Huish Episcopi Academy
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Part of United Learning

Sixth Form Transition Work

Year 12 Cohort of 2026-27

Each subject has set preparation work to help you get off to an excellent start with your Key Stage 5 studies in September. The work includes a mixture of research and practice tasks. You will receive feedback on all work you complete.

We have also provided some inspirational "super-curricular" extra challenge tasks. These are optional, but highly recommended and will give you a chance to take greater independence, explore the subjects you love, and gain wider, ambitious knowledge.

Please bring your completed transition work in with you on the first day in September.

Huish Episcopi Academy Sixth Form

A Level Physical Education Transition Work 2026

This work is designed to develop the skills required for success in A Level Physical Education: application, analysis and evaluation. Answers should be evidence-based wherever possible and demonstrate independent thinking. [234833-spe...ation-h555 | PDF]

Task 1: Anatomy of Performance

Choose a sporting skill from your main sport.

Examples:

- Football instep pass
- Rugby tackle
- Tennis serve

Produce a movement analysis that identifies:

- The joints involved.
- The movements taking place.
- The agonist and antagonist muscles responsible.
- The type of muscular contraction occurring.
- The plane(s) of movement involved.

Your answer should be approximately 750–1000 words.

Task 2: The Ultimate Athlete Debate

Choose ONE athlete from any sport.

Examples:

- Eliud Kipchoge
- Katie Ledecky
- Erling Haaland
- Noah Lyles
- Tadej Pogačar
- Simone Biles

Create a profile explaining:

Energy Systems

Which energy systems contribute most to their performance?

- ATP-PC
- Glycolytic
- Aerobic

Body Systems

How do the:

- Skeletal

- Muscular
- Cardiovascular
- Respiratory systems

work together to optimise performance?

Training Adaptations

Explain which physiological adaptations would be most beneficial to this athlete.

Use examples throughout.

Task 3: Physiological Mystery Challenge

Complete the following investigation.

Choose ONE of these scenarios:

Scenario A

A football team spends three weeks training at altitude before an important tournament.

Scenario B

An elite tennis player competes in 38°C heat and high humidity.

Your Task

Write a report answering:

1. What physiological changes would occur?
2. Which body systems would be affected?
3. What impact would this have on performance?
4. What are the advantages and disadvantages of the situation?
5. What recommendations would you give?

The best reports will use material from across:

- Anatomy and physiology
- Exercise physiology
- Environmental effects
- Training adaptations
- Recovery processes
- Injury prevention and rehabilitation.

Super-Curricular Challenge: "Explain Sport"

Find a sporting moment from the summer (live or recorded) and explain it using physiology.

Examples:

- Why a player cramped.
- Why a goalkeeper reacted so quickly.
- Why a marathon runner "hit the wall".
- Why a sprinter slowed in the final metres.
- Why a cyclist performed well at altitude.

Create a one-page analysis titled:

"The Science Behind the Moment"

Be prepared to present your example during the first week of lessons.

This challenge will be judged on how well you apply physiological theory to real sporting performance rather than simply describing what happened.

Transition from GCSE to A Level

Moving from GCSE Science to A Level can be a daunting leap. You'll be expected to remember a lot more facts, equations, and definitions, and you will need to learn new maths skills and develop confidence in applying what you already know to unfamiliar situations.

This worksheet aims to give you a head start by helping you:

- to pre-learn some useful knowledge from the first chapters of your A Level course
- understand and practice of some of the maths skills you'll need.

Learning objectives

After completing the worksheet you should be able to:

- define practical science key terms
- recall the answers to the retrieval questions
- perform maths skills including:
    - converting between units, standard form, and prefixes
    - using significant figures
    - rearranging formulae
    - magnification calculations
    - calculating percentages, errors, and uncertainties
    - drawing and interpreting line graphs.

Retrieval questions

You need to be confident about the definitions of terms that describe measurements and results in A Level Biology.

Learn the answers to the questions below, then cover the answers column with a piece of paper and write as many answers as you can. Check and repeat.

Practical science key terms

When is a measurement valid?	when it measures what it is supposed to be measuring
When is a result accurate?	when it is close to the true value
What are precise results?	when repeat measurements are consistent/agree closely with each other
What is repeatability?	how precise repeated measurements are when they are taken by the *same* person, using the *same* equipment, under the *same* conditions
What is reproducibility?	how precise repeated measurements are when they are taken by *different* people, using *different* equipment
What is the uncertainty of a measurement?	the interval within which the true value is expected to lie
Define measurement error	the difference between a measured value and the true value
What type of error is caused by results varying around the true value in an unpredictable way?	random error
What is a systematic error?	a consistent difference between the measured values and true values
What does zero error mean?	a measuring instrument gives a false reading when the true value should be zero
Which variable is changed or selected by the investigator?	independent variable
What is a dependent variable?	a variable that is measured every time the independent variable is changed
Define a fair test	a test in which only the independent variable is allowed to affect the dependent variable
What are control variables?	variables that should be kept constant to avoid them affecting the dependent variable

Basic components of living systems

Learn the answers to the questions below then cover the answers column with a piece of paper and write as many answers as you can. Check and repeat.

What is the formula to calculate magnification?	$\text{magnification} = \frac{\text{size of image}}{\text{actual size of object}}$
Why are cells stained before being viewed with a light microscope?	staining increases contrast between different cell components, makes them visible, and allows them to be identified
What is an eyepiece graticule?	a glass disc that fits on top of the eyepiece lens that is marked with a fine scale from 1 to 100
What is a stage micrometer?	a microscope slide with a very accurate scale in micrometers (μ) engraved on it
What is a scientific drawing?	a labelled line drawing that is used to highlight particular features and does not include unnecessary detail or shading, it should always have a title and state the magnification
What is magnification?	how many times larger an image is than the actual size of the object being viewed
What is resolution?	the ability to see individual objects as separate entities
What is the function of the nucleus?	controls the metabolic activities of the cell as it contains genetic information in the form of DNA
What is the nucleolus?	area within the nucleus that is responsible for producing ribosomes
What is the function of mitochondria?	site of production of ATP in the final stages of cellular respiration
What are vesicles?	membranous sacs that are used to transport materials in the cell
What are lysosomes?	specialised forms of vesicles with hydrolytic enzymes that break down waste material in cells
What is the role of the cytoskeleton?	controls cell movement, movement of organelles within the cell, and provides mechanical strength to the cell
Name the three types of cytoskeletal filaments	microfilaments, microtubules, and intermediate fibres
Give two types of extension that protrude from some cells	flagella (whip-like protrusions) and cilia (tail-like protrusions)
What is the endoplasmic reticulum (ER)?	a network of membranes enclosing flattened sacs called cisternae
What are the functions of the two types of ER?	smooth ER – lipid and carbohydrate synthesis, and storage rough ER – synthesis and transport of proteins
What is the function of the Golgi apparatus?	plays a part in modifying proteins and packaging them into vesicles

Maths skills

1 Numbers and units

1.1 Units and prefixes

A key criterion for success in biological maths lies in the use of correct units and the management of numbers. The units scientists use are from the *Système Internationale* – the SI units. In biology, the most commonly used SI base units are metre (m), kilogram (kg), second (s), and mole (mol). Biologists also use SI derived units, such as square metre (m^2), cubic metre (m^3), degree Celsius (°C), and litre (l).

To accommodate the huge range of dimensions in our measurements they may be further modified using appropriate prefixes. For example, one thousandth of a second is a millisecond (ms). Some of these prefixes are illustrated in the table below.

Multiplication factor	Prefix	Symbol
10^9	giga	G
10^6	mega	M
10^3	kilo	k
10^{-2}	centi	c
10^{-3}	milli	m
10^{-6}	micro	μ
10^{-9}	nano	n

Practice questions

1 A burger contains 4 500 000 J of energy. Write this in:
a kilojoules **b** megajoules.

2 HIV is a virus with a diameter of between 9.0×10^{-8} m and 1.20×10^{-7} m.
Write this range in nanometres.

1.2 Powers and indices

Ten squared = 10 × 10 = 100 and can be written as 10^2. This is also called 'ten to the power of 2'.

Ten cubed is 'ten to the power of three' and can be written as $10^3 = 1000$.

The power is also called the index.

Fractions have negative indices:

one tenth = 10^{-1} = 1/10 = 0.1

one hundredth = 10^{-2} = 1/100 = 0.01

Any number to the power of 0 is equal to 1, for example, $29^0 = 1$.

If the index is 1, the value is unchanged, for example, $17^1 = 17$.

When multiplying powers of ten, you must *add* the indices.

So 100 × 1000 = 100 000 is the same as $10^2 \times 10^3 = 10^{2+3} = 10^5$

When dividing powers of ten, you must *subtract* the indices.

So 100/1000 = 1/10 = 10^{-1} is the same as $10^2/10^3 = 10^{2-3} = 10^{-1}$

But you can only do this when the numbers with the indices are the same.

So $10^2 \times 2^3 = 100 \times 8 = 800$

And you can't do this when adding or subtracting.

$10^2 + 10^3 = 100 + 1000 = 1100$

$10^2 - 10^3 = 100 - 1000 = -900$

Remember: You can only add and subtract the indices when you are multiplying or dividing the numbers, not adding or subtracting them.

Practice questions

3 Calculate the following values. Give your answers using indices.

a $10^8 \times 10^3$ **b** $10^7 \times 10^2 \times 10^3$

c $10^3 + 10^3$ **d** $10^2 - 10^{-2}$

4 Calculate the following values. Give your answers with and without using indices.

a $10^5 \div 10^4$ **b** $10^3 \div 10^6$

c $10^2 \div 10^{-4}$ **d** $100^2 \div 10^2$

1.3 Converting units

When doing calculations, it is important to express your answer using sensible numbers. For example, an answer of 6230 µm would have been more meaningful expressed as 6.2 mm.

If you convert between units and round numbers properly, it allows quoted measurements to be understood within the scale of the observations.

To convert 488 889 m into km:

A kilo is 10^3 so you need to divide by this number, or move the decimal point three places to the left.

488 889 ÷ 10^3 = 488.889 km

However, suppose you are converting from mm to km: you need to go from 10^3 to 10^{-3}, or move the decimal point six places to the left.

333 mm is 0.000 333 km

Alternatively, if you want to convert from 333 mm to nm, you would have to go from 10^{-9} to 10^{-3}, or move the decimal point six places to the right.

333 mm is 333 000 000 nm

Practice question

5 Calculate the following conversions:

a 0.004 m into mm **b** 130 000 ms into s

c 31.3 ml into µl **d** 104 ng into mg

6 Give the following values in a different unit so they make more sense to the reader.

Choose the final units yourself. (Hint: make the final number as close in magnitude to zero as you can. For example, you would convert 1000 m into 1 km.)

a 0.000 057 m **b** 8 600 000 µl **c** 68 000 ms **d** 0.009 cm

2 Decimals, standard form, and significant figures

2.1 Decimal numbers

A decimal number has a decimal point. Each figure *before* the point is a whole number, and the figures *after* the point represent fractions.

The number of decimal places is the number of figures *after* the decimal point. For example, the number 47.38 has 2 decimal places, and 47.380 is the same number to 3 decimal places.

In science, you must write your answer to a sensible number of decimal places.

Practice questions

1 New antibiotics are being tested. A student calculates the area of clear zones in Petri dishes in which the antibiotics have been used. List these in order from smallest to largest.

0.0214 cm^2 0.03 cm^2 0.0218 cm^2 0.034 cm^2

2 A student measures the heights of a number of different plants. List these in order from smallest to largest.

22.003 cm 22.25 cm 12.901 cm 12.03 cm 22 cm

2.2 Standard form

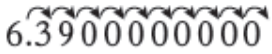
Sometimes biologists need to work with numbers that are very small, such as dimensions of organelles, or very large, such as populations of bacteria. In such cases, the use of scientific notation or standard form is very useful, because it allows the numbers to be written easily.

