



## Professional Graduate Programme – Summer Transition

### Introduction

1. Welcome to the Professional Graduate Programme summer transition pack. This set of resources is set out to enable you to start to think about the courses you will undertake in September 2020. It is possible that you are not absolutely sure which of the vocational areas you will study, so the pack gives a taste of each of the 10 vocational subjects we offer across Christ the King Sixth Forms.

### Vocational Subjects – Professional Graduate Programme

1. Art and Design
2. Business
3. Engineering
4. Health and Social Care
5. ICT
6. Law
7. Media
8. Psychology
9. Performing Arts
10. Science – Forensic
11. Science - Medicine
12. Sport

### Summer Transition

#### 1. Art and Design

Recommended Reading	Recommended Websites
<ul style="list-style-type: none"> <li>• The Story of Art - E.H. Gombrich</li> <li>• Ways of Seeing - John Berger</li> <li>• Design as Art - Burno Munari</li> <li>• Methods and Theories of Art History - Anne D'Alleva</li> </ul>	<a href="http://www.nationalgallery.org.uk">www.nationalgallery.org.uk</a> <a href="http://www.tate.org.uk">www.tate.org.uk</a>

### Subject: BTEC Level 2 First Diploma in Art & Design

#### Background

A BTEC Level 2 First Diploma is a level 2 qualification equivalent to 4 GCSEs at grades A\*-C. It is awarded by the examining and awarding body Pearson. At this College, it is a one-year course which will give you a broad understanding of the creative Industries and enable you to develop skills relevant to both employment and further study. Teacher led assessment remains at the heart of BTEC learning.

#### **The structure of your BTEC Level 2 First Diploma in Art & Design**

The course consists of three core, three mandatory units plus optional units for a combined total of 480 Guided learning hours.

#### **Core units: (3 units)**

- |        |  |
|--------|--|
| Unit 1 | Introduction to Specialist Pathways in Art and Design (Internal) |
| Unit 2 | Creative Project in Art and Design (External)                    |

Unit 23 Practical Research Project in Art and Design (Internal)

**Mandatory units: (3 units)**

- Unit 5 Developing an Art and Design Portfolio (Internal)
- Unit 6 Investigating Contextual References in Art and Design (Internal)
- Unit 7 Recording for Creative Intentions in Art and Design (External)

**Optional Units: (5 units)**

- Unit 11 Graphics Briefs (Internal)
- Unit 12 Textiles Briefs (Internal)
- Unit 13 Visual Arts Briefs (Internal)
- Unit 16 Applying Contextual References in Art and Design (Internal)
- Unit 28 Printmaking Briefs (Internal)

**Assessment**

Each assignment brief will set the scenario and make it clear what you are required to do in order to achieve that unit of study. You will see that the tasks on the assignment brief do not relate to specific grading criteria so you are required to work on the whole task.

The grading criteria for the level 2 qualification are grouped under **Pass**, **Merit** and **Distinction** headings. Externally assessed units have the same grades as internally assessed units.

To achieve a level 2 qualification learners must:

Achieve a total of 24 points or above through any combination of points across the 2 core and mandatory units and achieve the overall minimum points required for the qualification grade (depending on the size of the qualification).

**Points available for unit size and grades**

**The number of points scored per 10 guided learning hours at each grade at level 2 is outlined below:**

<b>Pass</b>	<b>4</b>
<b>Merit</b>	<b>6</b>
<b>Distinction</b>	<b>8</b>

D\* is an aggregated grade for the qualification, based on the learners overall performance in order to receive this grade, learners will have to demonstrate a strong performance across the qualification as a whole.

**In preparation for studying your BTEC Level 2 First Diploma in Art & Design in September, we ask that you complete the independent task outlined below. This will be used as your prep work for the first lesson and we would expect all students to have completed this for their first lesson.**

**Task to be completed:**

- **Scenario:** A national retail chain selling **kitchen tools and utensils** is undergoing a major makeover of its image and range of **kitchen tools and utensils**. Using the visual sources from your own home you must produce a series of first-hand observational studies that explore the shape, form, line, texture and colour of **kitchen tools and utensils**.
- Produce at least x5 double pages of an A4 sketchbook of drawings from primary/ first hand observation. Choose your approach from the following menu of options:
  - Draw your kitchen sink full of dirty pots, pans and utensils
  - Draw your kitchen sink drainer full of clean pots, pans and utensils
  - Draw your dishwasher full of cups, plates and utensils
  - Draw your kitchen/ dining room table set with cups, plates and utensils
  - Draw individual pots, pans, cups, plates, utensils
  - Draw groupings of pots, pans, cups, plates, utensils
  - Draw with pencils
  - Draw with colour

- Substitute one of the tasks above and paint
- Substitute one of the tasks above and use pastels, chalks or a biro
- Substitute one of the tasks above and combine one or more media to create a mixed media outcome
- Photograph the **kitchen tools and utensils** still-life set up you have created. Print out your images and stick these in your sketchbook.

**Should you require support in completing this, then please use the support below.**

Visit the following websites for ideas:

- <https://uk.pinterest.com/johnmurray/kitchen-tools-and-utensils-edexcel-btec-exam-theme/>
- <http://www.studentartguide.com/articles/realistic-observational-drawings>
- <http://www.studentartguide.com/articles/still-life-drawing-ideas>

**To further prepare you for September we suggest you read:**

John Berger (1972). *Ways of Seeing*. London: Penguin. 166. ISBN:0-14-013515-4

**We suggest you visit:**

Tate Britain, Millbank, Westminster, London SW1P 4RG

<http://www.tate.org.uk>

## Subject: **BTEC Level 3 National Extended Diploma in Art & Design**

### **Background**

A BTEC Level 3 Diploma is a level 3 qualification equivalent to 3 A Level's at grades A\*-C. It is awarded by the examining and awarding body Pearson. At this College, it is a two-year course which will give you a broad understanding of the creative Industries and enable you to develop skills relevant to both employment and further study. Teacher led assessment remains at the heart of BTEC learning.

The qualification is designed for post-16 learners who want to study art and design related degree courses in higher education. Learners gain knowledge and understanding of visual communication and the creative process to develop their creative voice. Learners develop an understanding of the importance and influence of the work of artists and designers to develop and realise their creative intentions. They produce a portfolio of art and design work to support progression to higher education. Optional units allow learners to gain knowledge in areas such as fashion, textiles, graphics, photography, 3D studies and fine art. The qualification is intended to be studied over two years as the substantial qualification in learners' study programme.

### **The structure of your BTEC Level 3 Diploma in Art & Design**

The course consists of thirteen units, seven mandatory units of which four are external set and marked.

Mandatory content (66%)

External assessment (42%)

### **Mandatory units: (7 units)**

Unit 1            Visual Recording and Communication (External)

Unit 2	Critical and Contextual Studies in Art and Design (External)
Unit 3	The Creative Process (Internal)
Unit 4	Materials, Techniques and Processes in Art and Design (Internal)
Unit 5	Developing an Art and Design Portfolio (Internal)
Unit 6	Managing a Client Brief (External)
Unit 7	Developing and Realising Creative Intentions (External)

**Specialist units: (6 units)**

Unit 9	Photographic Materials, Techniques and Processes (Internal)
Unit 10	Graphics Materials, Techniques and Processes (Internal)
Unit 21	Typography and Typographic Design (Internal)
Unit 27	Animation (Internal)
Unit 29	Constructed Textiles (Internal)
Unit 37	3D Model Making (Internal)

**Assessment**

Each assignment brief will set the scenario and make it clear what you are required to do in order to achieve that unit of study. You will see that the tasks on the assignment brief do not relate to specific grading criteria so you are required to work on the whole task.

The grading criteria for the level 3 qualification are grouped under **Pass, Merit and Distinction** headings. Externally assessed units have the same grades as internally assessed units.

To achieve a level 3 qualification learners must:

- complete all units and achieve a pass or above in all mandatory units.
- complete and **have an outcome** (D, M P or U) for all units within a valid combination
- achieve the **required units at pass or above** shown
- achieve the **minimum number of points** at a grade threshold.

**Points available for internal units**

The table below shows the number of **points** available for internal units. For each internal unit, points are allocated depending on the grade awarded.

	Unit size	
	60 GLH	90 GLH
<b>U</b>	0	0
<b>Pass</b>	6	9
<b>Merit</b>	10	15
<b>Distinction</b>	16	24

**Points available for external units**

Raw marks from the external units will be awarded **points** based on performance in the assessment. The point scores available for each external unit at grade boundaries are as follows.

	Unit size	
	90 GLH	120 GLH
<b>U</b>	0	0
<b>Pass</b>	9	12
<b>Merit</b>	15	20
<b>Distinction</b>	24	32

### Calculation of the qualification grade

Certificate		Extended Certificate		Foundation Diploma		Diploma		Extended Diploma	
180 GLH		360 GLH		510 GLH		720 GLH		1080 GLH	
Grade	Points threshold	Grade	Points threshold	Grade	Points threshold	Grade	Points threshold	Grade	Points threshold
U	0	U	0	U	0	U	0	U	0
Pass	18	P	36	P	51	PP	72	PPP	108
						MP	88	MPP	124
								MMP	140
Merit	26	M	52	M	73	MM	104	MMM	156
						DM	124	DMM	176
								DDM	196
Distinction	42	D	74	D	104	DD	144	DDD	216
						D*D	162	D*DD	234
								D*D*D	252
Distinction*	48	D*	90	D*	130	D*D*	180	D*D*D*	270

Pearson will automatically calculate the qualification grade for you when your unit grades are submitted. You will be awarded qualification grades for achieving the sufficient number of points within the ranges shown above.

**In preparation for studying the BTEC Level 3 National Extended Diploma in Art & Design in September, we ask that you complete the independent task outlined below? This will be used as your prep work for the first lesson and we would expect all students to have completed this for their first lesson.**

#### **Task to be completed:**

- You have been asked to explore and investigate the theme 'Labyrinthine' to produce creative outcomes for a group exhibition. The theme should be seen as a starting point and you should explore appropriate primary and secondary sources and contextual material. Using the visual sources around you, produce a series of first-hand observational studies that explore the shape, form, line, texture and colour of the theme 'Labyrinthine'.
- Complete 4-10 drawings in a sketchbook, using a range of black and white and coloured mediums such as graphite pencil, Indian ink, acrylic, coloured pencil, watercolours, oil. The level of realism achieved in these drawings will be dependent on your own drawing style and preferences. Mix and layer mediums as appropriate. Include photographs if desired. The drawings may be semi-incomplete and can merge into each other. At this point, do not worry so much about what you are achieving in terms of composition. You are merely conducting visual research and exploring your topic.
- Research at 2-4 artists and/or designers (use the list on the brief to help you). Produce a PowerPoint presentation on your chosen artists (you will present this in your first class in September). Analyse and evaluate the work showing understanding of purposes, meanings and contexts. Discuss the formal elements – line, tone, shape, pattern, texture etc.

**Should you require support in completing this, then please use the support below.**

Visit the following websites for ideas:

- <https://uk.pinterest.com/johnmmurray/kitchen-tools-and-utensils-edexcel-btec-exam-theme/>
- <http://www.studentartguide.com/articles/realistic-observational-drawings>
- <http://www.studentartguide.com/articles/still-life-drawing-ideas>

**To further prepare you for September we suggest you read:**

John Berger (1972). *Ways of Seeing*. London: Penguin. ISBN:0-14-013515-4

E.H. Gombrich (1950). *Story of Art*. London: Phaidon. ISBN: 978-0-7148-324-70

**We suggest you visit:**

Tate Britain. Millbank, Westminster, London SW1P 4RG

<http://www.tate.org.uk>

2. Business	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"><li>• <a href="https://qualifications.pearson.com">https://qualifications.pearson.com</a> - click business. This is the exam board's website where there are individual topic sheets you will find interesting.</li><li>• Business Studies, Dave Hall et al.</li><li>• It is important to understand what is happening in the business world, so try and get into the habit of watching the news, visiting the BBC website or even better download the BBC app!</li></ul>	<ul style="list-style-type: none"><li>• <a href="http://www.tutor2u.net/business">www.tutor2u.net/business</a>. An excellent website with useful resources and revision strategies and techniques.</li><li>• There are lots of fabulous resources available on <a href="http://www.youtube.com">www.youtube.com</a> which introduce topics within business.</li><li>• <a href="https://www.bbc.co.uk/news/business">https://www.bbc.co.uk/news/business</a> is an excellent website to research the latest business news stories</li></ul>

At Christ the King we work closely with all students to ensure they are prepared for each of their A Level Business lessons. By reading or planning ahead, and undertaking prep work, we believe students gain a greater understanding of the topics/subject being studied.



### **Introduction to A Level Business**

This qualification encourages students to develop an understanding of how businesses work in the real world. Students gain a holistic understanding of business in a range of contexts and analyse the opportunities and problems faced by local, national and international businesses. Encourage students to develop enterprising and creative approaches to business opportunities, problems and issues. Students develop an understanding of how various business functions such as marketing, finance, human and operations work together, as part of a cohesive business. Students are encouraged to take part in practical business activities such as planning and running a business and organising an event.

Students will acquire a range of relevant business and generic skills, including decision making, problem solving, the challenging of assumptions and critical analysis and be able to apply numerical skills in a range of business contexts.

## Subject Expectations

All students who study on this course are expected to attend talks given by visiting speakers and take part in educational visits to businesses and universities. On these occasions, you will need to dress smartly, in clothes that you would wear in a work environment. You must have an interest in the operations of local and national businesses and read newspapers on regularly.

## Outcomes of this activity

- **Be able to research and analyse the market to test the viability of a business start-up idea**
- **Understand the steps involved in planning a start-up business venture**
- **Be able to develop and pitch a realistic and viable business plan from an initial idea.**



## Activity

To complete this activity you are going to investigate the likely success of a new **business idea**. In order to do this you need to carry out research into the likely success of this business and create a business plan outlining the research that you have carried out to support the likely success of that idea.

As part of this project and activity you need to develop and assign different roles within the business such as:

1. **Project Manager (support Finance Manager)** - is responsible for ensuring that all activities or tasks are completed on time and ensure that if there are other team members, they are supported with decisions that are being made. You must create the overview section of the Business Plan and Cover sheet that has the logo and business name on the front.
2. **Marketing Manager/Marketing Assistant**- is responsible for creating a logo and business name and identifying how he/she is going to promote their business idea. He/she must complete the marketing strategy section of the business plan.
3. **Finance Manager**- is responsible for researching into the various start-up cost that the business will have and complete the finance strategy section of the business plan.
4. **Human Resource planning** - is responsible for researching into how a business recruits, train and reward staff. You must complete the recruitment advice section of the business plan.

This business plan should look professional and include a cover sheet with a business name and logo on the front. All aspects of the plan must be completed. A template has been provided in page 3 to support you with this.

Below are some options of the types of businesses that you could consider for a business start up and create a business plan for:

1. Clothing Store
2. Hairdressers/Barber Shop
3. Phone Shop/Computer Shop
4. Dry Cleaners
5. Sweetie Shop
6. Coffee Shop
7. Restaurant



## Activity 1: Explore a Start-up Business Idea:

Type of Business:

Ownership:

Name of Business:

What is the product/service?

What are the features and benefits of the product/service?

Is there a demand for this type of service in your local area?

Who are the competitors and how will your product compete against theirs?

## Activity 2: Marketing a business

To market your product, you are required to do the following:

1. Create a corporate image/identity for your business by choosing a business name, design a logo and strapline (slogan).

**Group Activity A:** Name the business that has the logo below and design a unique logo for your business.



**Group Activity B:** Identify the business that uses the strapline below and create a strapline for your business.

*Every little helps*

2. Set an aim/objective of your marketing campaign.

**Activity:** One of the aims of Nike is to increase their brand awareness. Brainstorm, research and discuss different business aims and objectives and set an appropriate aim for your business.

3. Determine appropriate activities to market your product i.e. different forms of advertising.

**Activity:** Businesses advertise their products using leaflets, billboards and social media etc. Decide how you will advertise your product(s).

4. Assume you have been given £20,000 to spend on marketing your product, create a budget. (Based on the activities identified above, how much will you spend on each of them).

**Activity:** Share your budget of £20,000 on the activities you identified above in order to achieve the aim of your campaign.

5. Create a timeline i.e. how long each of the activities will take.

**Activity:** Assign days/weeks/months to each of the activities identified in step 3 above.

## Marketing Mix

Use the elements of the marketing mix and decide on the marketing strategy of your small business start-up



## Activity 3: Financing a business

### Synopsis

A business plan is the essential document that is required to evaluate whether a business proposal will work. The business proposal could be for a new business or an existing business that wishes to expand or diversify its product range (goods or services).

Your business plan should be suitable to present to an external lender, such as a bank, who might **provide finance** to a new or existing business.

**Task1:**



Identify and explain your main sources of finance and the amount of money you need for setting your business start-up.

Source of finance	Amount and what you will use it for



**Cash Budget**  
 Present a four-month cash budget for your business start-up plan taking into consideration your sources of finance, sales revenue and business expenses.

