BRIDGING THE GAP

BTEC LEVEL 3 ENGINEERING

Course Title	Examination Board & Web Address
BTEC International Level 3 Subsidiary Diploma in Engineering	BTEC Pearson www.BTEC.co.uk

Units/Topics Studied:

Delivery of engineering processes safely as a Team, product design and manufacture in engineering, electrical devices and circuits, electrical and electronic principles, applied commercial and quality principles in engineering.

Bridging Task

Part One:

Find out the answers to the following questions

1. What is a life cycle assessment?
2. What is Total Quality Management?
3. What is Quality Control?
4. What is Ohms Law?
5. What is a diode?
6. What is the circuit symbol for a diode?
7. What is a capacitor?
8. What is the circuit symbol for a capacitor?
9. List three items of PPE and what they are used for?
10. If you see the letters CE on a product what does it tell you about that product?

Part Two:

Choose **TWO** of the following tasks to complete

Human Factors affecting the Performance of Engineering Processes Research the following ethical principles. Rigour, honesty, integrity, respect and responsibility. Explain what each principle is and how you think it relates to working as a team to produce an engineered product.	**Disassembly** Disassembly is a common process used in engineering to either repair, clean or see how a product works. See if you can find an old product that you do not use anymore such as a computer mouse, an old plug, or a cycle multitool. Using a screwdriver or other appropriate tool carefully take the product apart, lay out the component parts and try and label them, saying what they are and what they are used for.
Common Engineered Processes Research the following manufacturing processes used to create engineered products - Turning, milling and Injection Moulding. Explain how each process is used to manufacture a product. If you can, watch a short video clip on each process so you can see what is going on.	**Quality Management** Research the ISO 9001 quality management system and list the benefits of using this framework

Mrs MacGillivray