Standard form is expressing numbers in powers of ten, for example, 1.5×10^7 microorganisms.

Look at this worked example. The number of cells in the human body is approximately 37 200 000 000 000. To write this in standard form, follow these steps:

Step 1: Write down the smallest number between 1 and 10 that can be derived from the number to be converted. In this case it would be 3.72

Step 2: Write the number of times the decimal place will have to shift to expand this to the original number as powers of ten. On paper this can be done by hopping the decimal over each number like this:



until the end of the number is reached.

In this example that requires 13 shifts, so the standard form should be written as 3.72×10^{13}.

For very small numbers the same rules apply, except that the decimal point has to hop backwards. For example, 0.000 000 45 would be written as 4.5×10^{-7}.

Practice questions

3 Change the following values to standard form.

a 3060 kJ **b** 140 000 kg **c** 0.000 18 m **d** 0.000 004 m

4 Give the following numbers in standard form.

a 100 **b** 10 000 **c** 0.01 **d** 21 000 000

5 Give the following as decimals.

a 10^6 **b** 4.7×10^9 **c** 1.2×10^{12} **d** 7.96×10^{-4}

2.3 Significant figures

When you use a calculator to work out a numerical answer, you know that this often results in a large number of decimal places and, in most cases, the final few digits are 'not significant'. It is important to record your data and your answers to calculations to a reasonable number of significant figures. Too many and your answer is claiming an accuracy that it does not have, too few and you are not showing the precision and care required in scientific analysis.

Numbers to 3 significant figures (3 s.f.):

7.88 25.4 741

Bigger and smaller numbers with 3 significant figures:

0.000 147 0.0147 0.245 39 400 96 200 000 (notice that the zeros before the figures and after the figures are *not* significant – they just show you how large the number is by the position of the decimal point).

Numbers to 3 significant figures where the zeros *are* significant:

207 4050 1.01 (any zeros between the other significant figures *are* significant).

Standard form numbers with 3 significant figures:

9.42×10^{-5} 1.56×10^{8}

If the value you wanted to write to 3.s.f. was 590, then to show the zero was significant you would have to write:

590 (to 3.s.f.) or 5.90×10^2

Remember: For calculations, use the same number of figures as the data in the question with the lowest number of significant figures. It is not possible for the answer to be more accurate than the data in the question.

Practice question

6 Write the following numbers to **i** 2 s.f. and **ii** 3 s.f.

a 7644 g

b 27.54 m

c 4.3333 g

d 5.995×10^2 cm^3

7 The average mass of oxygen produced by an oak tree is 11800 g per year.

Give this mass in standard form and quote your answer to 2 significant figures.

3 Working with formulae

It is often necessary to use a mathematical formula to calculate quantities. You may be tested on your ability to substitute numbers into formulae or to rearrange formulae to find specific values.

3.1 Substituting into formulae

Think about the data you are given in the question. Write down the equation and then think about how to get the data to substitute into the equation. Look at this worked example.

A cheek cell has a 0.06 mm diameter. Under a microscope it has a diameter 12 mm. What is the magnification?

magnification = image size (mm) ÷ object size (mm) or $M = \frac{I}{O}$

Substitute the values and calculate the answer:

M = 12 mm/0.06 mm = 12/0.06 = 200

Answer: magnification = ×200 (magnification has no units)

Sometimes an equation is more complicated and the steps need to be carried out in a certain order to succeed. A general principle applies here, usually known by the mnemonic BIDMAS. This stands for **B**rackets, **I**ndices (functions such as squaring or powers), **D**ivision, **M**ultiplication, **A**ddition, **S**ubtraction.

Practice questions

1 Calculate the magnification of a hair that has a width of 6.6 mm on a photograph. The hair is 165 µm wide.

2 Estimate the area of a leaf by treating it as a triangle with base 2 cm and height 9 cm.

3 Estimate the area of a cell by treating it as a circle with a diameter of 0.7 µm. Give your answer in µm^2.

4 An *Amoeba* population starts with 24 cells. Calculate how many *Amoeba* cells would be present in the culture after 7 days if each cell divides once every 20 hours. Use the equation $N_t = N_0 \times 2^n$ where N_t = number after time t, N_0 = initial population, n = number of divisions in the given time t.

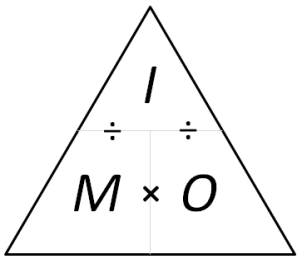
5 In a quadrat sample, an area was found to contain 96 aphids, 4 ladybirds, 22 grasshoppers, and 3 ground beetles. Calculate the diversity of the site using the equation $D = 1 - \Sigma\left(\frac{n}{N}\right)^2$ *where* n = number of each species, N = grand total of all species, and D = diversity.

Remember: In this equation there is a part that needs to be done several times then summed, shown by the symbol Σ.

3.2 Rearranging formulae

Sometimes you will need to rearrange an equation to calculate the answer to a question. For example, the relationship between magnification, image size, and actual size of specimens in micrographs usually uses the equation $M = \frac{I}{O}$, where M is magnification, I is size of the image, and O = actual size of the object.

You can use the algebra you have learnt in Maths to rearrange equations, or you can use a triangle like the one shown.



Cover the quantity you want to find. This leaves you with either a fraction or a multiplication:

$M = I \div O$ $O = I \div M$ $I = M \times O$

Practice questions

6 A fat cell is 0.1 mm in diameter. Calculate the size of the diameter seen through a microscope with a magnification of ×50.

7 A Petri dish shows a circular colony of bacteria with a cross-sectional area of 5.3 cm^2. Calculate the radius of this area.

8 In a photograph, a red blood cell is 14.5 mm in diameter. The magnification stated on the image is ×2000. Calculate the real diameter of the red blood cell.

9 Rearrange the equation $34 = 2a/135 \times 100$ and find the value of *a.*

10 The cardiac output of a patient was found to be 2.5 $dm^3\,min^{-1}$ and their heart rate was 77 bpm. Calculate the stroke volume of the patient.

Use the equation: cardiac output = stroke volume × heart rate.

11 In a food chain, efficiency = $\frac{\text{biomass transferred}}{\text{biomass taken in}} \times 100$

A farmer fed 25 kg of grain to his chicken. The chicken gained weight with an efficiency of 0.84. Calculate the weight gained by the chicken.

4 Magnification

To look at small biological specimens you use a microscope to magnify the image that is observed. The microscope was developed in the 17th century. Anton van Leeuwenhoek used a single lens and Robert Hooke used two lenses. The lenses focus light from the specimen onto your retina to produce a magnified virtual image. The magnification at which observations are made depends on the lenses used.

4.1 Calculating the magnifying power of lenses

Lenses each have a magnifying power, defined as the number of times the image is larger than the real object. The magnifying power is written on the lens.

To find the magnification of the virtual image that you are observing, multiply the magnification powers of each lens used. For example, if the eyepiece lens is ×10 and the objective lens is ×40 the total magnification of the virtual image is 10 × 40 = 400.

Practice questions

1 Calculate the magnification of the virtual image produced by the following combinations of lenses:

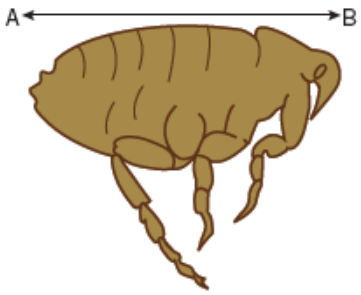
a objective ×10 and eyepiece ×12 **b** objective ×40 and eyepiece ×15

4.2 Calculating the magnification of images

Drawings and photographs of biological specimens should always have a magnification factor stated. This indicates how much larger or smaller the image is compared with the real specimen.

The magnification is calculated by comparing the sizes of the image and the real specimen. Look at this worked example.

The image shows a flea which is 1.3 mm long. To calculate the magnification of the image, measure the image (or the scale bar if given) on the paper (in this example, the body length as indicated by the line A–B).



For this image, the length of the image is 42 mm and the length of the real specimen is 1.3 mm.

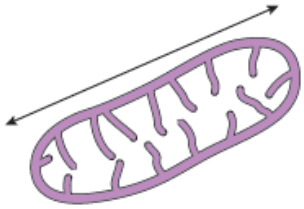
$$\text{magnification} = \frac{\text{length of image}}{\text{length of real specimen}} = 42/1.3 = 32.31$$

The magnification factor should therefore be written as ×32.31

Remember: Use the same units. A common error is to mix units when performing these calculations. Begin each time by converting measurements to the same units for both the real specimen and the image.

Practice question

2 Calculate the magnification factor of a mitochondrion that is 1.5 µm long.

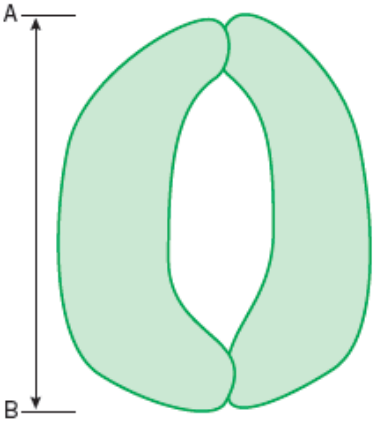


4.3 Calculating real dimensions

Magnification factors on images can be used to calculate the actual size of features shown on drawings and photographs of biological specimens. For example, in a photomicrograph of a cell, individual features can be measured if the magnification is stated. Look at this worked example.

The magnification factor for the image of the open stoma is ×5000.

This can be used to find out the actual size of any part of the cell, for example, the length of one guard cell, measured from A to B.



Step 1: Measure the length of the guard cell as precisely as possible. In this example the image of the guard cell is 52 mm long.

Step 2: Convert this measurement to units appropriate to the image. In this case you should use µm because it is a cell.

So the magnified image is 52 × 1000 = 52 000 µm

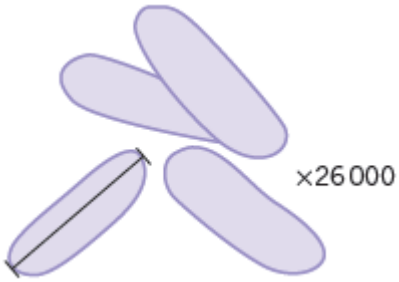
Step 3: Rearrange the magnification equation (see Topic 3.2) to get:

real size = size of image/magnification = 52 000/5000 = 10.4

So the real length of the guard cell is 10.4 µm.

Practice question

3 Use the magnification factor to determine the actual size of a bacterial cell.



5 Percentages and uncertainty

A percentage is simply a fraction expressed as a decimal. It is important to be able to calculate routinely, but is often incorrectly calculated in exams. These pages should allow you to practise this skill.

5.1 Calculating percentages as proportions

To work out a percentage, you must identify or calculate the total number using the equation:

$$\text{percentage} = \frac{\text{number you want as a percentage of total number}}{\text{total number}} \times 100\%$$

For example, in a population, the number of people who have brown hair was counted.

The results showed that in the total population of 4600 people, 1800 people had brown hair.

The percentage of people with brown hair is found by calculating:

$$\frac{\text{number of people with brown hair}}{\text{total number of people}} \times 100$$

$$= \frac{1800}{4600} \times 100 = 39.1\%$$

Practice questions

1 The table below shows some data about energy absorbed by a tree in a year and how some of it is transferred.

Energy absorbed by the tree in a year	3 600 000 kJ/m^2
Energy transferred to primary consumers	2240 kJ/m^2
Energy transferred to secondary consumers	480 kJ/m^2

Calculate the percentage of energy absorbed by the tree that is transferred to

a primary consumers **b** secondary consumers.

2 One in 17 people in the UK has diabetes.

Calculate the percentage of the UK population that have diabetes.