*Use the Template below to complete your Cash Budget*

	January (£)	February (£)	March (£)	April (£)
<b>Cash Inflows</b>				
Investment				
Cash sales				

<b>Total cash inflows</b>				
<b>Cash outflows</b>				
Rents				
Stock (Materials)				
Wages & salaries				
Telephone bills				
Electricity				
Transport cost				
Packaging				
Other costs				
<b>Total Cash outflows</b>				
<b>Net Cash Flow</b>				
Opening balance	0			
<b>Closing balance</b>				

Calculations:

Net cash flow = Total Cash Flows – Cash Outflow (for each month)

Closing balance = Net Cash Flow + Opening Balance (for each month)

#### Activity 4: Human Resource Planning Aspects of the Business

In starting a business new, entrepreneurs typically have a poor knowledge of how to recruit, select, train and reward the employees. They must be able to identify the type of recruitment methods, process involved in recruitment, type of training to use and how to keep their staff motivated. As part of this business plan activity, you could consider the following:

- Sources of recruitment – internal and external
- Training methods
- Motivational methods – financial and non-financial

You could decide the total number of staff you need to recruit, the job roles, the skills, knowledge and abilities required. Consider essential and desirable skills for the job as well.

You must justify the human resource plan by considering the benefits and limitations of using the above methods for planning human resource needs of the chosen business start-up.

## Extension task

### Evaluate how useful a business plan is to a new entrepreneur.

As A Level students you are expected to evaluate constantly. Evaluation is making a judgement. To do this effectively you must consider at least 2 points of view and then make a clear decision about which point is more valid.

#### Structure

- Assess why one activity today was very useful as a potential entrepreneur.
- Assess why another activity today was very useful as a potential entrepreneur.
- Discuss why one of your arguments is stronger than the other.

This extension task will be collected by your teacher in the first week back. It will form part of your induction process in August/September 2020.

## Helpful Preparation for the start of your course

Carry out some research to help understand different types of businesses, their purpose and ownership. Have a brief understanding of the performance of some of the large businesses operating in the UK.



### Useful Websites and Reading Material

- |   |   |                                   |
|---|---|-----------------------------------|
| <a href="http://www.asa.org.uk">www.asa.org.uk</a>  | - | Advertising Standards Authority   |
| <a href="http://www.cim.co.uk">www.cim.co.uk</a>  | - | Chartered Institute of Marketing  |
| <a href="http://www.ons.gov.uk">http://www.ons.gov.uk</a>   | - | Office for National Statistics    |
| <a href="http://www.bbc.co.uk/news/business">http://www.bbc.co.uk/news/business</a>   | - | Business News                     |
| <a href="http://www.nln.ac.uk">http://www.nln.ac.uk</a>   | - | National Learning Network         |
| (NLN)   |   |                                   |
| <a href="http://www.foxnews.com/travel/2012/10/10/paramount-pictures-unveils-plan-for-32b-theme-park-in-london/">http://www.foxnews.com/travel/2012/10/10/paramount-pictures-unveils-plan-for-32b-theme-park-in-london/</a> | - | Fox news                          |
| <a href="http://www.bbc.co.uk/news/uk-england-kent-19867695">www.bbc.co.uk/news/uk-england-kent-19867695</a>  |   |                                   |
| BBC news 'Disneyland rival' plan for Kent   |   | Paramount pictures theme park     |
| <a href="http://movies.uk.msn.com/features/paramount-to-open-theme-park-outside-london">http://movies.uk.msn.com/features/paramount-to-open-theme-park-outside-london</a>   |   |                                   |
| MSN Movies  |   |                                   |
| Newspapers  | - | The Times, Telegraph and Observer |

## Progression Opportunities

Past students of this course have progressed onto a range of Degree courses, including:

- Law with Business at Portsmouth
- Accounting and Business Studies at Northampton
- Business with Law at Greenwich
- Retail Management at Bournemouth
- Business Administration at Coventry
- Business Studies at Canterbury Christ Church
- Business and Management with a year in Industry at University of Kent

### **What is a business organisation?**

A business is an established organisation set up to provide goods and services to its customers.

Classification of business organisations and their Objectives:

We can classify business organisations into;

- Private e.g. making profits, profit maximisation, break-even, survival, growth, market leadership
- Public e.g. service provision, cost control, value for money, service quality, meeting government standards
- Not-for-profit e.g. education, housing, alleviating poverty, healthcare ( Charities and voluntary organisations can be put into this category)

### **Business Aims and Goals**

- Objectives are quantifiable targets or goals to be achieved within a given time frame.
- A mission is the overall reason for the business' existence.
- It is the main purpose of a business and therefore determines the business' strategic position.
- A mission statement is a written statement that states the purpose of an organisation.
- A mission statement provides a common focus for everyone within an organisation and hence a common sense of direction.

### **Some features of a business:**

- Purposes

Supply of products or services, difference between for-profit and not-for profit businesses

- Sectors

Primary, secondary, tertiary, quaternary

- Scope of business activities

Local, national, international

- Size  
Micro , small and medium enterprises (SME's), large
- Reasons for success

How these differ depending on the type of business (profit or non-profit), and its aims and objectives, e.g. clarity of vision, innovative products or processes

### **Not-for-profit business objectives**

All will have an overriding objective to support and further the work of a specific cause for the good of society

They will still want to maximise the surplus of revenue over costs in order to plough this back into their work

Possible specific objectives include:

- Education

To achieve literacy and numeracy targets for all children by the time they leave primary school

- To educate society about healthy eating in order to reduce national obesity
- Housing

Alleviating poverty

To alleviate poverty at home and across the world

Provide food for those who are hungry

- Healthcare

Reduce NHS waiting times

Using the above information on different types of business organisations, choose two contrasting businesses of your own (one in the profit making sector and the other in the voluntary or non-profit making sector/ public sector) to complete these tasks. Use your chosen Business' websites to help you.

Task 1a: organisation One:.....

**Write a brief history or background of your chosen organisation:**

Task 1b: organisation Two: .....

**Write a brief history or background of your chosen organisation:**

Task 1c: Explain three Business Objectives of Organisation One

**BUSINESS 1**

**Business Objective 1:**

**Business Objective 2:**

**Business Objective 3:**

Task 1d: Explain three Business Objectives of Organisation Two

**BUSINESS 2**

**Business Objective 1:**

**Business Objective 2:**

**Business Objective 3:**

## Section 2: Stakeholders

Stakeholders are people who are interested in the activities of the business or can be affected by the activities of a business.

## SECTION 2: Marketing and Marketing Mix

### SWOT ANALYSIS

- A SWOT analysis is an overview of a company's strengths, weaknesses, opportunities and threats.
- SWOT key objective is to create an awareness of the factors impacting an organisation externally and internally in order to make a business decision e.g. expansion
- SWOT analysis is also used to evaluate solutions/strategies and make recommendations with a focus on leveraging strengths and opportunities to overcome weaknesses and threats.

Carry out a SWOT Analysis on your profit- making organisation(BUSINESS 1)

<p><b>What are the strengths?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>	<p><b>What are the weaknesses?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>
<p><b>What are the opportunities?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>	<p><b>What are the threats?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>

Carry out a SWOT Analysis on your Non-Profit- making organisation (BUSINESS 2)

<p><b>What are the strengths?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>	<p><b>What are the weaknesses?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>
<p><b>What are the opportunities?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>	<p><b>What are the threats?</b></p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li><li>•</li><li>•</li></ul>

Based on the SWOT Analysis conducted on both Businesses, provide a justified conclusion on which of the two businesses is likely to achieve its key objectives.

Decision/conclusion

---

---

---

---

Key reasons based on the SWOT undertaken:

---

---

---

---

---

---

---

---

Why are the key reasons important?

---

---

---

---

---

---

---

---

---

---

---

---

What does this depend on to be successful?

---

---

---

---

---

---

**Sources of information:**

**Textbooks**

Barrow, C. and Barrow, P. – The Business Plan Workbook, 3rd Edition (Kogan Page, 1998) ISBN 0749426969

Barrow, C. – Financial Management for the Small Business (Kogan Page, 1998) ISBN 0749426454

Deakins, D. – Entrepreneurship and Small Firms (McGraw-Hill Publishing Company, 1999) ISBN 0077094522

Wisdom, J. – Checklists and Operating Forms for Small Businesses (John Wiley and Sons, 1997)

ISBN 0471138401

Wolinski J – AQA AS Business Studies: Unit 1: Planning and Financing a Business (Student Unit Guides)  
Pearson BTEC National Business Student Book 1 (For the 2016 Specification)

### Websites

<http://news.bbc.co.uk/1/hi/business> the business pages of the BBC website

<http://www.bized.co.uk> A business education resource site

<http://www.thetimes100.co.uk> The Times 100 case studies

<http://www.Tutor2u.net>

<http://www.investopedia.com>

3. Engineering	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"><li>Level 2 BTEC First in Engineering Student Book (ISBN 9781446902431)</li><li>Level 3 Pearson BTEC National Engineering – Student book (ISBN 978-1-292-14100-8)</li></ul>	<ul style="list-style-type: none"><li><a href="https://qualifications.pearson.com/en/subjects/engineering.html">https://qualifications.pearson.com/en/subjects/engineering.html</a></li><li><a href="http://www.kupper.org.uk/engineering/">www.kupper.org.uk/engineering/</a></li><li><a href="https://padlet.com/oconnke/Level_3">https://padlet.com/oconnke/Level_3</a></li><li><a href="https://www.theiet.org">https://www.theiet.org</a></li><li><a href="https://mathsmadeeasy.co.uk/gcse-maths-revision/">https://mathsmadeeasy.co.uk/gcse-maths-revision/</a></li><li><a href="https://www.pearsonschoolsandfecolleges.co.uk/AssetsLibrary/SECTORS/FurtherEducationColleges/ReviseBTEC/samples/9781292150277-btec-engineering-rw.pdf">https://www.pearsonschoolsandfecolleges.co.uk/AssetsLibrary/SECTORS/FurtherEducationColleges/ReviseBTEC/samples/9781292150277-btec-engineering-rw.pdf</a></li><li><a href="https://www.bbc.co.uk/bitesize/examspecs/z9p3mnb">https://www.bbc.co.uk/bitesize/examspecs/z9p3mnb</a></li></ul>

## Subject: BTEC Level 1/Level 2 First Diploma in Engineering

### **Background**

The BTEC Firsts in Engineering provide an engaging, robust, broad-based introduction to engineering. Learners can gain knowledge, skills and understanding through practical participation in engineering activities. This allows them to become familiar with the language, skills and processes required to work in the engineering industry. The BTEC philosophy of ‘learning through doing’ remains at the heart of these qualifications. Learners are given the opportunity to gain and broad understanding and knowledge of skills in engineering.

### **Progression**

The general engineering pathway provides learners with the opportunity to progress to level 3; this could be a full-time course or part-time linked to an apprenticeship. Mathematics and Science are core building blocks for a career in engineering and these core disciplines are built into many of the units.

Jobs in engineering at this level extend over a huge range; a few examples are: Technology-engineers and technicians working on:

- CAD design
- electronic circuit design and prototyping
- testing equipment against specification
- technical sales
- customer liaison – troubleshooting technical and delivery issues
- project management
- implementing ‘best practice’ systems (e.g. kaizen, lean manufacturing) in a factory.

## Qualification

A BTEC Level 2 First Diploma is a level 2 qualification equivalent to 4 GCSEs at grades A\*-C. It is awarded by the examining and awarding body Pearson. At this College, it is a one-year course which will give you a broad understanding of the engineering sector and enable you to develop skills relevant to both employment and further study. Teacher led assessment remains at the heart of BTEC learning.

## The structure of your BTEC Level 2 First Diploma in Engineering

The course consists of seven mandatory units, two of which, are externally assessed plus five optional units for a combined total of 480 Guided learning hours.

BTEC First Diploma in Engineering		S	A	GLH
1	The Engineered World	M	E	30
2	Investigating an Engineered Product	M	I	30
3	Health and Safety in Engineering	M	I	30
5	Engineering Materials	M	I	30
9	Interpreting and Using Engineering Information	M	E	30
10	Mathematics for Engineering	M	I	30
21	Introduction to Communications for Engineering	M	I	60
23	Electronic Devices and Communication Applications	O	I	60
8	Electronic Circuit Design and Construction	O	I	60
7	Machining Techniques	O	I	60
4	Engineering Maintenance	O	I	30
6	Computer-aided Engineering	O	I	30
				480

**Status (S)** = Mandatory (M) or Optional (O)

**Assessment (A)** = External (E) or Internal (I)

**GLH** = Guided Learning Hours

## **Assessment**

The Pearson BTEC Level 1/Level 2 First **Diploma**:

- has mandatory and optional specialist units
- has 12.5 per cent of the qualification that is externally assessed; Pearson sets and marks these assessments
- is graded from Level 2 PP to Level 2 D\*D\*. Learners who do not achieve at Level 2 may achieve a grade of Level 1 Pass. Learners whose level of achievement is below Level 1 will receive an Unclassified (U) result.

Internal assessment remains the main assessment method for BTEC qualifications. For Internal assessments each assignment brief will set the scenario and make it clear what you are required to do in order to achieve that unit of study.

A summative unit grade is awarded after all opportunities for achievement are given. A learner must achieve all the assessment criteria for that grade. Therefore:

- to achieve a **Level 2 Distinction** a learner must have satisfied all the Distinction criteria in a way that encompasses the Level 2 Pass, Merit and Distinction criteria, providing evidence of performance of outstanding depth, quality or application
- to achieve a **Level 2 Merit** a learner must have satisfied all the Merit criteria in a way that encompasses all the Level 2 Pass and Merit criteria, providing performance of enhanced depth or quality

- to achieve a **Level 2 Pass** a learner must have satisfied all the Level 2 Pass criteria, showing breadth of coverage of the required unit content and having relevant knowledge, understanding and skills.

**Points available for unit size and grades**

The table below shows the **number of points scored per 10 guided learning hours** at each grade.

This table shows the minimum thresholds for calculating the overall grade

Points per grade per 10 guided learning hours				
Unclassified	Level 1	Level 2 Pass (P)	Level 2 Merit (M)	Level 2 Distinction (D)
0	2	4	6	8

Diploma (480 GLH)	
Grade	Points threshold
U	0
Level 1	96
Level 2 PP	192
Level 2 MP	234
Level 2 MM	276
Level 2 DM	318
Level 2 DD	360
Level 2 D*D	366
Level 2 D*D*	372

**In preparation for studying your BTEC Level 2 First Diploma in Engineering in September, we ask that you complete the independent task outlined below. This will be used as your prep work for the first lesson and we would expect all students to have completed this for their first lesson.**

**Tasks to be completed:**

A sample of our units are available on our summer Transition website here:

<https://padlet.com/oconnke/Summer Transition>

where you will find exercises and resources to complete those exercises.

**1. Unit 8: Electronic Circuit Design and Construction**

In this unit you will learn to design electronic circuits using input, process and output building blocks to solve problems and you will build circuits, working safely, and using permanent construction methods. To help you prepare for this you will require some basic knowledge of voltage, current and resistance

Below is a sample of the questions on the website mentioned above for Unit 8. You will find the complete set of questions and all the resources you need to complete the exercise on the website.

#### Questions

---

Question 1

Describe what "electricity" is, in your own words.

---

Question 2

Explain what the electrical terms *voltage*, *current*, and *resistance* mean, using your own words.

---

Question 3

What units of measurement are used to express quantities of *voltage*, *current*, and *resistance*?

---

Question 4

Voltage is also known by another name: *electromotive force*, or *EMF*. Explain what this other name for voltage means.

---

Question 5

How many physical points must be referenced when speaking of the following electrical quantities?

- Voltage
- Current
- Resistance

In other words, does it make sense to speak of voltage at a single point, or between two points, or between three points, etc.? Does it make sense to speak of current at a single point, between two points, between three points, etc.?

## 2. Unit 7: Machining Techniques

This unit will help you to understand the engineering processes that we use to generate and form shapes through machining techniques. You will learn how to select, investigate and use machining techniques that involve shaping or forming with loss of volume. You will also use work-holding devices and a range of tools so that you can carry out a variety of machining processes.

Below is a sample of the questions on the website mentioned above for Unit 7. You will find the complete set of questions and all the resources you need to complete the exercise on the website.

### Task 1 Brief;

What are the right tools and work holding devices? Produce a written report to show your understanding of the function, advantages and effectiveness of:

- two simple and two more complex tools for drilling (1 simple drill bit and 1 complex drillbit)
- one simple and two more complex work-holding devices for drilling. (1 simple vice and 1 complex vice)

Your report should also reference different tooling materials. (Specific Metals and/or coatings)

Include annotated photographs/diagrams to enhance your report.

Next, do the same for one of the following machining techniques: turning or milling.

## 3. Unit 1: The Engineering World

--See Website [https://padlet.com/oconnke/Summer Transition](https://padlet.com/oconnke/Summer%20Transition)

#### 4. Unit 3: Health and Safety in Engineering

--See Website [https://padlet.com/oconnke/Summer\\_Transition](https://padlet.com/oconnke/Summer_Transition)

##### To further prepare you for September we suggest you read:

Clarke, S.et al. (2012) *BTEC First in Engineering Student Book*, Harlow: Pearson Education,978 1 44690 243 1.

Health and Safety Executive (2006) *Essentials of Health and Safety at Work*, 4<sup>th</sup> Edition, London: HSE Books, 978 0 71766 179 4

Health and Safety Executive (2004), *Health and Safety in Engineering Workshops*, 2<sup>nd</sup> Edition, London: HSE Books, 978 0 71761 717 3

Tooley, M. (2010) *BTEC First Engineering*, 2<sup>nd</sup> Edition, Oxford: Newnes, 978 1 85617 685 9.

