#">Work sheet here</a></p> <p><b>Complete the calculations and questions on the following work sheet.</b></p> <p><a href="#">Work sheet here</a></p> <p><b>Complete the quiz attached here</b></p>  <p><b>Task 2:</b></p>

**PART A – CIRCUIT SYMBOLS**

1. Watch the video about Circuit Symbols [Circuit Symbols](#)
2. Answer the [BRIDGING TASKS](#)

**PART B – CIRCUITS AND CALCULATING RESISTANCE**

3. Watch the video about setting up a circuit and calculating resistance [Video on circuits and calculating resistance](#)
4. Answer the [BRIDGING TASKS](#)

**PART C – OHM'S LAW**

5. Watch the video about setting up a circuit and calculating resistance [Ohm's Law](#)
6. Answer the [BRIDGING TASKS](#)

**Complete the attached quiz**



**Resources to help you with the Bridging Task**

Link to the tasks

Video links:

[GCSE Chemistry – Chromatography: Chromatograms & Calculating Rf Values](#)

[Circuit Symbols](#)

[Video on circuits and calculating resistance](#)

[Ohm's Law](#)

You can also use any other research sources and materials you wish.

**Extension Tasks**

**Extension Tasks to stretch and challenge you**

If you have completed the above to the best of your ability, feel free to try this extension task (*this is optional*):

Research the different types of chromatography Gas and High-performance Liquid.

Be sure to include a description of how the technique works and where it is used, images of the devices/ equipment needed. [Introduction to Electronics](#)

<b>Massive Open Online Courses (MOOCs)</b>	You might enrol on these online courses and complete the following to push you a little further (this is optional): <a href="#">Biochemistry: Biomolecules, Methods, and Mechanisms   My Mooc (my-mooc.com)</a> <a href="#">Science &amp; Cooking: From Haute Cuisine to Soft Matter Science (chemistry)   My Mooc (my-mooc.com)</a>
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