5.2 Calculating the percentage change

When you work out an increase or a decrease as a percentage change, you must identify, or calculate, the total original amount:

$$\% \text{ increase} = \frac{\text{increase}}{\text{original amount}} \times 100$$

$$\% \text{ decrease} = \frac{\text{decrease}}{\text{original amount}} \times 100$$

Remember: When you calculate a percentage change, use the total *before* the increase or decrease, not the final total.

Practice questions

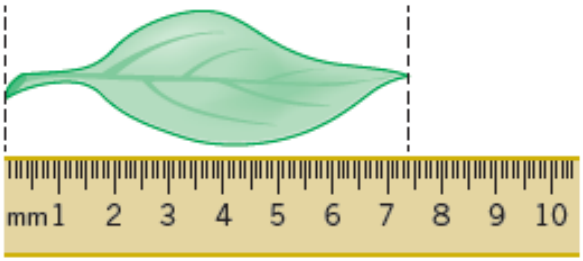
3 Convert the following mass changes as percentage changes.

Sucrose conc. / mol dm^{-3}	Initial mass / g	Final mass / g	Mass change / g	Percentage change in mass
0.9	1.79	1.06		
0.7	1.86	1.30		
0.5	1.95	1.70		
0.3	1.63	1.76		
0.1	1.82	2.55		

5.3 Measurement uncertainties

When you measure something, there will always be a small difference between the measured value and the true value. This may be because of the size of the scale divisions on your measuring equipment, or the difficulty of taking the measurement. This is called an uncertainty.

To estimate the uncertainty of a measurement with an instrument with a marked scale such as a ruler, a good rule of thumb is to let the uncertainty be equal to half the smallest division on the scale being used.



Using a ruler with a mm scale, the length of the leaf seems to be 74 mm. The smallest division is 1 mm, so the uncertainty is 0.5 mm.

The true length is therefore 74 mm +/− 0.5 mm.

Practice question

4 Give the uncertainty for the following pieces of equipment:

a large measuring cylinder with 2 cm^3 divisions

b digital stopwatch timer measuring to the nearest hundredth of a second

c thermometer with 0.1 °C divisions.

5.4 Calculating percentage uncertainties

The uncertainty is the range of possible error either side of the true value due to the scale being used, so the value recorded for the measurement = closest estimate +/− uncertainty.

The difference between the true value and the maximum or minimum value is called the **absolute error**.

Once the absolute error has been established for a particular measurement, it is possible to express this as a percentage uncertainty or **relative error**. The calculation to use is:

$$\text{relative error} = \frac{\text{absolute error}}{\text{measured value}} \times 100\%$$

In the leaf example above, the absolute error is +/−0.5 mm.

The relative error is therefore:

0.5/74 × 100% = 0.7%

Practice questions

5 Complete the table to show the missing values in the last two columns.

Measurement made	Equipment used	Absolute error	Relative error
Length of a fluid column in a respirometer is 6 mm	mm scale	0.5 mm	
Volume of a syringe is 12 cm^3 of liquid	0.5 cm^3 divisions		
Change in mass of 1.6 g	balance with 2 d.p.		

6 Scatter graphs and lines of best fit

The purpose of a scatter graph with a line of best fit is to allow visualisation of a trend in a set of data. The graph can be used to make calculations, such as rates, and also to judge the correlation between variables. It is easy to draw such a graph but also quite easy to make simple mistakes.

6.1 Plotting scatter graphs

The rules when plotting graphs are:

- Ensure that the graph occupies the majority of the space available:
  - In exams, this means more than half the space
  - Look for the largest number to help you decide the best scale
  - The scale should be based on 1, 2, or 5, or multiples of those numbers

- Ensure that the dependent variable that you measured is on the *y*-axis and the independent variable that you varied is on the *x*-axis
- Mark axes using a ruler and divide them clearly and equidistantly (i.e. 10, 20, 30, 40 not 10, 15, 20, 30, 45)
- Ensure that both axes have full titles and units are clearly labelled
- Plot the points accurately using sharp pencil 'x' marks so the exact position of the point is obvious
- Draw a neat best fit line, either a smooth curve or a ruled line. It does not have to pass through all the points. Move the ruler around aiming for:
    - as many points as possible on the line
    - the same number of points above and below the line
- If the line starts linear and then curves, be careful not to have a sharp corner where the two lines join. Your curve should be smooth
- Confine your line to the range of the points. Never extrapolate the line beyond the range within which you measured
- Add a clear, concise title.

Remember: Take care, use only pencil and check the positions of your points.

Practice questions

1 Use your calculated data in Topic 5.2 question 3 to plot a graph of % mass change against sucrose concentration.

2 For each of the tables of data:

a Plot a scatter graph

b Draw a line of best fit

c Describe the correlation

Turbidity of casein samples at different pH	
pH	**% transmission (blue light)**
9.00	99
8.00	99
6.00	87
5.00	67
4.75	26
4.50	30
4.00	24
3.75	43
3.50	64

Sodium bicarbonate concentration / %	**Rate of oxygen production by pondweed / $mm^3\ s^{-1}$**
6.5	1.6
5.0	2.1
3.5	1.2
2.0	0.8
1.0	0.5
0.5	0.2

Huish Episcopi Academy Sixth Form

Biology A-Level Transition Work 2026

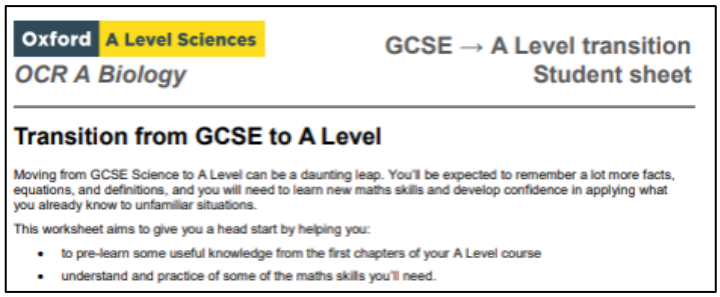
Task 1

Watch the following YouTube videos and produce brief summary notes on the GCSE Biology only content below to refresh (or learn if you were a combined scientist) these parts of the specification.

- Culturing microorganisms
- Plant Hormones
- Kidney

Task 2

Complete the OCR GCSE→A level Biology transition work booklet



Oxford A Level Sciences

OCR A Biology

GCSE → A Level transition
Student sheet

Transition from GCSE to A Level

Moving from GCSE Science to A Level can be a daunting leap. You'll be expected to remember a lot more facts, equations, and definitions, and you will need to learn new maths skills and develop confidence in applying what you already know to unfamiliar situations.

This worksheet aims to give you a head start by helping you:

- to pre-learn some useful knowledge from the first chapters of your A Level course
- understand and practice of some of the maths skills you'll need.

Task 3

Plan an investigation to test the effect of substrate concentration on enzyme rate of reaction

You will be given a solution containing the enzyme catalase which breaks down the substrate hydrogen peroxide into the products water and oxygen gas.

Success Criteria

- Write in a numbered list
- Identify independent, dependent and control variables
- Use imperative verbs e.g. measure, pour
- Provide an equipment list
- Design a results table
- Include a brief risk assessment

Super-Curricular Extra Challenge

Read

- The Selfish Gene – Richard Dawkins
- The Magic of Reality – Richard Dawkins
- Bad Science – Ben Goldacre
- The Immortal Life of Henrietta Lacks - Rebecca Skloot
- The Body: A Guide for Occupants - Bill Bryson

Watch

- Amoeba Sisters - Amoeba Sisters - YouTube
- Doctor Mike - Doctor Mike - YouTube
- The Institute of Human Anatomy - Institute of Human Anatomy - YouTube
- Surgeons at the edge of life – BBC Two BBC Two - Surgeons: At the Edge of Life

Listen

- The Rest is Science – Podcast by Hannah Fry and youtuber VSauce about various different lines of scientific enquiry such as 'can you die of boredom?'
- The Check up – Podcast by Doctor Mike interviewing specialists in the medical field
- This Podcast Will Kill You – Episodic podcast in which Bio grads discuss the fascinating epidemiology of rare communicable disease

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Cambridge Technicals Level 3 Sport and Physical Activity Extended Certificate Transition Work 2026

Welcome to Level 3 Sport. This transition work is designed to introduce you to the key concepts of sports coaching and activity leadership before you begin the course in September. It will help you develop essential knowledge and practical understanding that links directly to Unit 2: Sports Coaching and Activity Leadership. [258725-spo...ership (2) | PDF]

Task 1: Reflect on Your Sporting Experiences

Think about:

- A coach, teacher, captain, or leader who has had a positive impact on you.
- What qualities made them effective?
- How did they motivate you?
- How did they communicate instructions and feedback?
- What leadership style did they appear to use (autocratic, democratic or laissez-faire)?

Your Task

Produce a written reflection (approximately 500–750 words), presentation, mind map or poster explaining:

- The characteristics of an effective coach or leader.
- The responsibilities coaches have towards participants.
- How good coaching can improve performance, confidence, and enjoyment.
- Examples from your own sporting experiences.

Task 2: Investigate Coaching and Leadership

Watch the following videos:

Recommended Viewing

1. "What Makes a Great Coach?" (TEDx or similar)
2. UK Coaching YouTube Channel
3. England Football Learning YouTube Channel
4. Any National Governing Body (NGB) coaching video related to a sport you enjoy.

While watching, make notes on:

- Roles of a sports coach.
- Responsibilities of a coach.
- Leadership styles observed.
- Communication methods used.
- Ways the coach motivates performers.

Task 3: Coaching Analysis Challenge

Watch a sporting event, match, training session or coaching clip during the summer.

Consider:

- How does the coach communicate with players.
- What feedback is given.
- How does the coach adapt practices when performers struggle.
- How players respond to different coaching styles.
- How safety and organisation are managed.

Your Task

Write a short coaching analysis (300–500 words) covering:

1. The coach's strengths.
2. Areas that could be improved.
3. Examples of effective leadership.
4. How the session promoted development and participation.

Super-Curricular Extra Challenge

Imagine you have been asked to coach a group of Year 7 pupils, a skill in a sport of your choice.

Create a Simple Session Plan Including:

Section	Details
Aim	What skill will participants learn?
Warm-up	Activities to prepare participants
Main Activity 1	Skill practice
Main Activity 2	Progressive skill challenge
Cool-down	Recovery activities
Equipment	What will you need?
Safety Considerations	Possible risks and controls

Try to include at least one **SMART goal** for participants. This links directly to coaching session planning on the course.

Huish Episcopi Academy Sixth Form

Chemistry A-Level Transition Work 2026

Task 1

Watch the following YouTube videos on GCSE Chemistry only content to refresh (or learn if you were a combined scientist) these parts of the specification.

GCSE Chemistry - Alcohols

GCSE Chemistry - Carboxylic Acids (2026/27 exams)

GCSE Chemistry - Esters (2026/27 exams)

GCSE Chemistry - Tests for Anions - Carbonate, Sulfate and Halide Ions (2026/27 exams)

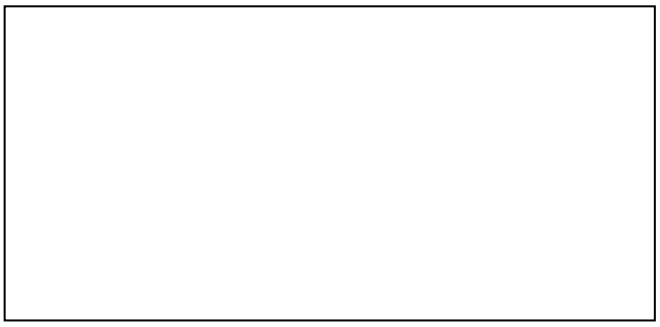
Task 2

1. Draw a diagram showing how a magnesium atom reacts with an oxygen atom to form magnesium ions and oxide ions. In your diagram try to clearly demonstrate the electron transfer process and show the charges on the ions formed.