Collins, Real-World Technology, Electronic Products ISBN:0-003-20012-4

##### We suggest you visit:

- The Design Museum, 224-238 Kensington High St, Kensington, London W8 6AG
- The V&A Museum, Cromwell Rd, Knightsbridge, London SW7 2RL
- <https://www.sciencemuseum.org.uk/see-and-do/engineer-your-future>

## Subject: **BTEC Level 3 National Extended Diploma in Engineering**

### **Background**

A BTEC Level 3 Diploma is a level 3 qualification equivalent to 3 A Level's at grades A\*-C. It is awarded by the examining and awarding body Pearson. At this College, it is a two-year course which will give you a broad understanding of the Engineering World and enable you to develop skills relevant to both employment and further study. Teacher led assessment remains at the heart of BTEC learning.

The qualification is designed for post-16 learners who want to study Engineering, young people taking their first steps towards a new career that need the right blend of **technical and academic skills** in order to become the highly skilled, work-ready individuals employers and universities look for. BTEC Level 3 Nationals are vocational qualifications designed to help your learners succeed. They have been developed in collaboration with over 5,000 universities, employers and

professional bodies with **employability at the heart**, so learners can develop the skills and confidence they will need to step into their future

### **The structure of your BTEC Level 3 Diploma in Engineering**

The course consists of fifteen units, seven mandatory units of which three are external and the remainder internal. These units cover a selection of units across general **Engineering Principles, Electronic Engineering, Mechanical Engineering and Robotics**.

<b>BTEC Advanced Diploma in Engineering</b>		<b>S</b>	<b>A</b>	<b>GLH</b>
1	Engineering Principles	M	E	120
2	Delivery of Engineering Processes Safely as a Team	M	I	60
3	Engineering Product Design and Manufacture	M	E	120
4	Applied Commercial and Quality Principles in Engineering	M	I	60
5	Specialist Engineering Project	M	I	60
6	Microcontroller Systems for Engineers	M	E	120
7	Calculus to Solve Engineering Problems	M	I	60
30	Mechanical Measurement and Inspection Technology	O	I	60
19	Electronic Devices and Circuits	O	I	60
20	Analogue Electronic Circuits	O	I	60
24	Maintenance of Mechanical Systems	O	I	60
27	Static Mechanical Principles in Practice	O	I	60
28	Dynamic Mechanical Principles in Practice	O	I	60
36	Programmable Logic Controllers	O	I	60
12	Pneumatic and Hydraulic Systems	O	I	60
				<b>1080</b>

**Status (S)** = Mandatory (M) or Optional (O)

**Assessment (A)** = External (E) or Internal (I)

**GLH** = Guided Learning Hours

### **Assessment**

Each assignment brief will set the scenario and make it clear what you are required to do in order to achieve that unit of study. You will see that the tasks on the assignment brief do not relate to specific grading criteria so you are required to work on the whole task.

The grading criteria for the level 3 qualification are grouped under **Pass, Merit** and **Distinction** headings. Externally assessed units have the same grades as internally assessed units.

To achieve a level 3 qualification learners must:

- complete all units and achieve a pass or above in all mandatory units.
- complete and **have an outcome** (D, M P or U) for all units within a valid combination
- achieve the **required units at pass or above** shown
- achieve the **minimum number of points** at a grade threshold.

### **Points available for internal units**

The table below shows the number of **points** available for internal units. For each internal unit, points are allocated depending on the grade awarded.

	Unit size	
	60 GLH	90 GLH
<b>U</b>	0	0
<b>Pass</b>	6	9
<b>Merit</b>	10	15
<b>Distinction</b>	16	24

### Points available for external units

Raw marks from the external units will be awarded **points** based on performance in the assessment. The point scores available for each external unit at grade boundaries are as follows.

	Unit size	
	90 GLH	120 GLH
<b>U</b>	0	0
<b>Near Pass</b>	6	8
<b>Pass</b>	9	12
<b>Merit</b>	15	20
<b>Distinction</b>	24	32

Extended Diploma	
1080 GLH	
Grade	Points threshold
U	0
PPP	108
MPP	124
MMP	140
MMM	156
DMM	176
DDM	196
DDD	216
D*DD	234
D*D*D	252
D*D*D*	270

### Calculation of the qualification grade

#### Extended Diploma in Engineering 1080 GLH

Same size as 3 A Levels  
Tech Level

**Total units: 15**  
7 Mandatory Units  
PLUS 8 Optional Units

#### Purpose:

- Designed as a 2 year full-time course that meets entry requirements for learners wanting to progress to employment in the engineering sector
- Learners gain relevant skills and knowledge from studying a range of content focused on electrical, electronic and mechanical disciplines

Pearson will automatically calculate the qualification grade for you when the internal unit grades are submitted. You will be awarded qualification grades for achieving the sufficient number of points within the ranges shown opposite

**In preparation for studying the BTEC Level 3 National Extended Diploma in Engineering this September, we ask that you complete the independent task outlined below? This will be used as your prep work for the first lesson and we would expect all students to have completed this for their first lesson.**

### Task to be completed:

A sample of our units are available on our summer Transition website here:

[https://padlet.com/oconnke/Summer Transition](https://padlet.com/oconnke/Summer%20Transition)

where you will find exercises and resources to complete those exercises.

#### 1. Unit 19: Electronic Devices and Circuits

In this unit you will investigate analogue electronic circuits based on diodes and transistors and combinational and sequential logic digital circuits. As part of the unit you will use software to simulate circuits, construct them safely and use typical bench instruments to test them. Electronic circuit designers make frequent use of software to simulate design ideas before building prototype circuits and testing them in the process of developing final products.

If you have no prior knowledge of electronics you are advised to consider our **Unit 8** Level 2 work before attempting these exercises. All units are available on our summer Transition website mentioned above.

Below is a sample of the questions on our summer transition website:

[https://padlet.com/oconnke/Summer Transition](https://padlet.com/oconnke/Summer%20Transition)

You will find the complete set of questions and all the resources you need to complete the exercise on this website.

### Questions

---

#### Question 1

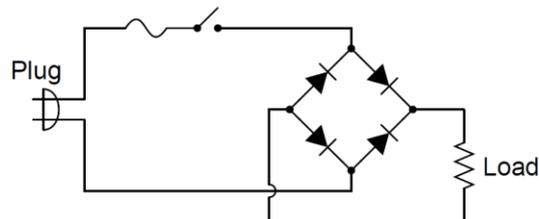
AC-DC power supply circuits are one of the most common circuit configurations in electronic systems. Though designs may vary, the task of converting AC power to DC power is vital in the functioning of a great many electronic devices.

Why is this? What is it about this kind of circuit that makes it such a necessary part of many electronic systems?

---

#### Question 2

Although not a popular design, some power supply circuits are transformerless. Direct rectification of AC line power is a viable option in some applications:



However, this form of AC-to-DC power conversion has some significant limits. Explain why most power supply circuits utilize a transformer instead of directly rectifying the line power as this circuit does.

## 2. Unit 3: Engineering Product design and Manufacture

In this unit, you will examine what triggers changes in the design of engineering products and the typical challenges that engineers face, such as designing out safety risks. You will learn how material properties and manufacturing processes impact on the design of an engineering product. Finally, you will use an iterative process to develop a design for an engineering product by interpreting a brief, producing initial ideas and then communicating and justifying your suggested solution.

--See Website [https://padlet.com/oconnke/Summer Transition](https://padlet.com/oconnke/Summer%20Transition)

## 3. Unit 1: Engineering Principles

This unit will develop your mathematical and physical scientific knowledge and understanding to enable you to solve problems set in an engineering context. You will explore and apply the algebraic and trigonometric mathematical methods required to solve engineering problems.

--See Website [https://padlet.com/oconnke/Summer Transition](https://padlet.com/oconnke/Summer%20Transition)

**To further prepare you for September we suggest you read:**

BTEC Nationals Engineering Student Book + Activebook: ISBN: 9781292141008

Runco, M.; Problem Finding, Problem Solving, and Creativity; Greenwood Publishing Group 1994; ISBN 9781567500134

De Bono, E.; Six Thinking Hats; Penguin 2010; ISBN 9780141033051

Engineering and Commercial Functions in Business; Bolton W. ; Elsevier, 2014; ISBN 9781483183961

Intellectual Property Rights for Engineers, 2<sup>nd</sup> Edition; Irish V; IET 2005; ISBN 9780863414909

Schrader, G. et al. (2000) *Manufacturing Processes and Materials*, 4th Edition, Society of Manufacturing Engineers, 0872635171.

**We suggest you visit:**

- The Design Museum, 224-238 Kensington High St, Kensington, London W8 6AG
- The V&A Museum, Cromwell Rd, Knightsbridge, London SW7 2RL
- London Transport Museum [www.ltmuseum.co.uk](http://www.ltmuseum.co.uk)

4. Health and Social Care	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"> <li>• BTEC Level 3 National Health and Social Care: Book 1 – 9781292126012</li> <li>• BTEC Level 3 National Health and Social Care: Book 2 – 9781292126029</li> </ul>	<p><a href="https://www.dementiafriends.org.uk/">https://www.dementiafriends.org.uk/</a></p> <p><a href="https://holycross.planetestream.com/Default.aspx?search=the%20world%20according%20to%20kids&amp;pagesize=20&amp;page=1">https://holycross.planetestream.com/Default.aspx?search=the%20world%20according%20to%20kids&amp;pagesize=20&amp;page=1</a></p> <p><a href="https://www.gov.uk/government/organisations/public-health-england">https://www.gov.uk/government/organisations/public-health-england</a></p> <p><a href="https://www.ons.gov.uk/">https://www.ons.gov.uk/</a></p> <p><a href="https://holycross.planetestream.com/View.aspx?id=288~3F~p7oM6k">https://holycross.planetestream.com/View.aspx?id=288~3F~p7oM6k</a></p> <p><a href="https://www.bbc.co.uk/news/health">https://www.bbc.co.uk/news/health</a></p> <p><a href="https://www.nhs.uk/news/">https://www.nhs.uk/news/</a></p> <p><a href="https://qualifications.pearson.com/en/qualifications/btec-nationals/health-and-social-care-2016.coursematerials.html#filterQuery=Pearson-UK:Category%2FTeaching-materials">https://qualifications.pearson.com/en/qualifications/btec-nationals/health-and-social-care-2016.coursematerials.html#filterQuery=Pearson-UK:Category%2FTeaching-materials</a></p>

## BTEC Health and Social Care

### Preparing for September 2020

**The purpose** of the tasks below is to

- introduce you to the type of learning content in BTEC Health and Social Care and
- the way that knowledge and understanding of health is applied in the course

Click on [the links](#) to help you to answer the questions.

**Extension work** - At the end of the tasks is a range of information sources that you may find useful in **exploring your future career**.

**Tasks** – are denoted with



**Videos** – are denoted with



### Beginning to understand COVID -19

#### Introduction



1. What is the difference between [bacteria and viruses](#)?
2. How is [COVID-19 transmitted](#) between humans? What are the 3 most important preventive measures currently recommended to restrict the transmission of COVID-19?
3. What is the difference between an epidemic and a pandemic? [What is a pandemic?](#)
4. How do pandemics spread? [TED video](#)
  - o Which pandemic in the 20<sup>th</sup> century had the highest mortality rate and how many (estimate) died worldwide?



#### **The Flu that killed 50 million** (BBC, 11.2.2020)

The Daily Motion - <https://www.dailymotion.com/video/x7rk1ld>

It is 1918 and the end of WWI. Millions have died, and the world is exhausted by war. But soon a new horror is sweeping the world, a terrifying virus that will kill more than fifty million people - the Spanish flu. Using dramatic reconstruction and eyewitness testimony from doctors, soldiers, civilians and politicians, this one-off special brings to life the onslaught of the disease, the horrors of those who lived through it and the efforts of the pioneering scientists desperately looking for the cure.



Narrated by Christopher Eccleston, the film also asks whether, a century later, the lessons learnt in 1918 might help us fight a future global flu pandemic.

- Which sections of society were hardest hit by the 1918 flu pandemic?



## Organisations that promote, and protect, health

### International - World Health Organisation (WHO)

1. What is the World Health Organisation (WHO) and what does it do?  
<https://www.who.int/about/what-we-do>
2. Click on the [COVID-19 WHO portal](#)
  - Find the WHO – latest situation report
    - What does the WHO recommend for preventing transmission of COVID-19 between employees?
3. What is the [WHO advice on wearing masks](#)?



### National - Public Health England (PHE) and the National Health Service (NHS)

Public Health England exists to protect and improve the nation's health and wellbeing and reduce health inequalities.

1. What are the responsibilities of PHE? <https://www.gov.uk/government/organisations/public-health-england/about>
2. Explain what PHE mean by shielding.
3. Identify 3 groups of people considered to be extremely vulnerable to COVID-19.
4. What does NHS England do? See page 9 on the following [annual report](#)
5. What is the NHS Nightingale Hospital? Why has it been commissioned?



Use the links below to explore what you might want to do in the future

## Your Future Career

### Not sure what health and social career interests you?

- Step into the NHS – not sure what you want to be in the future? – [take the test](#)
- NHS Careers – [find your career](#)

### Nursing

- How to [become a nurse](#)
- [King's College London Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care](#)
- What is studying nursing at university like? An example - [Birmingham University – children and young people's health learning and teaching](#)
- Maths is vital for all nursing and midwifery courses and professions. An example - [Middlesex University - maths – interactive practice for nurses](#)

### Midwifery

- Health Careers – [studying midwifery](#)
- Royal College of Midwives – [how to become a midwife](#)
- MIDIRS – [how to become midwife](#)



### Social work

- Try [a day in the life of a social worker](#)
  - Could you manage 24 hours as a social worker? A Day in the Life... provides you with the opportunity to step into a social worker's shoes and to experience a 'typical' day in the office
- Becoming a [social worker](#)
  - Discover the best route for you to becoming a social worker in the UK.

### Occupational therapy

- How to become an [Occupational Therapist?](#)
- Becoming an occupational therapist [How do I become one?](#)

## Pay scales in the NHS

Information about pay and conditions in the NHS

- [Agenda for Change pay scales 2020/2021](#)
- For current jobs (including apprenticeships), pay and employer information see [Jobs.nhs](#)

## Options after your time with CTK

[The Uni Guide](#) - this is a useful portal for information about different courses offered by universities across the country. Always double check the information with the chosen universities.

What the university **grades requirements** mean – a good example of the entry requirements tariff for undergraduate course can be seen on [Middlesex University's website](#). N.b. nursing, midwifery, social work and occupational therapy courses will also stipulate **work experience** in

their requirements. The length of time, and type of experience, will vary from course-to-course and between universities.

[Not going to uni](#) – this is website helps school and college leavers make informed decisions about their future by showing the opportunities that exist outside of the traditional university route. These include apprenticeships, degree apprenticeships, gap years, traineeships and jobs.

5. ICT	
Recommended Reading	Recommended Websites
<a href="http://www.bbc.co.uk/news/technology">www.bbc.co.uk/news/technology</a> <a href="http://www.forbes.com/technology">www.forbes.com/technology</a>	<a href="http://www.barclays.co.uk/DigitalEagles/Barclays CodePlayground/P1242686640999">http://www.barclays.co.uk/DigitalEagles/Barclays CodePlayground/P1242686640999</a> <a href="https://education.microsoft.com/">https://education.microsoft.com/</a> <a href="http://www-935.ibm.com/industries/education/">http://www-935.ibm.com/industries/education/</a> <a href="https://www.cokecce.com/pages/supporting-young-people">https://www.cokecce.com/pages/supporting-young-people</a>

### Activity 1:

Following a lifelong passion for IT, you have decided to become an entrepreneur in the social media industry and have concluded that introducing a new app would be the way forward. This app would give independent advice on new hardware such as iPhones as well as ratings and recommendations for other apps.

The initial idea is to charge £2.99 for individuals to download the app to their smartphones.

However, before you launch the product you are approached by a contact from Samsung who thinks that having the app exclusively built in on their new prototype smartphone, the Galaxy S20.

Explore the impact of social media on the ways in which your app business will be promoted and its services.

1. Describe ways your app business can use social media:

---

---

---

---

---

---

---

---

2. Describe the Impact of Social Media on your app business?

---

---

---

---

---

---

---

---

3. Describe negative impacts of social media on your app Business?

---

---

---

---

---

---

---

---

---

---

---

4. Describe strategies to advertise your app business on Social Media?

---

---

---

---

---

---

---

---

5. Benefits of Social Media?

---

---

---

---

---

---

## Activity 2:

Research one of the following emerging technologies you may want to gain a better understanding of, by answering the four questions.

<b>5G</b>	<b>Artificial Intelligence (AI)</b>
<b>Smart Grid</b>	<b>Biometric Technology</b>

1. An explanation of how the technology works
2. What products / tech is it replacing?
3. Why is it better?
4. What are the disadvantages?

6. Law	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"> <li>• BTEC National Applied Law - Pearson</li> </ul>	<a href="http://www.ocr.org.uk">www.ocr.org.uk</a> <a href="http://www.bbc.co.uk/news">www.bbc.co.uk/news</a> <a href="http://www.parliament.uk">www.parliament.uk</a> <a href="http://www.judiciary.uk">www.judiciary.uk</a>

**Welcome!** If you would like to explore Law either in anticipation of studying Law in Autumn, or just for fun, then this is one place to start...

There are a variety of tasks for you to have a go at and explore some of the key ideas and aspects of law that we will explore during the next couple of years. You can submit this by email, or bring it with you in the autumn term for a little Law Prize! I will be on email if you would like to ask any further questions, or links aren't working.

You will also find, at the end, a suggested 'watch list' of documentaries and films which are relevant to law (and some that are just great fun!)

Task No.	Outline	Completed Please date	Teacher Comment on your response	R	A	G
1	<b>Reflection</b> on current sentencing practice					

2	<b>Operation</b> of the Supreme Court					
3	<b>Case study</b> on the operation of the Criminal Justice System & Young Offenders					
4	<b>Evaluation</b> of the Appeals Process					
5	<b>Changing</b> the Law: Double Jeopardy					
6	<b>Case Study:</b> You be the Judge (Sentencing)					

**Task One:** Reflection on Sentencing

**[Why do prisoners only serve half their term?](http://bbc.co.uk)** (bbc.co.uk)

Using a range of the information on in the source (linked in the title), produce a summary of the current operation of sentencing in England and Wales in the space below. You may present the information in any format you like, but it must cover the questions below and must not simply be copy and paste.

<b>What</b> influences the sentence the judge hands down?	<b>What</b> type of sentences may a judge hand down?	<b>Why</b> do most offences offer a range of options?	<b>How</b> does a judge decide which tariff to hand down for murder?	<b>When</b> are most offenders released and what happens to them?
---	--	---	--	---

**Challenge:** Why do you think that people are often upset or confused by the sentences handed to offenders?

**Task Two: Supreme Court**

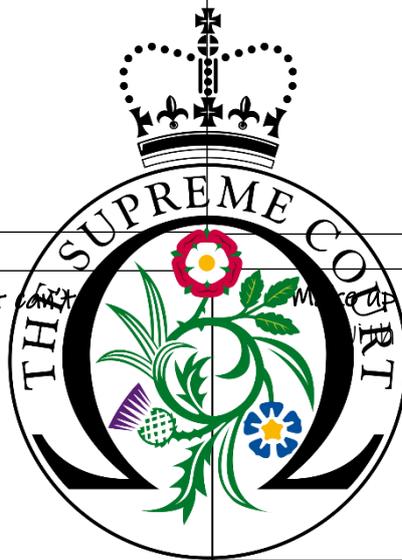
**What is the UK Supreme Court?** (bbc.co.uk)

and watch this documentary available on [youtube](#):

Using a range of the information on in the source, complete each of the information boxes below.

Remember to include relevant legal terminology accurately used.

<p>Name and Location:</p>	<p>Sum up the kind of cases and decisions that it has made over the last years:</p>
---------------------------	---



<p>What powers does it have (and what can it do?):</p>	<p>Make up of the court: What issues do you see who is on the court (pros and cons)?</p>
--	--

**Exploring a Case:**

Pick one of the cases which the article or documentary highlights. Summarise the facts, question and decision by the court. End with a critical comment on your view of the case and decision:

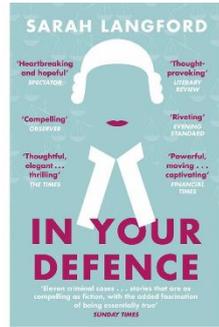
  
  
  
  
  
  
  
  
  
  

**Critical Response:**

**Task Three: Operation of the Legal System**

**Sarah Langford: In Your Defence**

Langford is a practising defence barrister and wrote this book to highlight some of the key issues within the law that she saw. It is very readable, and uses 11 cases to illustrate different issues within the law. Each chapter begins with the 'action' of the case, and then switches to the case and her role and perception of the issues within it.



If you buy the book, this optional activity requires you to read **Case 1: Dominic**.

Particulars of the first offence (what happened):	Prior Offending history:	
What concerns did Langford have about representing him in the Magistrates Court?	View of the police:	
What was the judgement of the court on the first offence and why?	<i>Critical Response:</i> how far do you agree with Langford on the outcome for this first offence?	
Particulars of the second offence (what happened):	What issues surrounding sentencing and remand are raised in this section?	
What sentence was handed down to Dominic for this first case and why did that cause issues for both Sarah and Dominic?		

*Critical Thinking:* How would you address the issues brought up by this chapter?

## The Courage of Our Convictions: Appeals

The Secret Barrister is a blogger and practicing Criminal law Barrister. Last year, he collated a number of issues into a book: Stories of the Law and How It's Broken. It's a great read and very hard hitting – essentially it covers most of what we do in the English Legal System.



If you buy the book, this **optional activity** requires you to read **Chapter 11**. This focuses on appeals, their operation and the consequences of winning an appeal (it's not all roses and happiness!) You need to complete the grid in as much detail as you can.

Impact of prison on offender and their family:	What does he think of the current appeals system and why?
Do you think he is right to say that to most people the Court of Appeal is "everything"?	<p><b>Case Study: Victor Nealon</b></p> <p>Impact of maintaining innocence on sentence:</p> <p>Facts:</p> <p>Charge:</p> <p>Grounds of appeals and outcomes:</p>
Key facts and figures on appeals in the Court of Appeal (including leave):	<p>Outcomes of appeals:</p> <p>Issues with compensation:</p>
<b>Bridgewater Four:</b> What issues with the operation of appeals are brought out by this case and the enquiries?	What happens to D after a successful appeal?

## Task Five: Changing and reforming the law

### Double Jeopardy

Watch the episode on **BBC iPlayer: Catching Britain's Killers: The Crimes that Changed Us (Episode 2)** Warning: there may be details which are upsetting.

P.S. the other two episodes are excellent as well... take a look!

1. What issue was raised by the case of Donald Hume?
2. What were the facts of the case of Julie Hogg?
3. What evidence was there that Dunlop may have been responsible for it?
4. What did the jury decide at the trial and what impact did this have?
5. What was the aim of the double jeopardy law?
6. What impact did the Stephen Lawrence report (McPherson Inquiry) have on double jeopardy?
7. What further charges did Billy Dunlop face and what was the evidence to support them? What sentence did he receive?
8. How does this case illustrate lobbying by both individuals and MPs/Peers?
9. What other legal principle would be affected by the change to the law on double jeopardy?
10. Why was Julie Hogg's mother still apprehensive following the White Paper?
11. What are the criteria for double jeopardy to be set aside?
12. Explain one of the further cases affected by double jeopardy change.



**Task Six: Case Studies**

# You Be the Judge

**Task:** go to: <http://ybtj.justice.gov.uk/>. You will need sound as you are going to work through two cases, completing the questions below as you go. **Burglary & Harassment**



Please note: there are other cases you can have a look at, but these two you must complete for this task!

**Offender**



**NAME:**  
Alexander Jackson

**AGE:** 26

**PREVIOUS CONVICTIONS:**  
Two for domestic burglary

**OFFENCE:**  
Burglary

**Defendant One:** *Alexander Jackson*

What did he do?

What was the plea?

Which court was it heard in and why?

Who determines sentencing for the defendant?

Relevant information from the police officer:	Relevant information from the Victim:

Will the fact that the victims were at home at the time of the break-in affect your sentence?

**Yes**

**Not sure**

**No**

Judge's response:

Do you think the fact that an item of sentimental value was taken is significant?

**Yes**

**Not sure**

**No**

Judge's response:

Mitigating Factors	Aggravating factors

Would a genuine commitment from Alex to come off drugs affect your sentence?

Yes

Not sure

No

Judge's response:

What other circumstances might be relevant in sentencing:

**Sentence choices:**

1. Prison: 2.5 years ( 1/2 in custody + 1/2 monitored in the community )
2. Prison: 3.5 years ( 1/2 in custody + 1/2 monitored in the community )
3. Prison: 4.5 years ( 1/2 in custody + 1/2 monitored in the community )
4. Prison: 6 years ( 1/2 in custody + 1/2 monitored in the community )

I would chose option \_\_\_\_\_ because...

He was actually given option \_\_\_\_\_ because...

What is the **purpose** of sentencing Alex? *Link to the aims of sentencing – which do you think was uppermost in the judge's mind*

**Offender**



**NAME:**  
Chris Williams

**AGE:** 19

**PREVIOUS CONVICTIONS:**  
None

**OFFENCE:**  
Threatening behaviour

**Defendant Two: Chris Williams**

What did he do?

What was the plea?

Which court was it heard in?

What is the relevant evidence from the victim?	Relevant information from the defendant?

Will the fact that Mrs Dixon is elderly influence your sentence?

**Yes**

**Not sure**

**No**

Judge's response:

Do you think the fact that Chris was provoked is significant?

**Yes**

**Not sure**

**No**

Judge's response:

Mitigating Factors	Aggravating factors

Will the fact that Chris pleaded guilty from the start affect your sentence?

Judge's response:

**Sentence choices:**

1. Fine: £300
2. Community sentence: 80 hours unpaid work + £100 compensation + £90 costs
3. Community sentence: 200 hours unpaid work + weekly supervision meetings with a probation officer for 2 years
4. Prison: up to 3 months ( ½ in custody + ½ monitored in the community )

I would chose option \_\_\_\_\_ because...

He was actually given option \_\_\_\_\_ because...

What is the **purpose** of sentencing Alex? *Link to the aims of sentencing – which do you think was uppermost in the Magistrates' mind.*

## Below are a range of documentaries and legally linked films...

In case you need them, the suggestions and their origins are below.



Title	Origin	Link (if available)
Catching Britain's Killers	iPlayer (BBC)	<a href="https://www.bbc.co.uk/iplayer/episode/m0009dz2/catching-britains-killers-the-crimes-that-changed-us-series-1-2-double-jeopardy">https://www.bbc.co.uk/iplayer/episode/m0009dz2/catching-britains-killers-the-crimes-that-changed-us-series-1-2-double-jeopardy</a>
The Case of Sally Challen	iPlayer (BBC)	<a href="https://www.bbc.co.uk/iplayer/episode/m000c65v/the-case-of-sally-challen">https://www.bbc.co.uk/iplayer/episode/m000c65v/the-case-of-sally-challen</a>
Crime and Punishment (History of the Law)	YouTube	<a href="https://www.youtube.com/watch?v=kn1gdZMLtrk">https://www.youtube.com/watch?v=kn1gdZMLtrk</a>
The Briefs	YouTube	<a href="https://www.youtube.com/watch?v=QWTcg8Ye6fl">https://www.youtube.com/watch?v=QWTcg8Ye6fl</a>
HARDtalk interview with Lady Hale	YouTube	<a href="https://www.youtube.com/watch?v=i1VozJR_jC8&amp;t=414s">https://www.youtube.com/watch?v=i1VozJR_jC8&amp;t=414s</a>
The Bar	YouTube	<a href="https://www.youtube.com/watch?v=6d78ROXCPgl">https://www.youtube.com/watch?v=6d78ROXCPgl</a>
To Kill a Burglar	YouTube	<a href="https://www.youtube.com/watch?v=BemcOAg53eM">https://www.youtube.com/watch?v=BemcOAg53eM</a>
The Trial: Murder in the Family	All4	<a href="https://www.channel4.com/programmes/the-trial-a-murder-in-the-family">https://www.channel4.com/programmes/the-trial-a-murder-in-the-family</a>

7. Media	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"> <li>• Media Theory: Essential Guide. London: Routledge - Mark Dixon (2019) ISBN: 978-0-36714-543-9</li> <li>• Representation. London: Sage - Stuart Hall (2012) ISBN: 978-1-84920-563-4</li> <li>• Media, Gender and Identity. London: Routledge - David Gauntlett (2008) ISBN: 978-0-415-39661-5</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="http://www.essentialmediatheory.com">www.essentialmediatheory.com</a></li> <li>• <a href="http://www.englishandmedia.co.uk/media-magazine">www.englishandmedia.co.uk/media-magazine</a></li> <li>• <a href="http://www.screenskills.com/">www.screenskills.com/</a></li> <li>• <a href="https://www.theguardian.com/education/mediastudiescommunicationsandlibrarianship">https://www.theguardian.com/education/mediastudiescommunicationsandlibrarianship</a></li> <li>• <a href="https://nfts.co.uk/bfi-film-academy">https://nfts.co.uk/bfi-film-academy</a></li> <li>• <a href="https://www.screenskills.com/">https://www.screenskills.com/</a></li> <li>• <a href="https://whatculture.com/">https://whatculture.com/</a></li> <li>• <a href="https://www.thestudentroom.co.uk/">https://www.thestudentroom.co.uk/</a></li> <li>• <a href="https://www.universalextras.co.uk/">https://www.universalextras.co.uk/</a></li> <li>• <a href="https://www.denofgeek.com/">https://www.denofgeek.com/</a></li> <li>• <a href="https://www.creativebloq.com/">https://www.creativebloq.com/</a></li> <li>• <a href="https://helpx.adobe.com/uk/photoshop/tutorials.html">https://helpx.adobe.com/uk/photoshop/tutorials.html</a></li> <li>• <a href="https://shootingpeople.org/">https://shootingpeople.org/</a></li> <li>• <a href="https://nofilmschool.com/">https://nofilmschool.com/</a></li> </ul>

## CTK Subject: Creative Digital Media - BTEC L3



**Background:**

*In the ever growing digital age, how you engage with media platforms says a lot about you as a person. Throughout the BTEC level 3 programme you will be required to build a digital portfolio of work ready for university interviews, apprenticeship applications, work experience placements and job opportunities. All organisations will want to see how you use media in your own time, how you can manipulate software to your advantage, and how you will cope when working in a very competitive creative environment. Your summer task is designed to help you begin to establish yourself as a creative professional, ready to engage with the exciting media industry.*

**In preparation for studying the BTEC Level 3 National Extended Diploma in Creative Digital Media in September, we ask that you complete the independent tasks outlined below. This will be used as prep work for your first ever lesson at CTK and we would expect students to have completed all requirements to the best of their ability.**

**Task to be completed:**

1. Invent a brand for yourself-think nickname/initials
2. Launch an email address (Gmail)-use your name/brand
3. Create a website on 'www.weebly.com' (use name/brand)
4. Layout web pages: 'home – image – video – contact'
5. Set up a YouTube channel (use name/brand)
6. Write an intro about yourself - place on home page

If you find these tasks fairly straightforward, then try to complete the following extension tasks:

1. Take a professional profile picture
2. Manipulate the photo on Photoshop (or any other digital software)
3. Design a logo for yourself (brand identity)
4. Create hyperlinks to all your social media (set up professional accounts though)

**To further prepare you for September 2020...**

**We suggest you read:**

1. Mark Dixon (2019). *Media Theory: Essential Guide*. London: Routledge. ISBN: 978-0-36714-543-9
2. Stuart Hall (2012). *Representation*. London: Sage. ISBN: 978-1-84920-563-4
3. David Gauntlett (2008). *Media, Gender and Identity*. London: Routledge. ISBN: 978-0-415-39661-5

**We suggest you visit:**

1. [www.weebly.com](http://www.weebly.com) – Free website creator/builder for your portfolio
2. [www.englishandmedia.co.uk/media-magazine](http://www.englishandmedia.co.uk/media-magazine) – Monthly media magazine
3. [www.screenskills.com/](http://www.screenskills.com/) – Career guidance and resources

8. Psychology	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"><li>• Opening Skinner's Box: Great Psychological Experiments of the Twentieth Century - Lauren Slater</li><li>• The Man Who Mistook His Wife for a Hat - Oliver Sacks</li><li>• The Curious Incident of the Dog in the Night-Time - Mark Haddon</li><li>• Classic Case Studies in Psychology - Geoff Rolls</li><li>• Human traces - Sebastian Faulkes</li><li>• Running with Scissors - Augusten Boughs</li><li>• The Skeleton Cupboard - Tanya Byron</li><li>• Room - Emma Donoghue</li></ul>	<ul style="list-style-type: none"><li>• <a href="http://www.aqa.org.uk">www.aqa.org.uk</a></li><li>• <a href="http://www.tutor2U.com">www.tutor2U.com</a></li><li>• <a href="http://www.simplypsychology.org">www.simplypsychology.org</a></li><li>• <a href="http://www.holah.karoo.net/zimbardostudy.htm">http://www.holah.karoo.net/zimbardostudy.htm</a></li><li>• <a href="http://www.BPS.org.uk">www.BPS.org.uk</a></li><li>• <a href="http://www.open.ac.uk/courses/psychology">http://www.open.ac.uk/courses/psychology</a></li><li>• <a href="http://www.bbcprisonstudy.org/">http://www.bbcprisonstudy.org/</a></li></ul>

I. **Key Psychological Studies**

Use the following links to read the studies, most of which you will be learning about in your course (some are exam board specific).

For each of the five studies listed below summarise the following in 100-150 words:

- Background and Aim(s)
- Method (procedure and details of the sample)
- Results (this could be written or included on a graph – as long as you explain your graph)
- Conclusion(s)

This information is called 'AO1'. It is all about describing or outlining something. This may be describing a study, an explanation or a model.

This element of the question will begin.... AO1 = Describe, Identify, Outline etc.