2. Draw 'dot and cross' diagrams showing the bonding and non-bonding electrons in the following molecules:

   a) ammonia (NH_3)

b) oxygen (O_2)



3. What type of **bonding** would you expect the <u>chlorides</u> of sodium and magnesium to exhibit?

   _____

4. What type of **bonding** would you expect the <u>chloride</u> of phosphorous to exhibit?

   _____

Deducing formulae from ions and balancing equations

Common ions:			
Aluminium: Al^{3+}	Bromide: Br^-	Calcium: Ca^{2+}	Carbonate: CO_3^{2-}
Chloride: Cl^-	Iron (II): Fe^{2+}	Iron (III): Fe^{3+}	Nitrate: NO_3^-
Oxide: O^{2-}	Potassium: K^+	Sodium: Na^+	Sulfate: SO_4^{2-}

1. Use the charges on the ions in the table above to deduce the formulae of the following ionic compounds.

Sodium chloride		Iron (II) chloride	
Calcium bromide		Potassium oxide	
Sodium carbonate		Aluminium sulfate	
Aluminium oxide		Iron (III) nitrate	

2. Balance the symbol equations for the following reactions:

a. $K + H_2SO_4 \rightarrow K_2SO_4 + H_2$

b. $C_3H_8 + O_2 \rightarrow CO_2 + H_2O$

c. $Na_2O + HCl \rightarrow NaCl + H_2O$

d. $KOH + H_2SO_4 \rightarrow K_2SO_4 + H_2O$

Mathematical Requirements

1. A student performs a titration and gets the following results for the volume of acid titrated:

25.05 25.00 24.90 23.65

Calculate the mean volume of the acid _____cm^3

3. Round the following numbers to the decimal places given:

a. 0.0272 to 3 d.p _____

b. 11.325 to 2 d.p _____

c. 23.976 to 1 d.p _____

d. 0.9191 to 2 d.p _____

4. What is 649.352 to:

a. 2 significant figures _____

b. 3 significant figures _____

c. 4 significant figures _____

5. What is 0.003425625 to:

   a) 2 significant figures _____

   b) 3 significant figures _____

   c) 4 significant figures _____

6. Convert the following to ordinary numbers:

   a. 6.23×10^{3} _____

   b. 2.3×10^{-3} _____

   c. 1.2×10^{-6} _____

   d. 4.323×10^{5} _____

7. Rearrange the following equations to make "moles" the subject.

   Moles x Mr = mass _____

   Volume of a gas = moles x 24 _____

   concentration = $\frac{\text{moles}}{\text{volume}}$ _____

   PV = nRT (where n is the number of moles) _____

Section 5: Structure and bonding

1. For each of the statements, say if it is true or false and explain why.

a. Giant covalent structures tend to have low melting and boiling points.

True/false because

_____

b. Most intermolecular forces are strong and make it difficult to separate the molecules.

True/false because

_____

c. Most covalent substances do not conduct electricity.

True/false because

_____

d. Graphite conducts electricity.

True/false because

_____

e. Graphite is slippery because the intramolecular bonds are weak covalent bonds.

True/false because

_____

Task 3 Deliberate Practice

Deliberate practice aims to get you in the habit of LEARNING key information. This key information is the foundation of good understanding in any subject.

Effective learning involves writing the information down WITHOUT looking at the notes. An approach could be to learn all the ions first by flash cards or simply saying them over and over if you have a pretty good working memory. Once you think you know the information, write it down without looking. Then, check and correct.

For this technique to be effective you MUST then do this again the following day, week etc until the information is learnt. Once you are confident you are SECURE in the knowledge there is no need to keep writing it down. Done correctly, the task gets easier and less time consuming as you progress through the weeks and your confidence in chemistry increases. Done incorrectly, you get stressed and shut down. Take your time and tackle in chunks.

Tasks:

1. **Write out and learn the following equations.**

   $$\text{moles} = \frac{\text{mass (g)}}{\text{Mr}}$$

   $$\text{moles} = \text{volume } (dm^3) \times \text{concentration } (\text{mol } dm^{-3})$$

   $$\text{moles} \times 6.02 \times 10^{23} = \text{number of atoms, ions or molecules}$$

   $$\text{moles} \times 24 = \text{volume of gas } dm^3$$

   $$\%\text{ yield} = \frac{\text{actual yield}}{\text{theoretical yield}} \times 100$$

   $$\%\text{ atom economy} = \frac{\text{RFM of desired product}}{\text{RFM of all reactants}} \times 100$$

2. **Write out and learn the following formulae for common substances and ions**

sodium hydroxide	NaOH
ammonia	NH_3
sulfuric acid	H_2SO_4
nitric acid	HNO_3
hydrochloric acid	HCl
ethanoic acid	CH_3COOH

hydroxide ion	OH^-
ammonium ion	NH_4^+
sulfate ion	SO_4^{2-}
nitrate ion	NO_3^-
carbonate ion	CO_3^{2-}
silver ion	Ag^+
zinc ion	Zn^{2+}

Super-Curricular Extra Challenge

Search for “Catalyst magazine” (on the Stem Learning website) or use this link | Resource Collection It contains hundreds of articles in its past editions section. Choose one that sparks your interest and download the article. When you have read it produce a summary which includes:

- the key scientific points
- what you found most interesting
- what further questions the article has made you consider
- a reference for the article

Transition Assignment: How Walter Bagehot linked Economics with the Liberal philosophy of Government

Objective: To show how critical Walter Bagehot was in the evolution of liberalism from a doctrine of limited government, which has now led to its modern, multifaceted state, and to assess its resilience in the face of contemporary global challenges.

To understand Walter Bagehot's role in the history of Liberalism, it is best to view him as the "bridge" between the abstract, theoretical classical economics of the early 19th century and the complex, industrial, and globalized reality of the late Victorian era.

Bagehot, who served as the first editor-in-chief of *The Economist* from 1861 to 1877, was instrumental in transforming Liberalism from a philosophical "system" into a practical guide for governing a modern state.

First of all, find out about Bagehot's connection to Langport, in relation to the attached sheet.

Secondly, read the Economist 'brief' on Liberalism, in order to become familiar with the main contributors to the development of these ideas.

Thirdly, add your own research notes to deepen your understanding of the issues.

Fourthly, read these guidance notes and **answer two** of the **Key Questions** included.

Fifthly, be ready to explain these two questions in class, in our first few lessons in September.

1. The Relationship Between Classical Economics & Liberalism

Classical economics (the tradition of Adam Smith and David Ricardo) and Liberalism were deeply intertwined in the 19th century:

The Philosophical Synergy: Classical economics argued for "natural liberty"—the idea that if individuals were left free to pursue their own interests in a market, prosperity would follow.

Liberalism provided the political framework for this, advocating for the protection of property rights, the rule of law, and the removal of feudal barriers (like the Corn Laws).

The "Manchester School" Connection: The Economist was founded in 1843 to campaign against the Corn Laws (tariffs on imported grain). It became the primary organ for "Manchester School" economics, which championed free trade as a means to achieve both global peace and domestic efficiency.

2. Bagehot's Role: Adapting Classical Ideas

Bagehot did not just repeat the doctrines of Smith or Ricardo; he **institutionalized** them. He recognized that classical economic theories (which assumed perfectly mobile capital and labour) were failing to account for the realities of a modern, financialized economy.

Financial Realism: In his seminal work *Lombard Street* (1873), Bagehot moved beyond pure "laissez-faire" theory. He observed that the banking system was prone to panic. He famously argued for **"Bagehot's Dictum"**: in a financial crisis, central banks should lend freely to solvent firms at a high interest rate, but against good collateral. This was a sophisticated liberal compromise—it preserved the market while acknowledging that the state (via the Bank of England) had to act as the **"lender of last resort."** This relationship persists today and underpins the entire banking system in the UK.

Institutional Context: He argued that economic laws do not operate in a vacuum; they depend on the "character" and "traditions" of a people. By emphasizing the role of institutions over abstract models, he helped save classical economics from being dismissed as irrelevant by more radical critics of his day.

3. Constitutional Breakthroughs: The "Efficient" vs. The "Dignified"

Bagehot's most famous contribution to political science, ***The English Constitution*** **(1867)**, was a masterclass in applying a "liberal" lens to the machinery of government. He demystified the British system, categorizing government into two parts:

The Dignified Parts: These are the aspects that evoke public awe and loyalty—the Monarchy and the House of Lords. He argued these were essential because they kept the "ignorant" masses emotionally attached to the state, preventing them from turning toward radical, disruptive change.

The Efficient Parts: This is the actual engine of government: the Cabinet and the House of Commons. Bagehot's genius was identifying the **"fusion of powers."** Unlike the American system, which enforces a rigid separation of powers, Bagehot argued that the British system was "efficient" because the executive (the Cabinet) was directly drawn from and accountable to the legislature (the Commons).

Why this matters:

Bagehot represents a **"pragmatic liberalism."** He was a staunch believer in individual liberty and markets, but he was not a "purist." He understood that:

1. **Markets need institutions** to survive crises (the *Lombard Street* lesson).
2. **Democracy needs stability**—even if that means using "dignified" illusions to maintain social order (the *English Constitution* lesson).

"Bagehot argued that the 'dignified' parts of the constitution were necessary to 'deceive' the public into obeying the law. Is this an inherently 'liberal' view of the people, or is it a betrayal of the liberal belief in rational, self-governing citizens?"

The Liberalism Toolkit

Core Theme: Liberalism is not a static list of beliefs; it is a **reactive political project** that evolves to solve systemic crises.

I. **The Evolution of Liberty**

Era	Key Focus	Definition of Liberty
Classical	Natural Rights	Negative Liberty: freedom from state interference
Modern	Social Justice	Positive Liberty: The capacity to act and participate in society
Contemporary	Resilience	Protecting liberal institutions against populism/illiberalism

II. Essential Thinkers & Concepts

John Locke (The Foundation): The state exists to protect "life, liberty, and property." Law should enlarge freedom, not restrict it.

J.S. Mill (The Individual): *The Harm Principle*—The only time the state can rightfully force you to do something is to prevent you from harming others.

John Rawls (The Modern Framework): *Justice as Fairness*—Society should be structured so that the most vulnerable are protected. Inequalities are only acceptable if they benefit the least advantaged.

III. The "Bagehot Bridge": Pragmatic Liberalism

Walter Bagehot (Editor of *The Economist*, 1861–1877) proved that Liberalism requires strong institutions to survive.

1. Economic Realism: "Bagehot's Dictum"

The Concept: In a financial panic, the central bank must act as the "lender of last resort."

The Liberal Lesson: Laissez-faire is not enough. To save the market from itself, the state must step in temporarily to restore confidence, then step back.

2. Constitutional Realism: The Two Parts of Government

The Dignified Parts (Monarchy/Lords): These provide stability and capture the public's imagination/loyalty. They prevent the masses from turning toward radical instability.

The Efficient Parts (Cabinet/Commons): The "engine room" where real work happens. Bagehot argued that the UK's "fusion of powers" (executive inside the legislature) made it more efficient than the American system.

IV. Key Analytical Questions

The Crisis Test: Does liberalism survive by abandoning its core principles, or by evolving them?

The Surveillance Trade-off: Can a liberal society justify infringing on individual privacy to ensure collective security or economic stability?

The "Dignified" Paradox: Is it "liberal" to use state pageantry to keep the public content, or is that a manipulation of the citizen's rational mind?

1. The Challenge of "Illiberal" Democracy

Liberalism relies on independent institutions (the judiciary, a free press, and neutral civil service) to moderate the "will of the people." Modern populism often bypasses these.

The Issue: The trend of elected leaders using democratic mandates to dismantle the very checks and balances (like independent courts or electoral oversight) that protect minority rights.

Connection to Liberalism: This challenges the "Harm Principle"—if a majority "wills" an action that harms a minority, is that still democracy?

Key Question: "Can a system be called 'democratic' if it lacks liberal protections for dissent and minority rights?"

2. The "New Economic Nationalism"

Bagehot's era championed free trade, but 2026 sees a global shift toward protectionism, industrial subsidies, and "reshoring" supply chains.