- 1) <https://simplypsychology.org/milgram.html> - Milgram
- 2) <https://www.simplypsychology.org/zimbardo.html> - Zimbardo
- 3) [https://www.canonsociaalwerk.eu/1971\\_stigma/1973%20Rosenhan%20Being%20sane%20in%20insane%20places%20OCR.pdf](https://www.canonsociaalwerk.eu/1971_stigma/1973%20Rosenhan%20Being%20sane%20in%20insane%20places%20OCR.pdf) – Rosenhan
- 4) <https://www.simplypsychology.org/loftus-palmer.html> - Loftus and Palmer
- 5) <https://www.simplypsychology.org/mary-ainsworth.html> - Ainsworth
- 6) <http://www.holah.karoo.net/rainestudy.htm> - Raine

## II. Key Research Quiz

- 1) How many participants were there in Milgram's study?
  - a) 20
  - b) 40
  - c) 50

- d) 60
- 2) How long (range and mean) were pseudo patients admitted to the hospitals for?
- a) 7-52 (19 day mean)
  - b) 8-52 (18 day mean)
  - c) 9-48 (19 day mean)
  - d) 7-53 (19 day mean)
- 3) What was the speed estimate when the verb 'smashed' was used?
- a) 40.6mph
  - b) 48.1mph
  - c) 40.8mph
  - d) 41.8mph
- 4) What role did Zimbardo play in the Stamford prison experiment?
- a) A guard
  - b) A prisoner
  - c) A warden
  - d) The chief superintendent
- 5) How were the prisoners for Zimbardo's study 'collected'?
- a) Arrested at home and handcuffed by police officer
  - b) Arrested at home by Zimbardo
  - c) They made their own way to Stamford University for the experiment
  - d) Arrested at home by the guards in the study

### III. Reading List

The following books relate closely to the study of Psychology. Using the internet, your local library and school or college library read a selection of books/articles listed below.

This task should take you ten hours. Therefore, you may wish to choose to read one-two books within that time or several articles. Summarise your findings in 50-100 words and suggest ways in which your chosen books/articles relate to the field of Psychology.

**Books:**

- *Friend Request*, 2018 by Laura Marshall
- *Born Evil*, 2018 by Julia Derek
- *Lies*, 2017 by T.M. Logan
- *Reaching Down the Rabbit Hole*, 2016 by Allan Ropper and Brian David Burrell
- *Good Me Bad Me*, 2017 by Ali Land
- *Selfie: How the West Became Self-Obsessed*, 2018 by Will Storr
- *The Lucifer Effect: How Good People Turn Evil*, 2008 by Philip Zimbardo
- *How to Survive the End of the World*, 2018 by Aaron Gillies

**Articles:**

- <https://www.psychologytoday.com/gb/blog/finding-new-home/201806/why-dosome-songs-become-popular>
- <https://www.psychologytoday.com/gb/blog/finding-newhome/201805/narcissistic-eyebrows>
- <https://www.psychologytoday.com/gb/blog/talking-apes/201805/are-youmorning-lark-or-night-owl>
- <https://www.psychologytoday.com/gb/blog/modern-mentality/201806/sadnessdoes-not-discriminate-reflecting-kate-spade>
- <https://www.psychologytoday.com/gb/blog/when-your-adult-child-breaks-yourheart/201805/are-children-overprescribed-psychiatric>
- <https://www.psychologytoday.com/gb/blog/finding-new-home/201805/newresearch-does-watching-tv-make-us-unhappy>

IV Ted Talks/Documentaries/You Tube Clips

Watch at least five of the video clips below and summarise the findings of each in 50-100 words

- 1) <https://www.youtube.com/watch?v=O3cOvLrixhY> – Trial of O.J. Simpson – BBC documentary. The collection of forensic evidence and investigation, including court cases.
- 2) [https://www.ted.com/talks/petter\\_johansson\\_do\\_you\\_really\\_know\\_why\\_you\\_do\\_what\\_you\\_do](https://www.ted.com/talks/petter_johansson_do_you_really_know_why_you_do_what_you_do)
- 3) [https://www.ted.com/talks/laurel\\_braitman\\_depressed\\_dogs\\_cats\\_with OCD\\_what\\_animal\\_madness\\_means\\_for\\_us\\_humans](https://www.ted.com/talks/laurel_braitman_depressed_dogs_cats_with OCD_what_animal_madness_means_for_us_humans)
- 4) [https://www.ted.com/talks/elizabeth\\_loftus\\_the\\_fiction\\_of\\_memory](https://www.ted.com/talks/elizabeth_loftus_the_fiction_of_memory)
- 5) [https://www.ted.com/talks/scott\\_fraser\\_the\\_problem\\_with\\_eyewitness\\_testimony](https://www.ted.com/talks/scott_fraser_the_problem_with_eyewitness_testimony)
- 6) [https://www.ted.com/talks/steven\\_pinker\\_chalks\\_it\\_up\\_to\\_the\\_blank\\_slate](https://www.ted.com/talks/steven_pinker_chalks_it_up_to_the_blank_slate)
- 7) [https://www.ted.com/talks/philip\\_zimbardo\\_on\\_the\\_psychology\\_of\\_evil](https://www.ted.com/talks/philip_zimbardo_on_the_psychology_of_evil)
- 8) [https://www.ted.com/talks/ben\\_ambridge\\_10\\_myths\\_about\\_psychology\\_debunked](https://www.ted.com/talks/ben_ambridge_10_myths_about_psychology_debunked)
- 9) [https://www.youtube.com/watch?v=yT\\_F0dMZRU](https://www.youtube.com/watch?v=yT_F0dMZRU) (Part 1)  
<https://www.youtube.com/watch?v=B3rHTm1YLxA> (part 2) – Stephen Fry - The Secret Life Of The Manic Depressive. BBC
- 10) <https://www.youtube.com/watch?v=jhLuEKZj1oo> – The Fritzl affair. Real crime documentary.
- 11) <https://www.youtube.com/watch?v=nJm7AhdGbDk> – Freud documentary (short)
- 12) <https://www.youtube.com/watch?v=5XFjLdNO4FU> – The Nurture room – child psychology
- 13) <https://www.youtube.com/watch?v=OON81IJ9yos> – Charles Whitman documentary
- 14) <https://www.youtube.com/watch?v=L-DgV2vixSo> – Motivation and rewards in learning (Rats)

## V Research – 5 Things to Find out Ready for September

- 1) Find out which exam board your school or college follows for Psychology.
- 2) Download and print off the specification for the exam board. Add it to a folder that you will be using to store your notes from the course. Read the specification, highlight it (especially details of the exams - content and length etc.) and if you have any

questions about the course make a note and ask your teacher on day one. In your second year you will learn 'option' topics. Your college or school will have decided which of these options you will learn about. Find out which options you will cover and read the specification requirements on those topics – ignore the options that you will not be learning about.

- 3) Look on the exam board's website for past papers and mark schemes. Get familiar with the exam papers and the types of questions you are likely to be asked. Look at the mark schemes, especially the 'generic' mark schemes, for longer questions. These 'generic' mark schemes can be found in the appendices or appear like a large table in the mark scheme booklet. This means that for longer questions, such as 15 marks for A Level OCR or 16 marks for AQA, you will be marked in a similar way for skill, organisation and Assessment Objectives. The content will obviously be dependent upon the exam question given.
- 4) Download the command words from your exam board website. What does the word 'discuss' mean (for example)? This will give you an insight into how you need to structure your answers and the type of language you need to use.

Some suggested links are provided below:

AQA -

<http://www.aqa.org.uk/resources/psychology/as-and-alevel/psychology/teach/command-words>

OCR – <http://www.ocr.org.uk/images/16206-a-parent-s-guide-to-understandingexam-techniques.pdf>

Edexcel -

<https://qualifications.pearson.com/content/dam/pdf/A%20Level/Psychology/2015/specification-and-sample-assessments/AL-Specification-Psychology.pdf> (pages 79-80)

- 5) Download the key terms provided by your exam board.

## VI Exam Style Questions

This activity is designed to recap on what you have learnt throughout this booklet. Now that you have downloaded the past exam papers and mark schemes you should have a vague idea of how to structure answers in the exam. Consider each of the following a 'four mark' question and aim to write 50-100 words for each answer.

- 1) Outline the nature/nurture debate

---

---

---

---

---

---

2) Describe Milgram's research

---

---

---

---

---

---

---

---

3) Outline two findings from Zimbardo's research

---

---

---

---

---

---

---

---

4) Describe one strength and one weakness of Rosenhan's research

---

---

---

---

---

---

---

---

5) Outline two ethical issues from Loftus and Palmer's research

---

---

---

---

---

---

---

---

## 9. Performing Arts

Recommended Reading	Recommended Websites
<ul style="list-style-type: none"><li>• The Frantic Assembly Book of Devising - Scott Graham and Steven Hoggett</li><li>• The Complete Stanislavsky Toolkit – Bella Merlin</li><li>• The Complete Brecht Tool Kit – Stephen Unwin</li></ul>	<p><a href="https://www.shakespeare-monologues.org/home">https://www.shakespeare-monologues.org/home</a></p> <p><a href="https://www.youngvic.org/young-vic-films">https://www.youngvic.org/young-vic-films</a></p> <p><a href="http://www.nationaltheatre.org.uk">www.nationaltheatre.org.uk</a></p> <p><a href="https://www.franticassembly.co.uk/frantic-digital/lovesong">https://www.franticassembly.co.uk/frantic-digital/lovesong</a></p>

### Subject: BTEC Level 3 National Extended Diploma in Performing Arts

#### **Background**

A BTEC Level 3 Diploma is a level 3 qualification equivalent to 3 A Level's at grades A\*-C. It is awarded by the examining and awarding body Pearson. At this College, it is a two-year course which will give you a broad understanding of the Performing Arts Industry and enable you to develop skills relevant to both employment and further study. Teacher led assessment remains at the heart of BTEC learning.

The qualification is designed for post-16 learners who want to study the Performing Arts and then progress on to related degree courses in higher education. Learners gain knowledge and understanding of the three art forms: Dance, Drama and Music. Learners will develop skills in aspects of performance, devising, creating and critically analysing their own work and the work of others. Learners develop an understanding of the importance and influence of the work of artists and practitioners within the performing arts. Assessment is completed through practical performances, portfolios, essays and external assessments. The optional units allow learners to gain knowledge a number of areas of performance, such as mask work, and screen acting. The qualification is intended to be studied over two years as the substantial qualification in learners' study programme.

#### **The structure of your BTEC Level 3 Diploma in Art & Design**

The course consists of thirteen units, seven mandatory units of which four are external set and marked.

#### **Mandatory units: (7 units)**

- Unit 1 Investigating Practitioners' Work (External)
- Unit 2 Developing Skills and Techniques for Live Performance (Internal)
- Unit 3 Group Performance Workshop (External)
- Unit 4 Performing Arts in the Community (Internal)
- Unit 5 Individual Performance Commission (External)
- Unit 6 Final Live Performance to an Audience (Internal)
- Unit 7 Employment Opportunities in the Performing Arts (External)

#### **Optional units: (6 units)**

- Unit 14 Choreography for Live Performance (Internal)
- Unit 17 Screen Acting (Internal)
- Unit 20 Developing the Voice for Performance (Internal)
- Unit 26 Physical Theatre Techniques (Internal)
- Unit 30 Audio Performance (Internal)

**Assessment:**

Each assignment brief will set the scenario and make it clear what you are required to do in order to achieve that unit of study. You will see that the tasks on the assignment brief do not relate to specific grading criteria so you are required to work on the whole task.

The grading criteria for the level 3 qualification are grouped under **Pass, Merit** and **Distinction** headings. Externally assessed units have the same grades as internally assessed units.

To achieve a level 3 qualification learners must:

- Complete all units and achieve a pass or above in all mandatory units.
- Complete and **have an outcome** (D, M P or U) for all units within a valid combination
- Achieve the **required units at pass or above** shown
- Achieve the **minimum number of points** at a grade threshold.

**In preparation for studying the BTEC Level 3 National Extended Diploma in Performing Arts in September, we ask that you complete the independent task outlined below This will be used as your prep work for the first lesson and we would expect all students to have completed this for their first lesson.**

**TASK 1:**

- Research the meaning of the terms for Performing Arts: Improvising, Rehearsing & Performing. What are their definitions and how can they be applied to each art form
- Research and write definitions of the 5 terms from each of the 3 art forms

**TASK 2:**

- Research at 2 practitioners from the list below. Choose **ONE** from a different art form (dance, drama or music).
- Produce a PowerPoint presentation on your chosen artists (you will present this in your first class in September)
- You should consider the following for each practitioner:
  - Who are they- name, education, background
  - What are they famous for?
  - Do they have any influences from other people?
  - What are their most famous pieces of work
  - How have they contributed to the Performing Arts Industry? This may take more wider research looking beyond the practitioners and searching for others that may have been influenced by them

# PERFORMING ARTS TERMS:

## THE PROCESSES:

<b>IMPROVISING</b>	
<b>REHEARSING</b>	
<b>PERFORMING</b>	

# DANCE

TERM	DEFINITION
MOTIF	
ACTION	
RELATIONSHIP	
SPACE	
DYNAMICS	

# DRAMA

TERM	DEFINITION
CHARACTERISATION	
DIALOGUE	
TENSION	
PROXEMICS	
PHYSICALITY	

# MUSIC

TERM	DEFINITION
RHYTHM	
MELODY	
HARMONY	
TIMBRE	
TEXTURE	

The web links below can help you find more research on your chosen practitioner.

### **DANCE PRACTITIONERS**

Bob Fosse

<https://www.britannica.com/biography/Bob-Fosse>

[https://www.youtube.com/watch?v=t14vhjUwe\\_o](https://www.youtube.com/watch?v=t14vhjUwe_o)

Matthew Bourne

<https://new-adventures.net/profile/sir-matthew-bourne-obe#overview>

[https://www.youtube.com/results?search\\_query=matthew+bourne+nutcracker](https://www.youtube.com/results?search_query=matthew+bourne+nutcracker)

### **DRAMA PRACTITIONERS**

Bertolt Brecht

<https://www.youtube.com/watch?v=l-828KqtTkA>

<https://www.youtube.com/watch?v=c7fqMPDcKXM>

John Godber

<http://thejohngodbercompany.co.uk/>

[https://www.youtube.com/watch?v=pX\\_ivgJtzm](https://www.youtube.com/watch?v=pX_ivgJtzm)

### **MUSIC PRACTITIONERS**

Stephen Sondheim

[https://www.youtube.com/watch?v=xFPqvHLC\\_rc](https://www.youtube.com/watch?v=xFPqvHLC_rc)

<https://www.youtube.com/watch?v=aXRivxyJhnU>

Bob Dylan

<http://www.bobdylan.com/>

<https://www.youtube.com/watch?v=MLmy2dxDOKM>

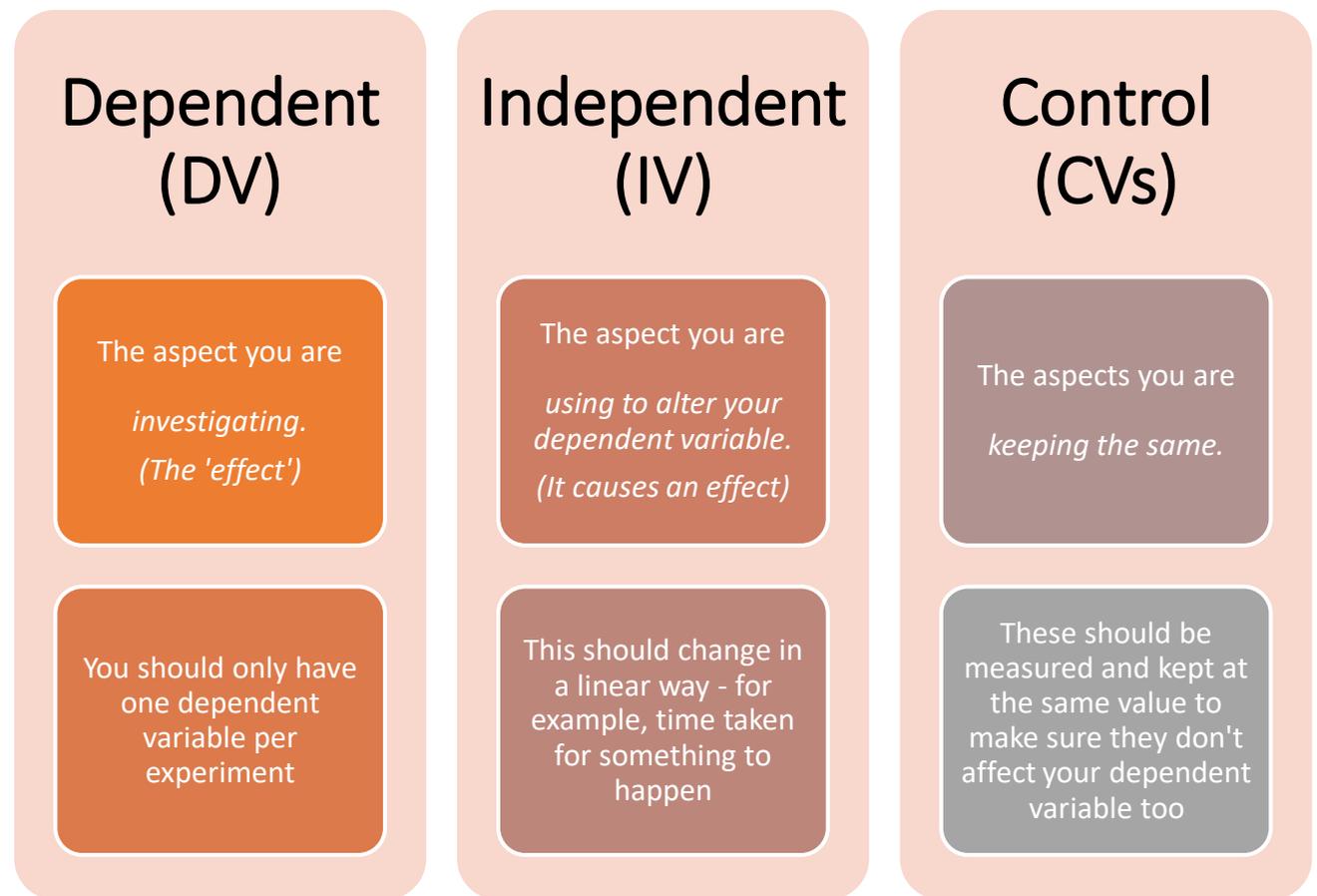
10. Science - Forensic	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"> <li>Forensic Science: An Introduction to Scientific and Investigative Techniques – Stuart H James, Jon J Nordby &amp; Suzanne Bell</li> <li>CSEye Magazine – Chartered Society of Forensic Sciences</li> </ul>	<a href="https://qualifications.pearson.com/en/qualifications/btec-nationals/forensics-and-criminal-investigation-2017.html">https://qualifications.pearson.com/en/qualifications/btec-nationals/forensics-and-criminal-investigation-2017.html</a>  <a href="https://www.csofs.org/">https://www.csofs.org/</a>

11. Science - Medicine	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"> <li>Biomedical Science Book – Ian Lyons</li> <li>Crash Course General Medicine - Inez Eiben</li> </ul>	<a href="https://www.sciencedaily.com/terms/medicine.htm">https://www.sciencedaily.com/terms/medicine.htm</a>  <a href="https://oxfordmedicine.com/view/10.1093/med/9780199204854.001.1/med-9780199204854-chapter-020101">https://oxfordmedicine.com/view/10.1093/med/9780199204854.001.1/med-9780199204854-chapter-020101</a>

The tasks below are designed to develop some of the scientific skills, knowledge and understanding that will allow you to carry out practical work with confidence



## Variables



**Remember –**

You might have to measure a different variable and do a calculation to get your dependent variable if you can't directly measure it - e.g. concentration!