The Issue: Governments (including the U.S. and EU) are moving away from laissez-faire toward state-led industrial strategies, often justified by national security or the need to secure critical minerals.

Connection to Liberalism: Does this interventionist model betray the liberal belief in the efficiency of markets, or is it a necessary evolution to ensure national survival in a volatile global economy?

Key Question: "Is state-managed industrial policy a departure from liberalism, or is it merely an adaptation to a world of geopolitical rivalry?"

3. Artificial Intelligence and the "Information Ecosystem"

Liberalism assumes a "rational citizen" who can form opinions based on truth. AI is complicating that assumption.

The Issue: AI-driven disinformation, deepfakes, and hyper-targeted algorithms that create "echo chambers."

Connection to Liberalism: If the "marketplace of ideas" is flooded with AI-generated synthetic content, can the truth actually compete? How does this impact the ability of citizens to self-govern?

Key Question: "Does the proliferation of AI-generated content make the liberal ideal of an 'informed citizenry' impossible?"

4. Climate Change and Global Governance

Liberal internationalism was designed for a world of sovereign states, but climate change ignores borders.

The Issue: The conflict between state sovereignty (a core liberal principle) and the need for a global, coordinated response to environmental crises.

Connection to Liberalism: Should the state prioritize its own economic growth (and the prosperity of its citizens), or surrender sovereignty to international institutions that enforce global climate targets?

Key Question: "Does climate change force a shift from 'Classical' negative liberty (freedom from interference) to a 'Modern' positive responsibility for global survival?"

5. The "Efficient vs. Dignified" Modern State

Bagehot's distinction between the "efficient" (working) and "dignified" (symbolic) parts of the state remains relevant.

The Issue: In 2026, social media has created new "dignified" spheres—influencers, viral movements, and algorithmic celebrities—that often exert more influence over public sentiment than parliaments or traditional politicians.

Connection to Liberalism: Have these new digital structures replaced the old, stable "dignified" institutions Bagehot described? If so, are they fostering stability or creating chaotic "disruption"?

Key Question: "In the age of social media, are we more or less governed by 'dignified' illusions than we were in the Victorian era?"

"The 2026 Diagnostic"

You must pick **two** of these 5 questions on **key issues** and write a "Bagehot-style" editorial.

The Task: Write 500 words for each one analysing the issue using the terminology presented here:

Is this a failure of **institutions**?

Does it require a temporary state intervention to save the market/system (**Bagehot's Dictum**)?

Does it threaten the **"dignified"** stability of the state?

This must be precise, with evidence and reach a Judgement which clearly supports an outcome, which you must be able to explain and argue in favour of in our class discussions

This should take around 5 hours to complete

It's a challenging start to this new course which demonstrates the difference between GCSE and A Level studies

Do your best,

Mr Madden BSc (Econ)

My email is PhilMadden@hea.ac.uk

Huish Episcopi Academy Sixth Form

ECONOMICS A-Level Transition Work 2026

Task 1 Read the full document and identify these key issues:

Key Question: "Can a system be called 'democratic' if it lacks liberal protections for dissent and minority rights?"

Key Question: "Is state-managed industrial policy a departure from liberalism, or is it merely an adaptation to a world of geopolitical rivalry?"

Key Question: "Does the proliferation of AI-generated content make the liberal ideal of an 'informed citizenry' impossible?"

Key Question: "Does climate change force a shift from 'Classical' negative liberty (freedom from interference) to a 'Modern' positive responsibility for global survival?"

Key Question: "In the age of social media, are we more or less governed by 'dignified' illusions than we were in the Victorian era?"

Task 2

You must pick **two** of these 5 questions on **key issues** and write a "Bagehot-style" editorial.

The Task: Write 500 words for each one analysing the issue using the terminology presented here:

Is this a failure of **institutions**?

Does it require a temporary state intervention to save the market/system (**Bagehot's Dictum**)?

Does it threaten the **"dignified"** stability of the state?

This must be precise, with evidence and reach a Judgement which clearly supports an outcome, which you must be able to explain and argue in favour of in our class discussions

Super-Curricular Extra Challenge

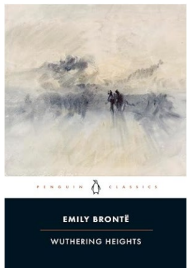
Now that you have read about Economics and Liberalism in what ways has it influenced your thinking about the choices which both you and the wider society you inhabit should be making to secure a better future?
(A well-constructed paragraph will be sufficient to answer this question.)

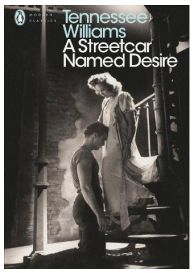
Huish Episcopi Academy Sixth Form

English Literature A-Level Transition Work 2026

Task 1 (AO1 focus)

Over the summer, buy and read *Wuthering Heights* by Emily Brontë. This is the first text we will be studying on the course as part of your Prose exam paper. Try to purchase the Penguin Classics edition, ISBN number: 978-0-141-43955-6 so that pages match in class! Please also buy Tennessee Williams' play 'A Streetcar Named Desire' (Penguin Modern Classics, ISBN-10: 0141190272), though there is no need to read this beforehand.





Please contact Ms Wellfair-Priest if you need financial support accessing these.

Task 2 (AO5 focus)

Find a review (ideally a Victorian one) of *Wuthering Heights* online and consider your own critical standpoint. Do you agree with the reviewer's comments? Why, or why not? Write down your own response, summarising the reviewer's opinion and why they hold such views, followed by a justification of why you agree or disagree with them. Try to use specific moments from the text to support your argument.

Task 3 (AO2 focus)

Write an analysis of the poem 'To My Nine-Year-Old-Self' by Helen Dunmore (available online) which features in your 'Poems of the Decade' anthology. Answer the question: How does the speaker present ideas about childhood in the poem 'To My Nine-Year-Old Self'? Write 400-500 words.

You could think about:

· The poet's big ideas
· The speaker's voice, thoughts and feelings
· Poetic and literary devices used and their effects

Super-Curricular Extra Challenge

Read, read, read! Reading a range of literary texts will help to build the foundation for your own critical voice. For your NEA, you will need to select a literary text of your choice to analyse, and so the more you read now, the easier your selection will be. Keep a log of the books you read over the summer and write a short review (100 words maximum) for each. Please bring these to your first lesson in September.

Huish Episcopi Academy Sixth Form

FrenchTransition Work 2026

Task 1

Grammar A bit of revision of the present, past and future tense:

https://www.languagesonline.org.uk/French/Grammar/Present_Tense/index.htm#gsc.tab=0

https://www.languagesonline.org.uk/French/Grammar/Perfect_Tense/index.htm#gsc.tab=0

https://www.languagesonline.org.uk/French/Grammar/Future/index.htm#gsc.tab=0

Task 2

Vocabulary Learn this vocabulary list to help you prepare for the first unit of study we will begin in September. You may need to create a (free) Quizlet account to access the list:

https://quizlet.com/gb/1072875345/a-level-french-1a-changing-family-structures-flash-cards/

Task 3

Culture

Look at this quick video about current French songs. Choose one that you like the most and research the singer, lyrics and meaning. Prepare a 2-minute presentation on it stating key facts and vocabulary from the artist and the song.

https://www.youtube.com/watch?v=T5wihKHJsS4

Super-Curricular Extra Challenge

Let's take a look at food and geography of France. Click on the link and fill in the worksheet. There is a link in the worksheet to all the answers. Bring the worksheet in the first lesson.

Gastronomie-WORKSHEET.docx

Huish Episcopi Academy Sixth Form

Geography A-Level Transition Work 2026

Task 1

A Level Geography is often divided into the two main spheres of geography: physical geography and human geography. Your tasks will be based around these.

Before you can complete Task 2 and 3, you will need to conduct some research. Use the following links (and any you find yourself) to do this:

https://www.rgs.org/schools/resources-for-schools/jurassic-coast

https://www.internetgeography.net/geotopics/coasts/dorset-coast/

https://education.nationalgeographic.org/resource/effects-economic-globalization/

https://geographyrevisionalevel.weebly.com/6c-opposition-to-globalisation.html

Task 2

You are going to create a short investigation into the Jurassic Coast; you can present your findings in a simple report – typed or handwritten.

Introduction: Map and location of Jurassic Coast including background which should explain what makes this coastline unique.

Erosional landforms: Explanation of two landforms (e.g. Lulworth Cove and Durdle Door) created by erosion on the Jurassic Coast. This should explain the natural processes that created them and the influence of geology on their formation – include sketches or annotated photographs.

Areas of coastal recession: Where are the cliffs eroding at a relatively rapid rate with an explanation why (linked to geology). You could look at Lyme Regis to see the impact of weathering on cliff recession.

Depositional landforms: What depositional landforms are found along the Jurassic coast and what formed them? The best example is Chesil Beach – include diagrams, maps and photos.

Task 3

You are going to research globalisation and its impacts on people and the environment. Present your work as a short report, poster, or presentation – typed or handwritten.

Introduction: Explain what globalisation means and how countries are connected through trade, travel, and technology.

Impacts on people: Describe how globalisation affects people, including the benefits (e.g. jobs, cheaper goods, better living standards) and problems (e.g. low wages, inequality, loss of culture).

Impacts on the environment: Explain how globalisation affects the environment, including the negative impacts (e.g. pollution, deforestation, climate change) and positive impacts (e.g. global agreements, green technology).

Example: Include one example in each section (a country or company) to support your ideas.

Conclusion: Decide whether globalisation has more positive or negative impacts overall and explain why.

Super-Curricular Extra Challenge

Read: 'Prisoners of Geography' by Tim Marshall - available in most libraries. Write a brief summary.

Watch: Stacey Dooley Investigates Fashions Dirty Secrets (BBC) https://vk.com/video-47459147_456239325 Write a short summary of the impact of the fast fashion industry using examples.

Listen: A conversation with Tim Marshall https://soundcloud.com/rgsibg/a-conversation-with-tim-marshall-author-of-the-seminal-book-prisoners-of-geography Listen to this podcast and write a short one paragraph summary.

(Bring all of these to the first lesson back.)

Huish Episcopi Academy Sixth Form

Further Maths A-Level Transition Work 2026

Task 1

Make sure you have completed all of your A-level Maths transition work up to and including task 3.

Task 2 – Independent Learning

Research one of the three topics below

- What are Polar Coordinates?
- Hyperbolas and parabolas
- Hyperbolic functions

Task 3

Produce a teaching aid or power point presentation on what you have learned in task 2.
A teaching aid could be in the form of a revision mat, knowledge organizer, poster or produce a podcast.
A presentation should consist of a few slides, outlining what you have discovered.
Or you could try and produce a lesson to teach your peers what you have learnt.

Super-Curricular Extra Challenge: Try reading, listening or watching one or more of the following.

Reading: (Many other great books are available)

What is Mathematics? – by Richard Courant, Herbert Robbins and Ian Stewart
Fermat's Last Theorem – by Simon Singh
The Mathematics of Games and Gambling – by Edward Packel

Watching:

Any of the videos on Numberphile here is the link Numberphile

Listening:

Breaking Math Podcast - Breaking Math Podcast - Podcast - Apple Podcasts

Other Puzzles and articles:

This website has loads of links to interesting articles, puzzles and more More maths for A level Mathematics students - AMSP

Huish Episcopi Academy Sixth Form

Textiles A-Level Transition Work 2026

Task 1

Fashion through the ages.

Choose any time period over 50 years and document how Fashion and Textiles has changed over this time. (e.g. 1920 – 1960)

Requirements

All of the work you produce must fit into an A4 or A5 sketchbook. You can choose to start at any time period, but you must follow the next 50 years.

Success criteria

-Includea timeline of key fashion styles and designers (this might also include artists and design movements). Use as much visual information as you can, print clear images that show the detail in a product (remember textile is a visual subject). Also include written information on your chosen decade and show links to key designers from that time period.

Include –

- Famous fashion designers and iconic outfits
- Icons of the time
- Music
- Lifestyle
- Historical events could have possibly led to changes in what people wore or how they dressed.

Task 2

Analyse at least one product or outfit from each of your chosen decades. (This doesn't have to be a fashion product)

Task 3

Design ideas

Be creative, design your own outfits inspired by the time periods, or create fabric or techniques samples that are inspired by the designers you have researched.

Useful websites

www.textileartist.org

www.vam.ac.uk

www.vogue.co.uk

www.Fashiontextilemuseum.org

www.acearts.co.uk

Super-Curricular Extra Challenge

Include within your research visits to art exhibitions or fashion museums, photos and collected images including postcards. (if possible although lots now have online exhibitions too).

Expectations for September

Sketchbook and materials

Your sketchbooks are a fundamental element of the course; they are a place where you record both visual and written ideas, intentions, analysis, experiments, and techniques.
Quality sketchbooks are key to the success of your development, and it is important to take pride in the presentation of this work.

You will need to purchase at least 2 x A4 sketchbooks

It is expected that all students will have drawing pencils, pens, watercolours/graphic markers and a set of brushes and a basic sewing kit including fabric scissors, small embroidery scissors, threads, and variety of embellishment and scrap fabrics (all can be purchased at Yandle's, Hobby Craft, or online) A sewing machine is not essential.

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The best in everyone™
Part of United Learning

Dear Student,

Please use this letterhead letter as evidence of you being a student at Huish Episcopi Academy 2026/2028 in order that you are able to download and use Inventor for your coursework at home.

As discussed, using this software in your NEA will ensure you are able to produce high level modelling in the design and development section of your major project.

If there are any problems, please speak to your Product Design teacher.

Kind regards

Mr. J Walker
Head of Design & Technology

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Huish Episcopi Academy Sixth Form

A-Level English Language Transition Work 2026

Task 1: 'Song to Story'

Take your favourite song and turn it into a short story (max 500 words). Write a commentary analysing how you have taken inspiration from the song to turn it into a different format e.g. tone, language devices, structure, characterisation, setting, etc.

Task 2: Collect examples of 'Language'

In preparation to analyse a variety of different language uses, create a portfolio of different examples of language being used. This could include:

· Extracts from cookbooks
· Songs
· Text messages (including the use of emoticons, memes and GIFs)
· Advertising
· Poetry, prose & fiction
· Non-fiction (articles, blogs, biographies, fact files, etc)
· Conversations around the dinner table

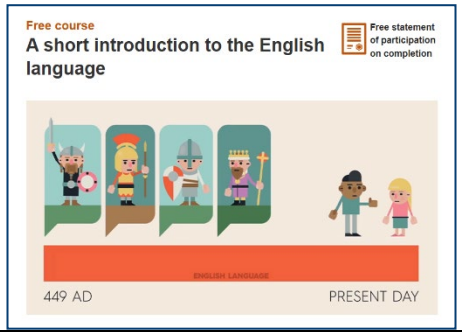
Task 3: The History of Language

Create a timeline to show how the English Language has changed since its 'creation' in the 5th century through to the language of 2026 (think 'tuff'). Include what has caused/influenced these changes.

Super-Curriculum: Open University's Short Course on English Language

A short introduction to the English language | OpenLearn - Open University

This free course, *A short introduction to the English language*, will look at the role language plays in our lives, with a particular focus on the English language. It will examine the history and the future of the language, from the Anglo-Saxons and Shakespeare to social media communication and stand-up comedy. It aims to give a media-rich introduction to a selection of the key issues which form the basis of the Open University's undergraduate curriculum in English language studies.



Huish Episcopi Academy Sixth Form

Computer Science A Level Transition Work 2026

Task 1

Design and implement a program in Python that:

- Takes a list of numbers as input
- Outputs:
  - The largest and smallest values
  - The average
  - A sorted version of the list (without using built-in sort functions)

Extension:

- Add a feature to search for a specific number (linear search first, then binary search if sorted)
- Compare efficiency of both methods

Task 2

Create a text-based game (Python recommended), such as:

- A quiz game
- Adventure game (decision-based branching story)
- Number guessing game with levels

Minimum Requirements:

- Use functions to structure your code
- Include selection (if statements) and iteration (loops)
- Store data in lists or dictionaries

Extension:

- Add a scoring system
- Save high scores to a file
- Implement error handling for invalid input

Task 3

Convert the following into binary:

- 25
- 103
- 7

Convert these binary numbers into denary:

- 101101
- 111000

Explain:

- What is a bit, nibble, and byte?
- Why computers use binary

Logic Challenge:

- Create truth tables for AND, OR, NOT, XOR
- Draw a logic gate diagram for:
- (A AND B) OR NOT C

Super-Curricular Extra Challenge

Build a small application solving a real problem (e.g. revision planner, expense tracker)

Include:

- Analysis of the problem
- Design (flowcharts/pseudocode)
- Implementation
- Testing

Huish Episcopi Academy Sixth Form

Art A-Level Transition Work 2026

In Art and Design we begin by studying the work of Artists, Photographers, Designers and craftsmen along with primary research before developing our own ideas.

Develop

Develop your knowledge of the Art world by **visiting** an Art gallery, Museum or Artists workshop. Sketch and annotate (make notes) what you saw and were interested in.
Watch the video of David Hockney talking about what inspires him. A Bigger Picture, BBC I player
https://share.google/WJtGIdKy1pf1t2TK4

Task 2

Refine

Use a range of materials to **produce** a visual diary from your summer break. This can be drawing, painting, found objects, photographs presented in a book or other appropriate way.
Use these websites for ideas.
Diary Coursework Guide | Tate
Visual Journal Ideas & Getting Started Art Project

Task 3

Record

Take a series of photographs, at least 12 of a place that inspires you. This could be a landscape, town or city, or your garden, garage, shed or anywhere where you feel inspired.
Present these in a suitable way.

Super-Curricular Extra Challenge

Present

Produce a response to things that you have seen and discovered in any appropriate media or technique.
https://pin.it/1y8hZDga7

Huish Episcopi Academy Sixth Form

CRIMINOLOGY LEVEL 3Transition Work 2026

Task 1 Key Vocabulary:- Look up and define (in sentences you understand) the following terms: Norms / Values / Crime / Deviance / Law / Social Control / Culture / Labelling / Criminals Subcultures / The Criminal Justice System / Moral Panics / The Crime Survey of England and Wales

The following used websites might help:

https://www.tutor2u.net/sociology

https://revisesociology.com/

Task 2 As a criminology student you will also be expected to keep up to date with the news and current events
research a recent crime that interests you! (use the search term "BBC NEWS CRIME" to see stories currently in the news)

- What happened?
- Where?
- When?
- Do you consider the victim a "typical" victim of this type of crime? Why / why not?
- Do you consider the perpetrator typical of this type of crime? Why / why not?
- How was the crime committed

Most importantly...why is this of interest? Is it about the type of victim, the cause of the criminal behaviour, the effect on society, the media representation?

You could create this as a collage, a mindmap, a presentation on slides or similar.

Task 3

As part of your controlled assessment you will be asked to create a campaign related to an aspect of crime.

A) Research ONE campaign that aims to do one of the following: reduce a type of crime, support victims of a type of crime, change a law to make something criminal, change a law to stop something being criminal

- What is the aim of the campaign?
- Who is the target audience?
- What strategies have they used for their campaign?

- Has it been successful (how do you know?)

B) You have been asked to create a poster OR social media page promoting the "anti knife crime" message. Your **target audience** is young people who might carry a knife. Your campaign must include:
- A catchy slogan (using the rhetorical devices you learned about in English Language)
- A memorable logo

Super-Curricular Extra Challenge

Develop you understanding of the subject by listening to one of these fantastic podcasts which we have checked to ensure they are: A) Really interesting B) Provide reliable information relevant to your course

If It Bleeds, It Leads - Podcast (A Professor of Criminology and writer of "Silent Witness" discuss true crimes and the media representation of crime)

BBC Radio 4 - It's a Fair Cop - Available now - An ex police officer now comedian invites you to consider how you would respond in real life crime situations...and then laws and policies the police actually work to

Of the many recommended books -
Shallow Graves: My life as a Forensic Scientist on Britain's Biggest Cases Ray Fysh - Written as a

thriller Ray Fysh discusses cases he worked on as one of the world's first dedicated forensic

scientists.

A Few Kind Words and a Loaded Gun: The Autobiography of a Career Criminal Noel 'Razor' Smith

Now a friend of a Criminologist this book details many of the factors that contributed to Noel's life as a violent criminal – this book is an excellent introduction to theories of crime we look at in unit 2 of the course

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GERMAN A-Level Transition Work 2026

Task 1

Grammar Complete the two grammar worksheets handed out and sent via email (these are on the present tense and perfect past tense). First, use the grey "Grammatik" boxes to revise the rules of forming these tenses and make notes / flashcards and bring these into your first lesson. Once you've learned this off by heart, do the practice tasks.

Task 2

Vocabulary Learn this vocabulary list to help you prepare for the first unit of study we will begin in September. You may need to create a (free) Quizlet account to access the list:

Transition Vocabulary - Family Extension beyond GCSE Flashcards | Quizlet

Task 3

Culture Listen to a "Popcast" Podcast: Popcast - Current music from Germany - Goethe-Institut. Write a short paragraph giving your opinion on German on 3 songs in the podcast, including PROFS sophisticated opinion language and this vocabulary:

kitschig – cheesy / es klingt wie… - it sounds like… / die Melodie – the melody / eintönig – monotonous / der Takt – the beat / die Liedtexte – the lyrics

Super-Curricular Extra Challenge

Choose at least one article on something from the news from this section of the Deutsche Welle website which interests you: Top-Thema. Read the article and look up any new vocabulary you need to learn. Make a glossary list of this vocabulary in English and German. Then, write a summary in English of the article – bring this to first lesson and be prepared to share what you read, and your list of new vocabulary. Exceptional work worthy of contact home would be to complete 3 of these summaries and vocab lists!

Other ideas for exploring German and strengthening your knowledge over the summer:

Planet Schule is a fantastic website aimed at learners of German, containing fact files, videos and articles about a range of topics.
BBC German Cool has lots of listening practice and practical vocabulary for general conversation

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HISTORY A-Level Transition Work 2026

Task 1: Preparation for Unit 1

Research Churchill's early life and political career up to 1930, including his role in government.

Your summary must be presented as a single page of information in any format of your choosing (annotated timeline, mind map, written summary etc).

Your work must be your own, using your own words.

Task 2: Preparation for Unit 2

According to the historian, A.J.P Taylor, 'It was no more a mistake for the German people to end up with Hitler than it is an accident when a river flows into the sea.' Taylor was a champion of the Sonderweg interpretation of German history which is the idea that German culture and society developed in a 'special way' which made extremism inevitable.

For us to understand the German path to Weimar democracy we need to understand what sort of political system the Second Reich operated. Activity: Carry out research into the political structure of the Second Reich, 1871-1918. How democratic was imperial Germany? Ensuring that you cover the following:

- **The constitution**
- **The role of the Kaiser**
- **The government (chancellor and other ministers)**
- **Reichstag**
- **Reichsrat**
- **Political parties**

· The electorate

You can present your findings in any single page format of your choosing (diagram, mind-map, report, table of information). You must use your own words throughout your summary.

Task 3: Preparation for Unit 3

Watch 'Ch4 Tony Robinson Gods and Monsters 4 of 5 Witches' and make notes on Early Modern beliefs and practices in relation to magic and witchcraft.

Use your notes to create a single page summary and present your work in any format of your choosing (diagram, mind-map, report, table of information).

Super-Curricular Extra Challenge

Watch the following films and create a list of significant individuals.

Name
Role
Significance

Unit 1: *Darkest Hour*
Unit 2: *The Rise of Evil*
Unit 3: *The Crucible*

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Health and Social Care AAQ Transition Work 2026

Task 1

Revision to get a 'Head Start'.