*What properties and measurements can you think of that might be used as variables? List them in the space below:*

## Reliability, Validity and Accuracy

There are three very important things you need to be able to say about scientific data:

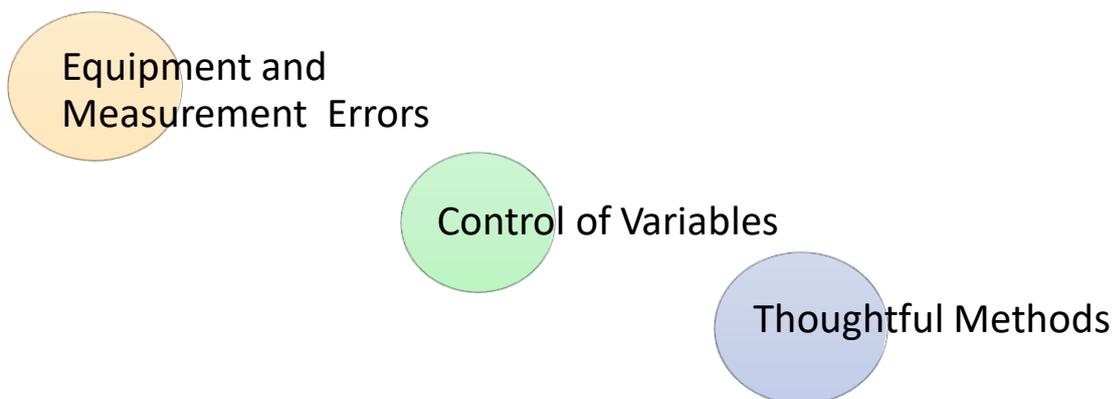
Match the words to their definitions and to what can effect (improve or reduce) them.



I have measured to a useful amount of decimal places

I have collected results that are close to their true values.

I always get the same value when I repeat my experiment



## Presenting Data tables

Independent Variable (unit)	Dependent Variable (unit)			
	Repeat 1	Repeat 2	Repeat 3	Mean
IV test value 1				
IV test value 2				
IV test value 3				
IV test value 4				
IV test value 5				

### Titration Tables

A titration is a procedure conducted in chemistry where volumes of liquids measured are then placed in a table.

Titration readings are always to two decimal places, with the second decimal being 0 (on a graduation mark) or 5 (between two graduation marks)

	1st	2nd	Notes
<b>Final Volume /cm<sup>3</sup></b>	<b>15.60</b>	<b>32.45</b>	This is the volume which was recorded after the colour change
<b>Initial Volume /cm<sup>3</sup></b>	<b>0.00</b>	<b>15.60</b>	This is the volume which you recorded before you started this repeat
<b>Titre/cm<sup>3</sup></b>	<b>15.60</b>	<b>17.85</b>	
<b>Mean Titre /cm<sup>3</sup></b>	<p><b><math>(15.60+17.85)/2 = 16.7</math> ← This must be to 1 d.p.</b></p> <p>This is the average of the 2-3 closest numbers – ideally they should be within 0.5 cm<sup>3</sup> of each other, but if not just use the two closest</p>		

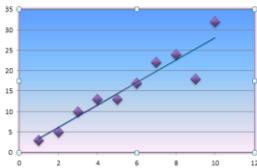
Task: Use the values in the table to show the full calculation of the titre value in the 2<sup>nd</sup> column:

.....

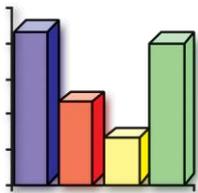
**Graphs -When drawing graphs, state what parts of a graph need to be labelled: the first has been done as an example**

- I must have labels for:
  - The x axis showing the dependent variable
  - The..... axis showing the.....variable
  - The units for both axes
- Scales are linear and go up in easy-to count numbers
- The graph takes up at least half the page – use all the paper you want, but make it clear
- The graph is of an appropriate type
- Anomalies identified, and a line of best fit drawn if appropriate

*Name the types of graph, and match them to the appropriate use*



Used for showing different quantities  
e.g. different uses of a chemical



Used for showing correlation  
e.g. resistance increase when wire length increases



Used for showing how information changes over different groups  
e.g. biodiversity at different points in a wood

## Example Practicals

### Chemistry

An experiment is carried out to react different concentrations of acid with the same amount of base and see what volume of acid is needed to neutralise the base each time

Dependent Variable: \_\_\_\_\_

Independent Variable: \_\_\_\_\_

Possible Control Variables: \_\_\_\_\_

#### Results Table

---

---

#### Appropriate Graph:





*Physics*

An experiment is carried out to test the force required to stretch pieces of elastic of different thicknesses

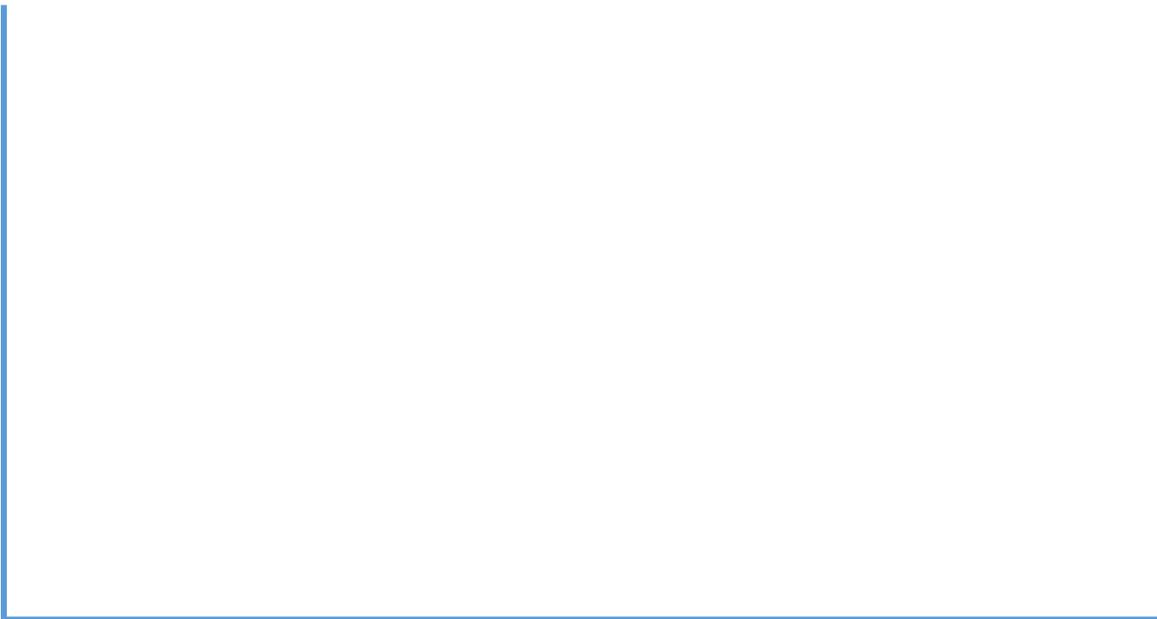
Dependent Variable: \_\_\_\_\_

Independent Variable: \_\_\_\_\_

Possible Control Variables: \_\_\_\_\_

**Results Table**

**Appropriate Graph:**





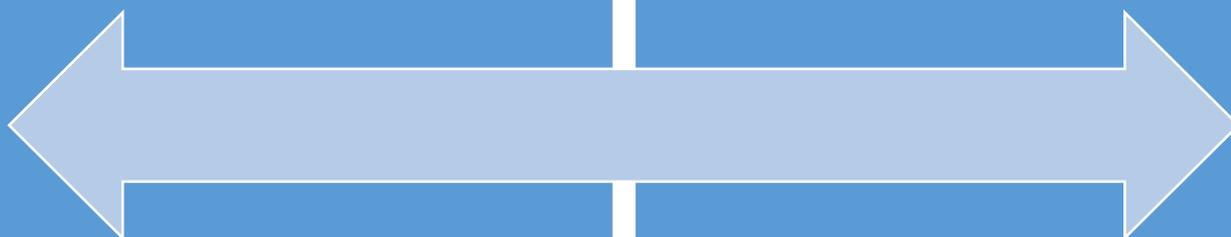
### For Reports

- Explain key Science ideas in topic
- Back up information learned in class
- Research points in the specification
- Gather data and information
  
- Short Reports: 5-10 References
- Long Reports: 15-20 references
  
- You should aim for at least one reference for every mark the report is worth



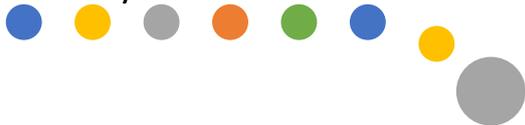
### For Practicals

- Find methods
- Find equations
- Support risk assessments
- Define key terms
  
- Check your tables are appropriate
- Find data, e.g. masses of chemicals
  
- Explain Results
- Support Conclusions
- Suggest further research



If you want to get a good marks for coursework, you must also be **critical and be able to use a range of sources** of information effectively to complete your work in your own words and using more than one reference to confirm each idea. You need to compare several sources and decide what the **best, most reliable and accurate** information is. See the Referencing Section for more help with this.

Multiple Sources Used  
Critically



Key Terms Defined



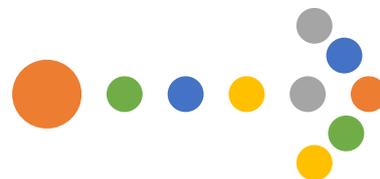
Well Written in  
Scientific Style



Understanding  
Demonstrated



Good  
Research



---

---

### Investigation report writing



#### Aim and Hypothesis

- This is a brief summary telling the reader what the point of the practical is
- You should write out the **vocational context** in your own words – you are acting as a scientist in a lab, not a student in a class
- Remember that the writer of the A level applied science practicals was very sarcastic – read carefully and only include relevant information
- You must write in a neutral way – don't use "I", "my", "your" etc. See the scientific writing section for more help on this.

#### Layout

- Each separate practical should have its own method, for example, this will mean that for the citric acid test in Unit 2 you will write five methods, one for each test
- When you list equipment and chemicals, they should each be a separate list. Include concentrations and volumes for solutions, and masses for chemicals.
- Methods should be step-by-step and numbered 1, 2, 3 etc, NOT in paragraphs





### *Writing*

- Methods should be written in the present tense or future tense – think of a method like a recipe, you are saying what you are going to do
- Methods should not use “I” or “We” – try to write in the passive tense, for example “Place the beaker on the stand”

### *Expected Observations*

- You should include a description of what you expect the result to be for a positive and negative test
- For example, “If the citric acid is pure, there will be no white precipitate. If a white precipitate appears, the citric acid is contaminated with chloride ions”
- What will the product look like? Smell like? Will it be solid, liquid, or gas? How will you know you’ve made the right thing?
- For Chemistry units, you must also include a theoretical yield.



This part of the practical will be completely different for every practical you do, apart from a few basic themes, which are listed below. Because of this, only a few basic “general” guidelines can be given as written above.

Have a look at the practical shown in the you tube video link below:

<https://www.youtube.com/watch?v=zsOs3v8Z-P4>

Imagine you are a scientist conducting the practical to **investigate the effect of the temperatures 20, 30 40 and 50 degrees Celsius on the effect of amylase enzyme activity**

Practice writing out the method in the present tense, not using I or we as stated in the “writing “ section above:

1. Produce a list of all the apparatus including the chemicals, glassware, amylase solution etc, needed for the practical.
2. Use the details in the video to produce a full method for the above investigation in bold.
3. Answer the questions shown in the blue and pink circles below.

Practice writing out the method in the present tense, not using I or we as stated in the “writing “ section above:

The first 2 steps have been done for you

1. Collect all the equipment together and add the test tubes to a test tube rack and label each with one of the temperatures being investigated using a permanent marker pen.
2. Switch on the water baths and make sure they are set at the temperatures:20,30,40 and 50 degrees Celsius

## Presenting Results

*It will make your life much easier if you set up a results table when you write your method –see the “tables” section for help with this. You can then print out a rough copy of the table to take results on when you carry out the practical, and then type it up neatly afterwards.*

### Describe your PRODUCTS

(State? Colour? Shape? Smell?)

### Check ACCURACY

(Aim to measure one more decimal point than you need – for example, if your mean is to 1 d.p., measure to 2.d.p.)

### What did you SENSE?

(See, hear, and smell? Did solids form or disappear? Did anything fizz, bubble or heat up?)



### What did you MEASURE?

(Variables dependent/independent, and check controls)

## Evaluation

You cannot possibly have a perfect experiment. Nobody can. Evaluations are not about making a judgement about poor practicals of a student, it's about acknowledging the flaws in our scientific method so we can see how reliable our results actually are.

- ❖ In fact, mistakes that you made through carelessness or messing up should **not** be listed in your evaluation, as they aren't a problem with the method.
- ❖ Even if you made no mistakes, you are still limited by things like fluctuations in temperature, the accuracy of your equipment, reading the meniscus and so on. Again, all scientists are – it's not just you!



### Random (Human) Errors

- These errors identify and acknowledge the mistakes inherent to being human.
- This includes things like reading the meniscus.
- This also includes things like adding too much of one chemical by a small amount because of the limits of your dexterity.

### Procedural (systematic) Errors

- This includes things like independent variables (did the temperature of the lab change during your experiment?)
- It also includes things like dodgy, or non calibrated, equipment
- They describe things which are outside your control.

### Percentage Errors

- You should use your % errors to say which bit of equipment caused the biggest errors in your results.
- Suggest a more accurate piece of equipment for each error
- A bigger number means the equipment is less accurate.

- ❖ Once you have identified your errors (you should have two of each) you should suggest how to avoid/minimise the impact of the problems you had next time, or explain how you overcame them this time. It is not enough to just say what went wrong; you must explain how to fix it so that the next person can get better results
- ❖ You should also link your improvements to your results – will they make your results more reliable? More accurate? More valid? See the section above on Reliability and Accuracy for more help with this.

## Common and Useful Errors and Improvements

Use the above information to complete the table below:

<i>Error when carrying out a chemistry practical</i>	<i>Type of Error</i>	<i>How to minimise</i>
<b>Misreading the level of a liquid in a measuring cylinder</b>		
<b>Contamination of a powder with a different chemical</b>		
<b>Using a different balance for measuring masses</b>		
<b>Adding too much of one chemical (solid or liquid) to some water to produce a solution</b>		
<b>Results show very little similarity when repeated</b>		
<b>Running out of time</b>		

Percentage errors are slightly different

- Remember that a larger reading can have a larger tolerance without being affected as much
  - For example, a tolerance of  $\pm 0.5\text{cm}^3$  on a reading of  $100\text{cm}^3$  is an error of 0.5%
  - The same tolerance of  $\pm 0.5\text{cm}^3$  on a reading of  $1\text{cm}^3$  is an error of 50%
  - So it would be ok to measure out  $100\text{cm}^3$  of liquid with that piece of equipment, but if you wanted to measure  $1\text{cm}^3$ , you would need something more accurate

When you calculate percentage error for your readings, you should look at the table below to decide about the accuracy of the measurement

Percentage Error	
Less than 0.1%	Very accurate readings, results will also be accurate
0.1-0.5%	This is a good level of accuracy
1-3%	Reasonable accuracy, but better equipment should still be used next time
5% or bigger	This is poor accuracy – it means that a measurement of $10\text{cm}^3$ could actually be a measurement of $10.5\text{cm}^3$
10% or bigger	You must not use this piece of equipment for this measurement

## Referencing

### The Golden Rule of Referencing

Don't use Wikipedia. This is unreliable as anyone can change this information

#### Reliability and Usefulness

**Reliable does not mean useful.** Just because it was easy to read and understand doesn't mean the information is right. Reliable means that you can trust the information 100%.