The first unit you will be studying is Human Lifespan Development.

Create an information page showing they features of development within each life stage: Birth and infancy, Early childhood, Adolescence, Early adulthood, Middle adulthood, Later adulthood.

Include age ranges, descriptions, pictures.

Try to approach it from a physical, intellectual, emotional and social standpoint.

Keep it to one page and make it as bright and beautiful as possible.

https://www.wensumtrust.org.uk/_site/data/files/documents/hellesdon/sixthform/summerwork/42A57ED0BC1DF57F38CB41D378B8C301.pdf

Task 2

Key people related to development

Produce a table to summarise the work and conclusions of the following, it is also essential to place the findings/theories in the historical context, a timeline would help here.

Be as original as you can with the presentation!

Jean Piaget- cognitive development.

Noam Chomsky- language acquisition.

John Bowlby – attachment.

Arnold Gesell – biological maturation.

Albert Bandura – social learning.

Holmes and Rahe – social readjustment

Cumming and Henry – social disengagement.

Robert Havighurst – activity.

Task 3

Referencing your work

This referencing requirement will be needed for all coursework therefore this is a great opportunity to practice this key skill.

For all the information you use in your timeline - it is important to reference internally and add a bibliography at the end, using the Vancouver or Harvard systems correctly.

You will need to not only put it at the end of your presentation, but also (please!) put in a reference to it next to where you used it in your write up itself.

For example: "Hartland (2015) suggests that students who read and put into practise his guidance have an increased probability of succeeding in their studies. Similar authorities (Ghandi (1939), CS Lewis (1928), and Socrates (undated) back this up." Put references as footnotes or in a bibliography.

Follow the guidance below or see

http://www.open.ac.uk/libraryservices/documents/Harvard_citation_hlp.pdf

Book: Author, Initials., Year. Title of book. Edition (for after the 1st edition). Place of Publication (town or city, not a country), Publisher. Page numbers

Hartland, G.A., 2015. Writing up Practicals (3rd edition). Frimley, Hogs Back Press. Pages 2-4

Journal / Magazine: Author, Initials., Year. "Title of article", Full title of journal, volume number (issue / part number), page numbers
Hartland, G.A., 2015. "How to write", A level Practical Guidance, 3.2, 1, pages 34-62
Website: Authorship or source, Year. Title of web page, **type of media**. Available at: web address or URL. (Access date)
Hartland, G.A., 2015. "Why writing practicals can be tricky", **web page**. Available at http://www.GH-Biology-Teaching.org/whywritingpracticalscanbetricky.htm (Accessed 30-02-2016)
Hartland, G.A., 2015. "Interview with a teacher about practicals", **video**. Available at http://www.youtube.com/abshgie.htm. (Accessed 30-02-2016)
Journal from the web: you'll need to reference the journal information first, and then say where you found it
Hartland, G.A., 2015. "How to write", A level Practical Guidance, 3.2, 1, online, from http://www.GH-Biology-Teaching,org/howtowrite.htm

Super-Curricular Extra Challenge

Sector Documentaries

Watch real-life documentaries such as Channel 4's *Born to be Different*. Create a short review detailing the daily challenges faced by individuals with disabilities and how care services support them.

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Maths A-Level Transition Work 2026

Task 1

You have been given a transition booklet, produced by Sparx, that aims to revise and consolidate the essential skills needed for A-level mathematics that you were taught at GCSE. If you missed the transition day; A copy of the booklet and answers can be found here Sparx Maths Curriculum - Transition Booklets , please make sure you do the GCSE to A-Level one!

Initially you should work through the "introduce" parts of each section of the booklet that you have been given and mark it using the mark scheme you have also been given.

There are Sparx codes at the front of the booklet to help you with any topics you are unsure of. In addition, these websites can also help you with the topic areas covered

Hegarty Videos on you tube

https://www.youtube.com/playlist?list=PLxHVbxhSvleR5tntP2FxYBJCoY5-pD_Z8

TL Maths videos

https://sites.google.com/view/tlmaths/home/gcse-to-a-level-maths-bridging-the-gap

Mathedup Videos

https://www.mathedup.co.uk/a-level-maths-takeaway/

You can also use the videos on Maths Genie under GCSE revision from grade 5 onwards

https://www.mathsgenie.co.uk/gcse.html

Task 2

To strengthen your knowledge of the topics, **now work through the "strengthen" part** of each section of the booklet that you have been given and mark it using the mark scheme. Again, use the websites above if you are unsure how to complete anything.

Task 3

To ensure you have a solid understanding of the key concepts needed to start studying A-level mathematics, you should **now work through the "deepen" part** of each section of the booklet and mark your answers. You should make a note of anything you are unsure of and revise that topic fully. If you don't get the correct answer, you should then re-attempt the questions after revising the topic – **it is essential that you are able to understand the process in deriving the correct solution to these types of questions**.

Super-Curricular Extra Challenge: Try reading, listening or watching one or more of the following.

Reading: (Many other great books are available)

The Joy of X: A guided tour of mathematics from one to infinity – by Steven Strogatz

Mathematical Puzzles: A Connoisseurs Collection – by Peter Winkler

The Great Mathematical Problems – Ian Stewart

Watching:

Any of the videos on Numberphile here is the link Numberphile

Listening:

Breaking Math Podcast - Breaking Math Podcast - Podcast - Apple Podcasts

Other Puzzles and articles:

This website has loads of links to interesting articles, puzzles and more More maths for A level Mathematics students - AMSP

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Photography A-Level Transition Work 2026

In Art and Design, Photography we begin by studying the work of Photographers, Artists, Designers and craftsmen along with primary research before developing our own ideas.

Task 1

Develop

Develop your knowledge of the Photography world by visiting an Art gallery, Museum or Artists studio.

Sketch and annotate (make notes) what you saw and were interested in.

Watch the video of David Hockney talking about what inspires him. A Bigger Picture, BBC I player https://share.google/WJtGIdKy1pf1t2TK4

Task 2

Refine

Take a photograph every day to produce a visual diary from your summer break. This can be presented in a book or other appropriate way.

Diary Coursework Guide | Tate

Visual Journal Ideas & Getting Started Art Project

https://youtu.be/lVJmW_425Fk?si=cAyKqLuhu3pfxnw3

Task 3

Record

Take a series of photographs, at least 12 of a place that inspires you. This could be a landscape, town or city, or your garden, garage, shed or anywhere where you feel inspired.

Present these in a suitable way.

Super-Curricular Extra Challenge

Present

Produce a response to things that you have seen and discovered in any appropriate media or technique.

There are many ways to do this, here are a few.

https://pin.it/1y8hZDga7

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Physics A-Level Transition Work 2026

Task 1

Watch the following YouTube videos on GCSE Biology only content to refresh (or learn if you were a combined scientist) these parts of the specification.

- Resolving forces and vector diagrams
- Momentum part 1
- Momentum part 2

Task 2

Complete the OCR GCSE→A level Physics transition work booklet

Task 3

Plan an investigation to accurately measure the acceleration due to freefall (g)

You will be given a bean bag, tape measure and stop-clock.

Success Criteria

- Write in a numbered list
- Identify independent, dependent and control variables
- Use imperative verbs e.g. measure
- Provide an equipment list
- Design a results table
- Include a brief risk assessment

Super-Curricular Extra Challenge

Read

A brief history of time – Stephen Hawking
Human Universe – Brian Cox

Watch

YouTube channel Veritasium
Physicist Brian Cox explains quantum physics in 22 minutes

Listen

Podcast: More or Less – BBC Sounds or YouTube

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Politics A-Level Transition Work 2026

Task 1: Preparation for Unit 1

Higher marks in essays are awarded for up-to-date, recent examples. This is why ongoing engagement in politics is essential to be successful at A Level. This also means that you will need to have secure knowledge of the 2024 General Election, as it is the UK's most recent election.

Task: Use the Pearson Edexcel Case Study booklet below to create a guide to the 2024 Election. Your guide must include the following:

1. Context – the 2019-24 Parliament
2. A brief summary of each party's manifesto promises
3. Key features of the campaigns
4. Analysis of the final results – i.e. which party won, number of seats [and %] won per party.
5. Significant voting trends and behaviour – i.e. Turnout, tactical voting, age, gender, class, increased number of independent candidates, or any other noticeable trends.

https://qualifications.pearson.com/content/dam/pdf/A%20Level/Politics/2017/Teaching%20and%20learning%20materials/a-level-politics-2024-uk-general-election-case-study.pdf

Criteria:

✓ No more than 1-2 sides of A4
✓ Figures and statistics
✓ Key terms used effectively (add definitions of new vocabulary as necessary)

Task 2: Preparation for Unit 2

Create a guide to British political figures i.e. a 'who's who of British politics?' Your guide must include the names of the following:

1. Current Cabinet members
2. Current Shadow-cabinet members
3. Current leaders of key political parties [Conservative, Labour, LibDem, Reform UK, SNP, Green Party, DUP, Sinn Fein, Plaid Cymru]
4. Current First Ministers [of Scotland, Wales and Northern Ireland]
5. The Speaker of the House of Commons [since 2009]
6. Former leaders of 'major' political parties since 1997 [Conservative, Labour, LibDem]
7. Other lesser-known but significant individuals we will use as key examples for certain essays: Dominic Cummings, Nigel Farage, Caroline Lucas, Douglas Carswell [describe who they are / why they are significant]
8. Political editors for mainstream TV news channels [The BBC, ITV News, Sky News, Channel 4]

Criteria:

✓ Accurate and up-to-date lists of political figures
✓ Pictures of individuals [not all, but at least the key ones]

Task 3: Preparation for Ideologies

1. Complete the following quiz to find out where your beliefs sit on the political spectrum https://www.politicalcompass.org/test/en?page=1
2. Research the beliefs of the main political parties – Conservatives, Labour, LibDem, Reform, SNP and plot them on a political compass.
3. Create a short summary of their beliefs.

Super-Curricular Extra Challenge

Create a record on the topic discussed in any form (diagram, notes, poster etc.) Remember to include the specific example/figures discussed.

To watch:
One film you should watch this summer:
• Brexit: The Uncivil War, 2019: https://www.imdb.com/title/tt8425058/

Two BBC Teach series you should trawl through before starting the course:
• Exploring the House of Commons, BBC Teach https://www.bbc.co.uk/teach/class-clipsvideo/articles/zfjh8xs

• How Government Works, BBC Teach https://www.bbc.co.uk/teach/class-clipsvideo/articles/zbpdf4j

Three documentaries you should watch this summer:
• The Rise and Fall of Boris Johnson, Channel 4 2023
https://www.channel4.com/programmes/the-rise-and-fall-of-boris-johnson

• The Cameron Years, BBC 2019 https://www.youtube.com/watch?v=dZ16fp2451w

• Blair and Brown: The Labour Revolution, BBC 2021
https://www.bbc.co.uk/iplayer/episodes/p09wg9cm/blair-brown-the-new-labour-revolution

Three podcast series you should listen to on a weekly basis throughout your A Level course:
• The Rest is Politics, Alastair Campbell and Rory Stewart (Podcast – Wednesday & Thursday)
• Leading, Alastair Campbell and Rory Stewart (Podcast - Monday)
• The A Level Politics Show, Nick DeSouza (Podcast)

Huish Episcopi Academy Sixth Form

Product Design A-Level Transition Work 2026

Task 1

Download Inventor, ensure to download V2025. You will need the confirmation letter of attendance I have shared with you to prove you are a student. Watch the short films **below** and create the Lego man. Take screen shots and create a PowerPoint about your progress through the task.

Autodesk Student Access to Education Downloads

Task 2

Watch:

Designing - How to 'think on paper'!
How to design quickly!
How to annotate design ideas!

Task 3

Have a go:

How to sketch with construction lines - part 1 (watch- have a go from 5.00)
Making 3D sketching so much easier!
The fundamentals of shading - explained

Super-Curricular Extra Challenge

How to Make Trainers
How It's Made: Headphones
The Case for Radically Human Buildings | Thomas Heatherwick | TED
EP 12 | ArchiTech Office Tours | Heatherwick Studio
How This Famous Architect Revolutionized The Way Architects Design | Architectural Digest

Tutorial: Designing The Lego Man Head With Autodesk Inventor	https://www.youtube.com/watch?v=_ubyon6GVGo
Tutorial: Designing The Lego Man Body With Autodesk Inventor	https://www.youtube.com/watch?v=ec59CDGMAGc
Tutorial: Designing The Lego Man Arms With Autodesk Inventor	https://www.youtube.com/watch?v=MsibdihMsjc
Tutorial: Designing the Lego Man Hand with Autodesk Inventor	https://www.youtube.com/watch?v=fdB8x3rUzXU
Tutorial: Designing The Lego Man Legs With Autodesk Inventor	https://www.youtube.com/watch?v=7vaU0a-ggX4
Tutorial: Designing The Lego Man Connector Piece With Autodesk Inventor	https://www.youtube.com/watch?v=wC7B38ObIyE
Tutorial: Assembling The Lego Man With Autodesk Inventor	https://www.youtube.com/watch?v=na4iSV5KrVQ
Lego Man Exploded View	https://www.youtube.com/watch?v=eN_IvuGf41k

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Psychology A Level Transition Work 2026

You can access the A Level Online Textbook below:*

https://illuminate.digital/aqapsych1/ logy for A Level

Username: SHUISHEA **Password**: Student

Task 1

Activity one: Watch the TED talk and ***choose 3 myths to describe and explain how they have been debunked***

TED 9 myths about Psychology, debunked (14 mins):

https://www.ted.com/talks/ben_ambridge_10_myths_about_psychology_debunked/transcript?language=e n

Task 2 Psychology timeline In Year 1, we look at four different schools of psychology. Behaviour is explained differently by psychologists from each approach. For example - are you born with a personality or are personalities a product of our environment?
Social Approach / Cognitive Approach / Biological Approach / Learning Theories/ Behaviour Approach

Activity: for each of the different approaches answer the following questions:

1. When did the approach come about?
2. Who was the founder of the approach?
3. What are the key beliefs of the approach in regards to explaining human behaviour?

http://mrmcnabb.weebly.com/5-major perspectives-in-psychology.html
https://www.simplypsychology.org/a-level approaches.html
Chapter 4 – online texbook

Task 3

Is Psychology a science? Watch the linked video (or read the section in the textbook) and complete a **one side of A4 argument**. You are to argue that Psychology is a science / is not a science / is somewhere between the two.

Features of psychology as a science - Research Methods [A-Level Psychology]

Is psychology a science?

Super-Curricular Extra Challenge

TED talks have become a great source for leading Psychologists to share their ideas. Choose one talk from the link (all TED's Psychology lectures). Create a brief report detailing:
WHO – the researcher is
WHAT – they investigated
HOW – they conducted their research
WHY – this is useful in understanding humans

Psychology TED Talks - YouTube

**NB – The textbook is for the old specification – this means it contains some content that is no longer used in the course. However, it is still a useful resource*

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Sociology A level Transition Work 2026

Task 1: Reflect on your experiences of family, education and media. Write down your thoughts in a format which suits you – this could be an extended essay, or a visual mood board or some other format which shows your thoughts and ideas clearly. This will need to be brought with you at the beginning of term, or emailed to me racheljones@hea.c.uk

Task 2: Watch these introduction videos from Crash Course Sociology. Feel free to watch any others in the series which take your interest, but please do start with these nine videos which cover all the basics we might need to know to get started in September. You'll have a multiple-choice quiz covering all the basic concepts when we get started.

https://youtube.com/playlist?list=PLeSQpwbJjt0ENm5Oq8ncRWv6RjJPzhjE5&si=WTce0F03QvCq-abx

Task 3: Think about this; what is it; how do you interact with it; why use it rather than a manned till and what you (and other shoppers) might be missing by using it. How does it benefit the business and any other thoughts you have whilst out and about shopping this summer. Jot down your ideas and bring them with you in September.

Super-Curricular Extra Challenge:

Read, watch or listen to one of the following (or something you have found yourself) which should fire your sociological imagination. Write a review of the content including what you learned from it, what questions it raises and whether you would recommend it to someone else.

Reading: (you can borrow books from the library for free!)

Everyday Sexism, *Laura Bates* Born a Crime, *Trevor Noah*

Freakonomics, *Levitt & Dubner* Difficult Women, *Helen Lewis*

Watching: (all available on streaming services)

I, Daniel Blake *Dirty Money (series)* *The Laundromat* *Maid* *The Social Dilemma* *American Factory* *Moxie* *13th*

Listening: (these should be available on BBC Sounds)

Unreal: A Critical History of Reality *Thinking Allowed – any episodes*

Things Fell Apart – Jon Ronson *Free Thinking – any episodes*

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SPANISH A-Level Transition Work 2026

Task 1

Complete as many grammar exercises on tenses as you can form www.studyspanish.com. This is an excellent opportunity to address any gaps in your knowledge, especially with reference to verbs and tenses.

Focus on exercises – Grammar Unit 6 ex 62-73

Verb drills –Preterite Imperfect, Perfect and Pluperfect

Task 2

Research an area of interest to do with the Spanish speaking world. It could be a famous Spanish artist, a Latin America country or a type of Spanish or Latin American music. It doesn't matter what it is, as long as it is related to Spain or Latin America. You should write a page in Spanish about your project and be prepared to say something about it in your first few lessons. This is not your Individual Research Project; it is a way of demonstrating your spoken and written Spanish and it will give you an insight into what is involved in researching a topic.

Task 3

Listen to at least one news item from www.bbc.com/mundo or www.newsinslowspanish per week and write a detailed summary in English of what the news article/podcast is about. If you can, keep a record of your summaries to show your teacher in September.

Super-Curricular Extra Challenge

Choose at least one article on something from the news from this section of the BBC Mundo website BBC Mundo

Read the article and look up any new vocabulary you need to learn. Make a glossary list of this vocabulary in English and Spanish. Then, write a summary in English of the article – bring this to first lesson and be prepared to share what you read, and your list of new vocabulary. Exceptional work worthy of contact home would be to complete 3 of these summaries and vocab lists!

Other ideas for exploring Spanish and strengthening your knowledge over the summer:

The news in slow Spanish – genuine news items slowed down for non-native speakers
The News in Slow Spanish

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ECONOMICS A-Level Transition Work 2026

Task 1 Read the full document and identify these key issues:

Key Question: "Can a system be called 'democratic' if it lacks liberal protections for dissent and minority rights?"

Key Question: "Is state-managed industrial policy a departure from liberalism, or is it merely an adaptation to a world of geopolitical rivalry?"

Key Question: "Does the proliferation of AI-generated content make the liberal ideal of an 'informed citizenry' impossible?"

Key Question: "Does climate change force a shift from 'Classical' negative liberty (freedom from interference) to a 'Modern' positive responsibility for global survival?"

Key Question: "In the age of social media, are we more or less governed by 'dignified' illusions than we were in the Victorian era?"

Task 2

You must pick **two** of these 5 questions on **key issues** and write a "Bagehot-style" editorial.

The Task: Write 500 words for each one analysing the issue using the terminology presented here:

Is this a failure of **institutions**?

Does it require a temporary state intervention to save the market/system (**Bagehot's Dictum**)?

Does it threaten the **"dignified"** stability of the state?

This must be precise, with evidence and reach a Judgement which clearly supports an outcome, which you must be able to explain and argue in favour of in our class discussions

Super-Curricular Extra Challenge

Now that you have read about Economics and Liberalism in what ways has it influenced your thinking about the choices which both you and the wider society you inhabit should be making to secure a better future?
(A well-constructed paragraph will be sufficient to answer this question.)

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Subject Transition Work 2026

Task 1
Task 2
Task 3
Super-Curricular Extra Challenge

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Business A-Level Transition Work 2026

Task 1 – Research and Create

To provide a head start to A-level Business, it is crucial that you understand the main 'players' within the game.
These consist of:

- Entrepreneurs
- Stakeholders
- Different forms of Business ownership

Research two contrasting businesses (they should contrast in terms of size, ownership, main activity). *Examples drawn from this year's students include Nvidia, Oculus, Cadbury, Tesla, BMW, Sony, The Body Shop, Liverpool FC, Tesla, Amazon, Clarks and Apple.*
Create a presentation which has a fact file on each business, detailing their origins (Entrepreneur), their timeline of success and who their stakeholders are.
Conclude the presentation with "how do my chosen businesses contrast".
Be ready to deliver your presentation within the first few weeks of the Autumn term.

Task 2 – Get ready for wider discussion

It is imperative for A-level business that you have an interest in the wider world, including business news and global affairs (political and economic).
Read a news article a week, on: https://www.bbc.co.uk/news/business
Write a diary for the 11 weeks, summarising an article per week – what has happened, what are the consequences of the event/news for UK Businesses.
(Add a link to the article if you can).

Task 3 – Specification readiness

- Your course is a new specification, AQA A-level Business (7138)
- The course will be taught as 3 different units, each will have its own exam, all exams will be summer 2028.

Find out more here: https://www.aqa.org.uk/subjects/business/a-level-business-guidance-videos
And: Business AS and A-level 7137, 7138 Specification v1.1
Prepare 3 ring binder folders, 1 for each unit with the correct number of sections for the subtopics within the units.
(Unit one: 4, Unit two: 3, Unit three :4), all labeled correctly.

Super-Curricular Extra Challenge – Be inspired

Choose a couple of the podcasts below and list to 2 episodes of each. Write a summary of something you learnt from each episode.

- **Bloomberg Business Podcast**
- **50 Things That Made the Modern Economy** - Tim Harford
- **The Bottom-Line Podcast** - Evan Davis
- **How I Built My Small Business**
- **The rest is Politics**

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Music - Level 3 BTEC Extended Certificate Transition Work 2026

Task 1 – Repertoire Exploration

Research and listen to **three contrasting pieces** you would like to perform or learn on your primary instrument. Provide an overview for each to include:

- Background context of the piece – what is it about? what / who was it written for? / any cultural or historical references that might be relevant.
- Musical context – key / tempo / time signature / instrumentation etc
- Reasons for choosing the piece
- Adjustments you would need to make to help you perform the piece successfully e.g. transposing key / rescore for a different instrument / using of backing track or other musicians.
- Challenges that could occur in learning the piece, and how you plan for overcoming them

Task 2 – Practice Journal

Keep practice journal over a 3-week period. Document your long / short-term goals, warm-up routines, and how you overcome specific technical challenges. You may wish to include short videos or audio recordings of your progress.

NB – this **does not** need to relate to a piece from Task 1, but could be anything you are currently working on.

Task 3 – Music Industry Role Research

Choose **three contrasting job roles** within the modern music industry. Conduct research to create a short profile of each role. You may wish you include:

- Job role and responsibilities
- Key stills and attributes required to be successful in this role
- Any specific qualifications or training which may be needed
- Working parameters e.g. hours, location, salary etc.
- Reflection – would this role interest you? Why / why not?

Super-Curricular Extra Challenge: Theory Knowledge and Practice

Before you begin your course, you will be in a very good position if you already have a basic understanding of music theory and notation. The following tasks will help you to learn and review some of the aspects of music theory:

- Watch this short TED-Ed video on How to read music - Tim Hansen
  Take notes on how music notation identifies notes, pitch, clef, rhythm and bars.

- Go through the lessons on musictheory.net based on the following topics
  a) The staff, clefs and ledger lines
  b) Note duration
  c) Measures and time signature
  d) Rest duration
  e) The major scale
  f) The minor scale
  g) Key signatures

  Take notes on each area and practice writing out your clefs and notes.

Theory exercises can be downloaded and completed from here: Year 12 Music Theory