*What things make a reference more reliable?*

✓

✓

✓

✓

✓

---

*What things make a reference less reliable?*

x

x

x

x

x

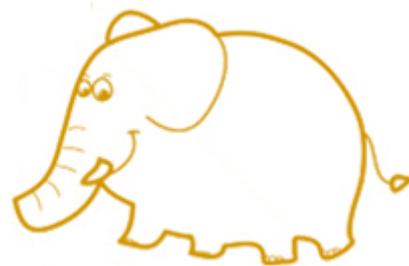


Unjustifiable references

Websites to avoid/justify

Good General Science websites

<b>Wikipedia</b>	eHow	Avogadro.co.uk BBC GCSE Bitesize
<b>Essaywriter, markedbyteachers and other sites which actively encourage plagiarism</b>	Yahoo answers	<a href="http://www.bbc.co.uk/Science">www.bbc.co.uk/Science</a> Chemchapterzero
	Wisegeek	Chemguide Chemistry.About.com
<b>Tumblr (I literally cannot believe someone used Tumblr as a reference. Seriously, guys. Come on.)</b>	Answers.com	Chemistry-videos.org.uk Chymist
	HowStuffWorks	Creative-chemistry.org.uk GCSEScience Hyperphysics IBchem Nature New Scientist Physchem Practicalchemistry.org RSC Schoolscience.co.uk Sciencegeek.net Scientific American s-cool Snopes TheScienceLab Tutoring websites University websites if you can understand the information Webchem Webelements www.chem.iastate.edu



Remember, just because a reference is unreliable doesn't mean that you can't use it and the information is wrong. It *\*does\** mean you need to back it up with another source. And you should justify why you've chosen to use it anyway in your referencing section.

References should be numbered at the end of the report, and the numbers should be in the text. For example, I might put <sup>1</sup> or (ref. 1) to label parts of my work which are backed up by my first reference.

#### How to References

##### ***To reference a book:***

1. Title of book, *author*, **ISBN**, Edition, page number of information

##### ***To reference a website:***

1. Website name, URL, *date consulted*

##### ***To reference a journal article:***

1. *Title of Article*, Author , **Journal**, Volume, *Pages*

#### Plagiarism

It is important that you do not plagiarise other peoples work by using it and presenting it as your own.

##### ***All of the following things count as plagiarism:***

1. *Putting large chunks of text from a source into my work, with quote marks, and listing the site.*

*Instead, I should:* \_\_\_\_\_

- 2. Giving my work to other people to help them, or taking someone else's work to help me, including risk assessments and researched work where we are trying to achieve the same outcome*

*Instead, I should:* \_\_\_\_\_

- 3. Copying a worked example of a calculation without explaining the steps and formatting it in a way which makes sense to me*

*Instead, I should:* \_\_\_\_\_

- 4. Copying text and using the synonyms function in word to change a few words.*

*Instead, I should:* \_\_\_\_\_

*A student used the resources listed below to reference their work.*

*Where should they put each reference in their bibliography?*

1. e-how, [www.ehow.com](http://www.ehow.com) (4<sup>th</sup>, 6-7<sup>th</sup> May 2013)
2. BBC news, [www.bbc.co.uk/Science](http://www.bbc.co.uk/Science), (6<sup>th</sup> May 2013)
3. Chem Chapter Zero, [www.chemchapterzero.com](http://www.chemchapterzero.com) (5<sup>th</sup>, 8<sup>th</sup> May 2013)
4. Chemguide, [www.chemguide.co.uk](http://www.chemguide.co.uk) (6<sup>th</sup> May 2013)
5. WebChem, [www.Webchem.org](http://www.Webchem.org) (4-6<sup>th</sup>, 8<sup>th</sup> May 2013)
6. How Stuff Works, [www.howstuffworks.com](http://www.howstuffworks.com), (7<sup>th</sup> May 2013)
7. OCR AS Chemistry Textbook, *Gent and Richie*, 4<sup>th</sup> Edition, Pages 250-251
8. Google images, [www.google.co.uk/images](http://www.google.co.uk/images), (4<sup>th</sup>-12<sup>th</sup> May 2013)

References	Reliability	Notes
	Good	All of these sources were written by experts in their subject, and are regularly used as teaching aids by A level teachers.
	Reasonable	These sources are generally highly regarded, and intentionally publishing misinformation might cause their reputation to be damaged. However, they are non-expert resources so may contain errors or misconceptions. However, they made information easier to understand.
	Poor	Information on these sites can be edited by anyone. However, they matched information gained from more reliable references, and they made the information easier to access.
	N/A	Credit is given to the original owners of image copyrights.

*You might find it helpful to save a copy of a table like this in your area on the intranet, with references you commonly use already entered.*

For EACH of the three students on the following pages:

1. Give three good things about their referencing, with examples.
2. Give three less good things about their referencing, with examples.
3. How could they improve these less good things?
4. Which is their best source evaluation?
5. Which is their worst source evaluation?
6. What grade do you think each student got on their report overall?
7. In your groups, come up with and note down in everyone's handbooks, five features of a perfectly referenced piece of work
8. Use this list to write an example of a good reference

### STUDENT 1:

[www.madehow.com](http://www.madehow.com)

This website gave me information on how to find the yield. I used it to find a definition for the word yield. It was the same definition as Wikipedia, so that proves that they are both the right definition.

[www.en.wikipedia.org/biocatalysts](http://www.en.wikipedia.org/biocatalysts)

Wikipedia must be reliable as if the website were to publish false information it could scrutinize the website origins and reliability considering millions of people use the encyclopaedia for information and facts.

[www.wisegeek.com](http://www.wisegeek.com)

This website gave me information on catalysts. I used it to find a definition for the word catalyst. I also used it to give me the equation for a catalyst. It is reliable as it was written by a science teacher. This proves that the information is true.

[www.basf.co.uk](http://www.basf.co.uk)

This website gave me information on the Haber process. I used it to find an equation for the Haber process. It said that there were no harmful side products of the reaction. It is reliable as the company would not lie about what they do.

## STUDENT 2:

1. [www.chemguide.co.uk](http://www.chemguide.co.uk)
2. <http://www.gcscience.com/m28.htm>

I used these references to help me explain how to calculate numbers of moles. I believe the information was accurate as the same information was given on both pages. Both of these websites are used by teachers to help support A level and GCSE learning, and they match information given in the AQA syllabus.

3. <http://en.wikipedia.org/wiki/Catalysts>

I used this reference to find a definition of a catalyst. Wikipedia is a useful tool for finding other references, but as it can be edited by anyone, it is not always reliable, so I checked the references at the bottom of the page. These are all from scientific journals and government websites, and therefore should be reliable as these agencies would lose credibility if they were caught being dishonest.

4. [http://www.ehow.com/how-does\\_5245012\\_do-catalysts-work\\_.html](http://www.ehow.com/how-does_5245012_do-catalysts-work_.html)

I used this reference to explain how catalysts worked. It was very easy to understand, but this means that it could have been simplified and missed bits out of the explanation. It is taken from eHow, which can be edited by anyone, and therefore might be unreliable. However, it made sense with the other reliable information I had, and what I already knew.

5. [www.basf.co.uk](http://www.basf.co.uk)

This is a company website of a company which performs the Haber process. I got the chemical equation for the Haber process from this website. However, the company website did not mention any side products or ethical issues.

6. [www.fischersci.co.uk](http://www.fischersci.co.uk)

This company sells chemicals – I used their pricing guide to suggest possible costs of manufacture.

### STUDENT 3:

#### **This student put references into their work like this:**

“Catalysts are chemicals which speed up the rate of reaction without being used up themselves.<sup>1</sup> They are often made from metals, such as palladium in the Haber process.<sup>2”</sup>

#### **They then put a bibliography at the end with the references listed in order like this:**

1. [www.chemicool.com](http://www.chemicool.com)

Reliable – information matches source 2 and 3.

2. [www.chemguide.co.uk](http://www.chemguide.co.uk)

Reliable – matches A level syllabus.

3. [www.gas-plants.com](http://www.gas-plants.com)

Potentially unreliable – company website, might be biased on some things like ethics. I only used it to find equations and definitions, though, so my information should be reliable as it is factual.

4. [www.chemguide.co.uk](http://www.chemguide.co.uk)

This should be reliable as it was provided by my school. However, I didn't understand some of it so I checked with reference 1 to confirm it.

5. [www.wikipedia.co.uk](http://www.wikipedia.co.uk)

Unreliable – anyone can edit it so the authors might not know what they are talking about. The references given at the bottom of the page were reliable as they were scientific journals, but I did not understand them so I checked with reference 2.

## A Final Note



Applied Science is a primarily coursework-based subject. There will be a lot of paper, a lot of coursework and a lot of deadlines – it is the nature of the course so think about how you can organise your work



We hope you will enjoy the Applied Science BTEC course, and we look forward to working with you to achieve your best possible grade 😊

## Appendices

### Appendix A: SI units

Aspect	Symbol	Standard Unit	Other possible measurements	Conversion
Acceleration	a	Metres per second per second, $m s^{-2}$	-	-
Amount of chemical	n	Moles, mol	-	-
Area	a	Square metres, $m^2$	Square Centimetres, $cm^2$	X10,000
Capacitance	C	Farad, F	-	-
Charge	Q	Coulombs, C	-	-
Concentration	c	Mols per decimetre cubed, $mol dm^{-3}$	-	-
Force	F	Newtons, N	-	-
Frequency	f	Hertz, Hz	-	-
Length	l	Metres, m	Centimetres, cm Inches, " Feet, '	/1000 x 0.0025 X 3.33
Magnetic field strength	B	Teslas, T	-	-
Mass	m	Grams, g	Kilograms, kg	X 1000
Power	P	Watts, W	-	-
Pressure	P	Kilopascals, kPa Atm, atmospheres	-	-
Resistance	R	Ohms, $\Omega$ (omega, see Appendix: Greek Letters)	-	-
Aspect	Symbol	Standard Unit	Other possible measurements	Conversion

Speed	s	Metres per second, $m s^{-1}$	Kilometres per hour, $km h^{-1}$ Miles per hour, mph	x 0.28 x 0.045
Temperature	T	Degrees Kelvin, K	Degrees Celsius/centigrade, $^{\circ}C$ Degrees Fahrenheit, F	+ 273 X 1.8 - 459
Time	t	Seconds, s	Minutes, min Hours, h	X 60 X 3600
Velocity	u	Metres per second, $m s^{-1}$	-	-
Voltage	v	Volts, V	Millivolts, mV	/1000
Volume	V	Decimetres cubed, $dm^3$	Centimetres cubed, $cm^3$ Millilitres, mL Litres, L	/1000 As $cm^3$ No conversion

12. Sport	
Recommended Reading	Recommended Websites
<ul style="list-style-type: none"> <li>Pearson BTEC National Sport and Exercise Science</li> </ul>	<a href="http://www.mysportscience.com">www.mysportscience.com</a> <a href="http://www.sportsscientists.com">www.sportsscientists.com</a>

## Summer Homework/Prep-work

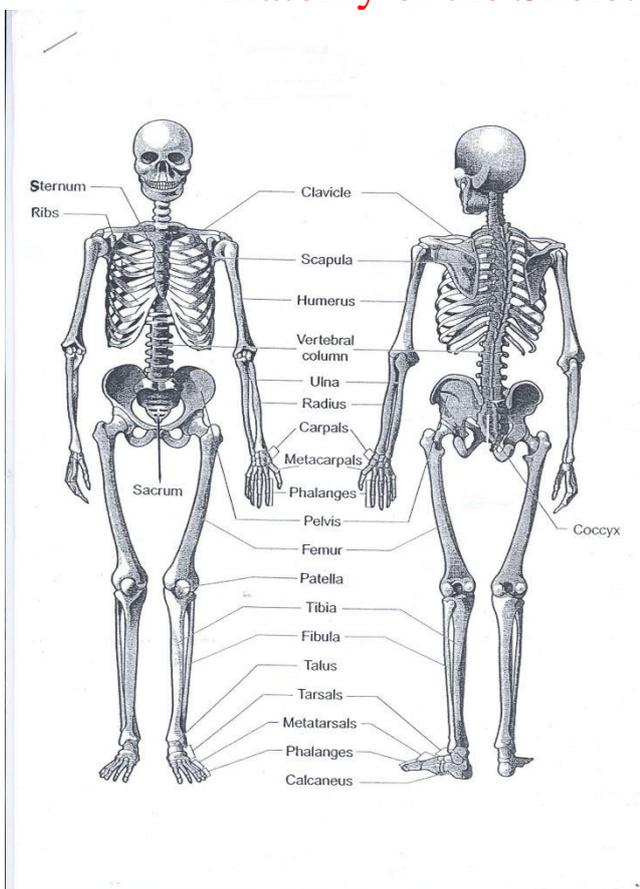
Subject: BTEC Level 3 National Extended Diploma in Sport			
<b>Background</b>			
A BTEC Level 3 Diploma is a level 3 qualification equivalent to 3 A Level's at grades A*-C. It is awarded by the examining and awarding body Pearson. At this College, it is a two-year course which will give you a broad understanding of the sports sector and enable you to develop skills relevant to both employment and further study. Teacher led assessment remains at the heart of BTEC learning.			
<p><b>The BTEC National Extended Diploma in Sport</b> is designed to enable you to start a career in the sports sector or pursue a sport related degree courses in higher education. The Diploma is a <b>vocational</b> qualification. This means you will have the opportunity to gain specific knowledge, understanding and skills that are relevant to your chosen subject or area of work. The qualification will give you, insight into the various, different occupational routes you can take within the sector e.g. Sports Management, Sports Journalism, Sports Psychology, Sports Medicine, Sports Therapy, Sports Science, PE Teaching, Coaching.</p>			
<b>The structure of your BTEC Level 3 Diploma in Sport</b>			
The course consists of 14 nits, 7 to be completed in the 1 <sup>st</sup> year and 7 in the 2 <sup>nd</sup> year.			10
coursework units and four external exams units.			
Year 1	Unit	Title	Coursework External Exam

	1	Anatomy & Physiology	External Exam
	2	Fitness Training and Programming	External Exam
	4	Sports Leadership	Coursework
	7	Practical Sports Performance	Coursework
	23	Skill Acquisition	Coursework
	25	Rules, Regulations & Officiating	Coursework
	31	Current Issues in Sport	Coursework
Year 2	3	Professional development in the Sports Industry	Coursework
	5	Application of Fitness Testing	Coursework
	6	Sports Psychology	Coursework
	8	Coaching for Performance	Coursework
	9	Research Methods	Coursework
	19	Development and Provision of Sport	External Exam
	22	Investigating Business in Sport	External Exam

## Preparation / Homework for BTEC Level 3 Extended Diploma in Sport

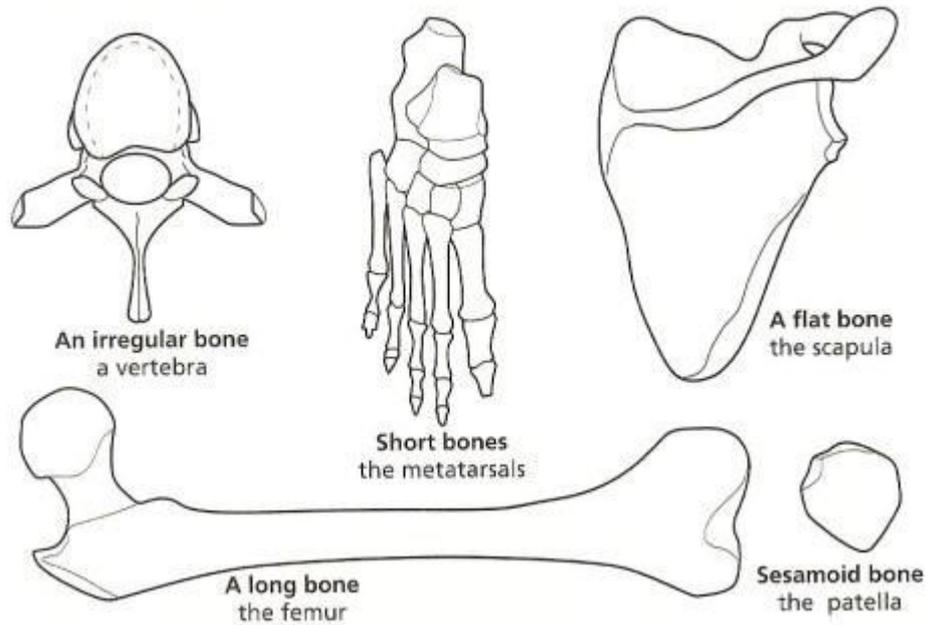
In preparation for studying the BTEC Level 3 National Extended Diploma in Sport in September, we ask that you complete the independent tasks outlined below. This will be used as your prep work for the first lesson and we would expect all students to have completed this for their first lesson.

### Unit 1 Anatomy & Physiology Anatomy of the Skeletal/Muscular Systems



# Types of Bones

Examples of each type of bone are shown in *Figure 1.1*.

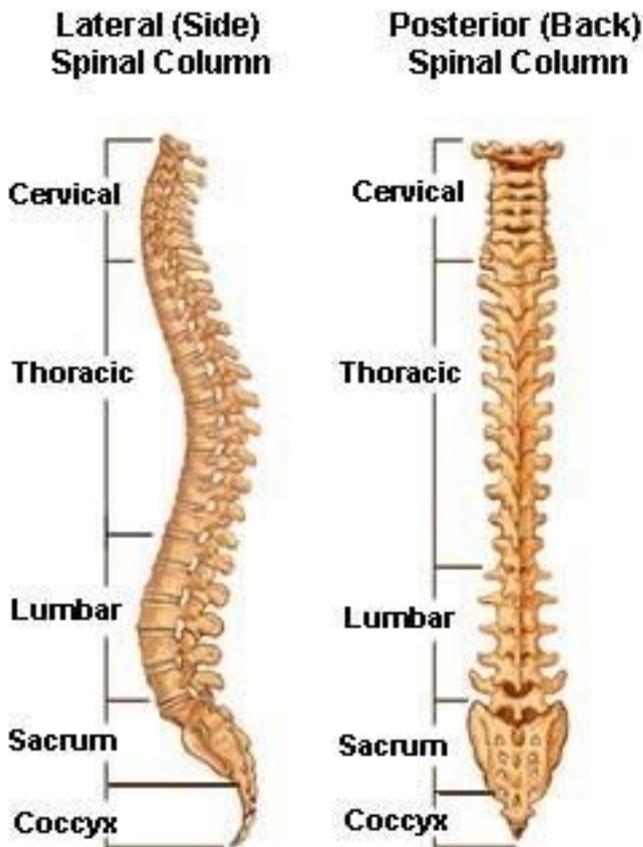


Types of bone	Name of bone	Location of bone
	vertebra	Vertebral column
	Metatarsals phalanges	
Flat	Pelvis	
	Femur	Upper leg
Sesamoid,		

# Backbone

The backbone or spine is divided into 5 sections: Use the information at the bottom of the page to fill in the missing information

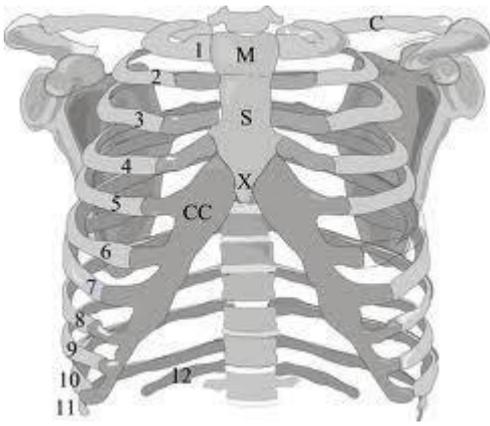
- The c..... vertebrae ( 7 unfused bones),
- The t..... vertebrae (..... unfused bones),
- The l..... vertebrae (..... unfused bones) and
- The s..... (..... fused) and
- The c.....(..... fused bones).



## THE RIB CAGE

There are 12 pairs of ribs that make up the structure of the rib cage

- How many true ribs .....
- How many false ribs .....
- How many floating ribs .....



## TYPES OF CARTILAGE

Cartilage is a dense connective tissue that attaches to bones, there are 3 types

<b>Elastic Cartilage</b>	Is soft and very e..... and is very tolerant to continual bending
<b>Fibro – Cartilage</b>	Is very st..... and can withstand a large force (Discs between the v..... of the spine Acts as a s..... absorber helping to prevent damage to the bones
<b>Hyaline Cartilage also known as /Articular Cartilage</b>	Is a g..... smooth structure that covers and protects e..... of bones to prevent friction and absorb shock Connects the ribs to the s..... is found on the articulating surfaces of bones

# Types of synovial joints

**FIGURE 1.7** Examples of the six synovial joints

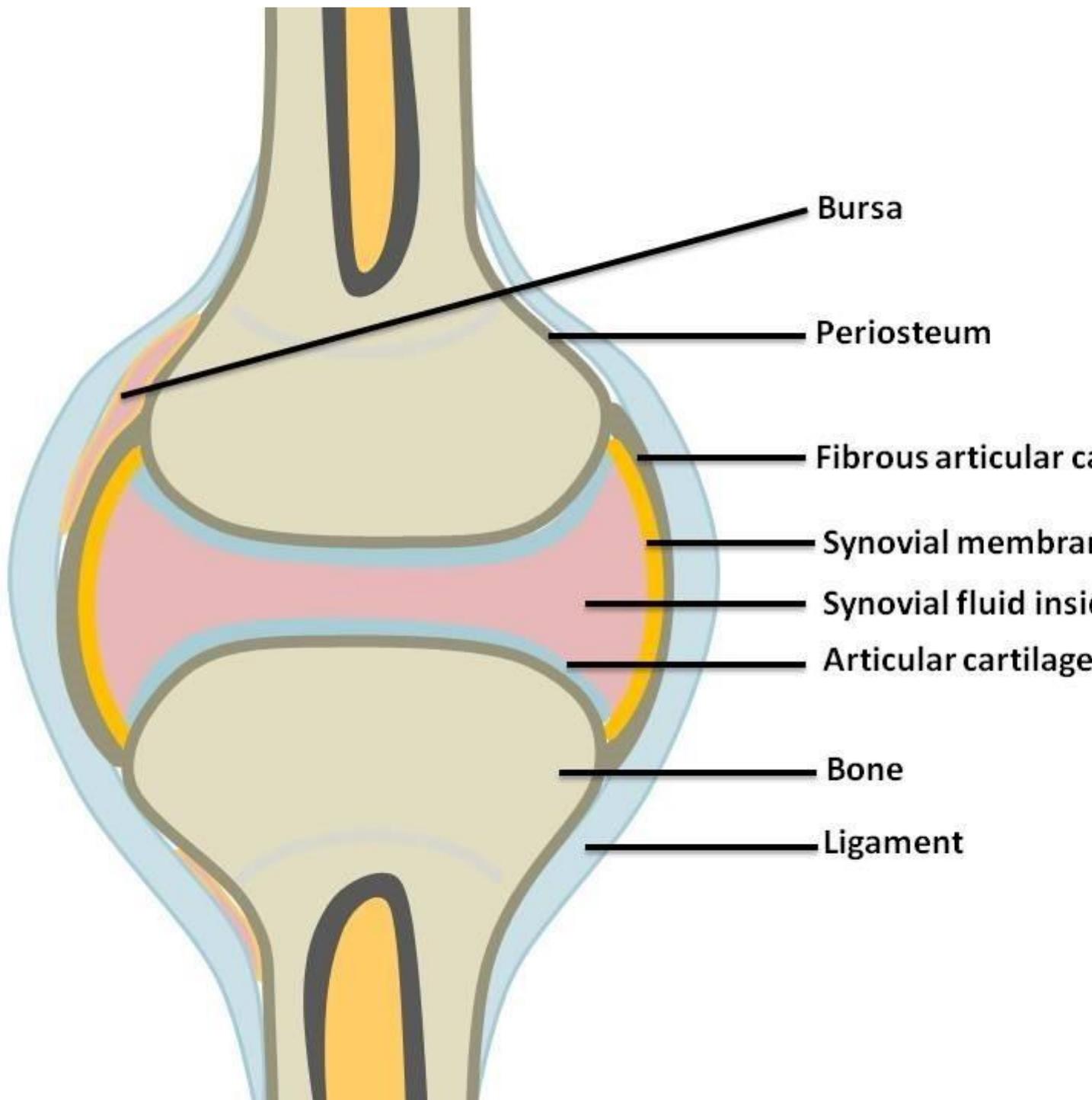


JOINTS AND THEIR ARTICULATING BONES (fill in the missing information)

JOINT NAME	JOINT TYPE	ARTICULATING BONES
Wrist		
Elbow		
Radio Ulnar		
Shoulder		
Hip		
Knee		
Ankle		

## Structure of a synovial joint

Use the descriptions and the diagram below to help fill in the empty boxes by placing the relevant description in each box.



<b>Joint feature</b>	<b>Description</b>
Joint capsule	
Tendon	
Synovial fluid	
Synovial membrane	
Ligament	
Bone ends	
Bursa	

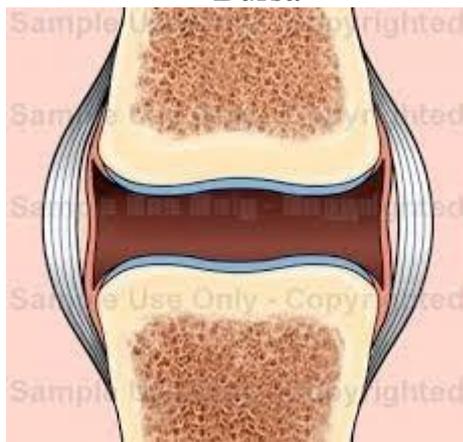
## Descriptions

- A. This is a fibrous tissue encasing the joint, forming a capsule
- B. The synovial membrane acts as a lining to the joint capsule and produces synovial fluid
- C. Glassy-smooth cartilage that covers the ends of bone. This helps gliding movements between the bone ends
- D. Strong connective tissue, joining bone to bone. They restrict the amount of movement that can occur at the joint.
- E. This fluid fills the joint capsule, it nourishes and lubricates the joint
- F. A sack containing synovial fluid that reduces friction between the ligaments, tendons muscles and bones
- G. Connective tissue attaches muscle to bone

## SYNOVIAL JOINTS

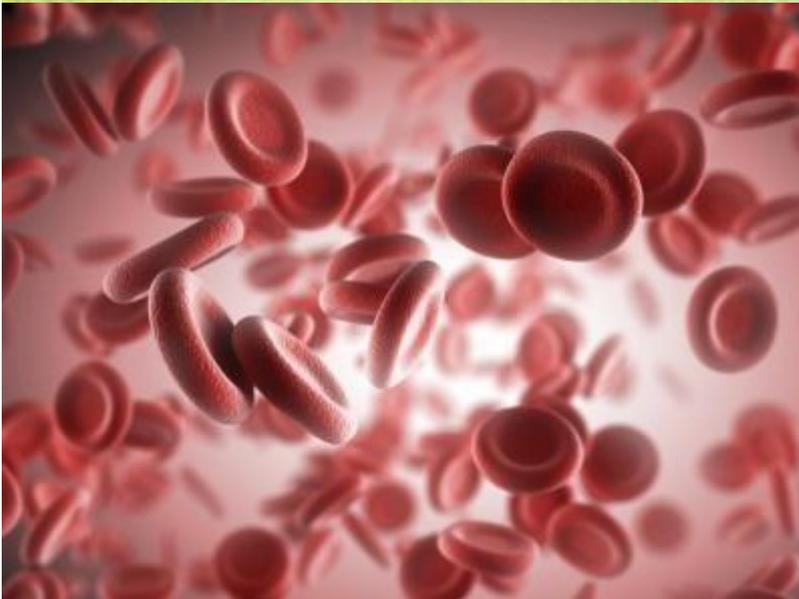
Use the structures in the box below to label the diagram below

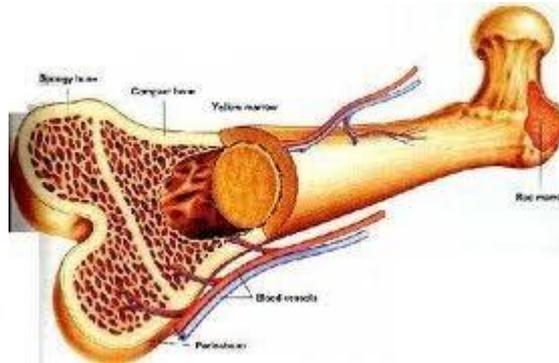
Synovial fluid
Synovial membrane
Joint capsule
Articular cartilage  
Tendon
Bursa
Ligament



Features	Definition	Function
Joint capsule	This is a fibrous tissue forming a capsule lying outside the synovial membrane	
Articular Cartilage	Glassy-smooth cartilage that covers the ends of articulating bone.	
Synovial Fluid	This fluid fills the joint capsule, it nourishes and lubricates the articular cartilage	
Synovial Membrane	The synovial membrane lines the inside of the joint capsule	
Ligament	Strong fibrous connective tissue	
Bursae	A sack containing synovial fluid	

## FUNCTIONS OF THE SKELETAL SYSTEM





Use the words in the box to help fill in the missing functions

Protection  
production

Support  
Muscle attachment and movement

Shape

Mineral storage

Blood

FUNCTIONS	DESCRIPTIONS
	Bones provide a framework that gives support to the body
	Many flat bones provide protection to the vital organs of the body
	Bones are connected to muscle via tendons that pull the bones to move the body
	Bones act as a store of vital minerals such as calcium
	Within bones are hollow sections in which blood cells are produced
	The skeletal system gives shape to the body

### MOVEMENTS POSSIBLE AT JOINTS

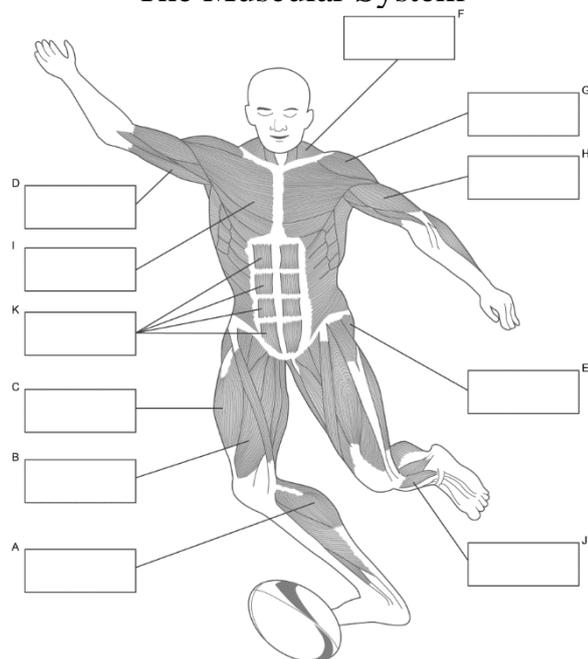
Using the words in the box below, fill in the missing joint movements in the left hand column of the table.

ADDUCTION      DORSI FLECTION      HORIZONTAL  
 FLEXION      LATERAL FLEXION      SUPERNATION      ROTATION      ABDUCTION      CIRCUMDUCTION  
 PLANTER FLEXION      EXTENSION      FLEXION      HORIZONTAL EXTENSION      PRONATION

	Taking a limb towards the mid-line of the body
	Taking a limb away from the mid-line of the body

	When one end of the limb describes a circle
	This happens at the ankle and is when the toes are pulled upwards
	This happens at the ankle when the toes are pointed
	Increasing the angle of a joint, or straightening
	Decreasing the angle of a joint, or bending
	Shoulder - arm parallel to ground shoulder joint moves towards the middle of the body
	Shoulder - arm parallel to ground pointing to the horizon shoulder joint moves away from the middle of the body
	Spine - bending the spine sideways
	This happens in the forearm where the radius and ulna slide over each other. Twisting the forearm
	This is the opposite to supination
	When a limb rotates about it's own internal axis

### The Muscular System



## MUSCLE MOVEMENT

### Antagonistic Muscle Pairs

Muscles work in pairs usually an **agonist** muscle and an **antagonist** muscle, while one is contracting, the other is relaxing.

- Complete the missing information in the table below

..... / (prime mover	The muscle that is directly responsible for the movement at a joint. (..... when contracting)
.....	The muscle that is directly opposite to the agonist (..... when contracting)
.....	The muscles that are ..... the joint

## TYPES OF MUSCLE CONTRACTION

<b>Isotonic C..... contraction</b>	<b>Muscle s..... under tension</b> - For example, during the upward phase of a bicep curl, the biceps brachii performs a concentric contraction as it shortens to produce flexion of the elbow.
<b>Isotonic E..... contraction</b>	muscle L..... under tension - For example, during the upward phase of a bicep curl, the <b>biceps</b> performs an eccentric contraction as it lengthens to produce extension of the elbow.
<b>I..... contraction</b>	contract without actually lengthening or shortening - and the result is that no ..... occurs. For example rugby scrum, plank, arm wrestling, tug of war.

### Antagonistic muscle action

Once you have learnt the muscle pairings and the agonist and antagonist for those movements have a go at completing the table below to see what you have remembered and understood.

Hip joint.

MOVEMENT	AGONIST	ANTAGONIS
Flexion	Iliopsoas	Gluteus maximus

Extension		
Abduction		
Adduction		

**Shoulder joint.**

MOVEMENT	AGONIST	ANTAGONIS
Flexion	Anterior deltoid	Posterior deltoid
Extension		
Horizontal flexion		
Horizontal extension		
Abduction		
Adduction		

**TYPES OF MUSCLE FIBRE**

**There are three main types of muscle fibre**

**Type 1** (slow o.....) (**Endu..... activities**) (marathon)

**Type 2a** (f..... oxidative glycolytic) (**Tea..... sports**) (400m)

**Type 2b** (fast glycolytic) (**dynamic pow..... activities**) (100m)

Our skeletal muscles contain a mixture of all three types but not in equal proportions, the mixture is genetically determined.

In an **elite endurance athlete** there will be a greater proportion of .....-twitch fibres in the leg muscles.

In the **elite sprinter** there will be a greater proportion of .....-twitch (type.....) fibres in the leg muscles.

## CHARACTERISTICS OF MUSCLE FIBRES

Muscle fibres have different characteristics

Structures	Functions
Size of muscle	Contraction Speed
Colour	Force of contraction
Mitochondria Content	Resistance to fatigue
Number of Capillaries	Aerobic Capacity
Myoglobin Content	Anaerobic Capacity
Glycogen Stores	
PC stores	

State whether the following activities use predominantly

- Slow twitch (**type 1**) or
- Fast twitch (**type 2a**) or
- Fast twitch (**type 2X**) fibres:

Marathon = (**type 1**)

Distance swimming

Basketball

Endurance cycling

Long jump

Sprinting (100m)

Football

400m sprinting

1500m run

Weightlifting

Shot putt

Rugby

Cricket

Judo

1 repetition maximum (1RM)

Next Year...