

# Making Revision Work for You: Hints and tips to support subject learning

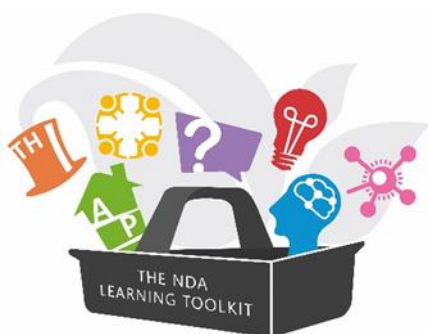
Resilience and Independence in Learning at NDA

**I**   
**REVISION**



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## Revision Timetables

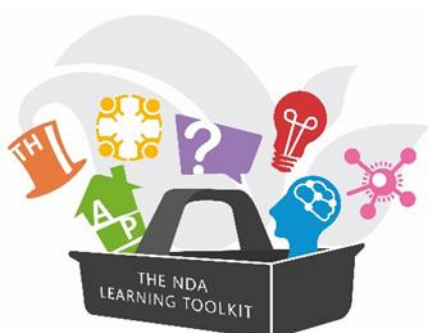
Make yourself a revision timetable. We've got 4 weeks to go until the first exam so start planning your revision for after school and the weekend, for the next four weeks. Change your exam timetable as you start the exam period so you can start to prioritise.

Remember: breaks are important, don't overdo it! (Include your Enrichment sessions in the 2:30 slot). Here's an example revision timetable below.

## After School Revision

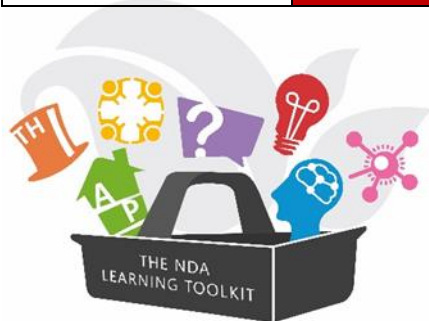
After School Intervention and Enrichment Sessions					
	Monday	Tuesday	Wednesday	Thursday	Friday
15.00					
16.00		Maths	English	Science	

You should be aiming to complete revision during evenings and weekends, especially in the run-up to your examinations. An example revision timetable is shown below, as well as your own blank revision timetable to complete



## Example Weekly Revision Timetable

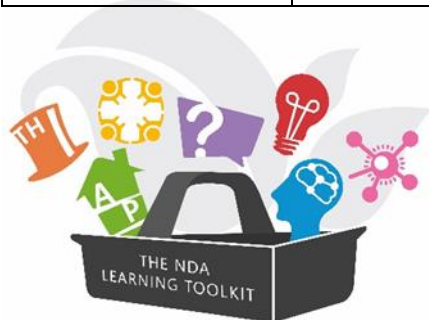
Day	8.00 – 10.00	10.00 – 12.00	12.00 – 13.00	13.00 – 14.00	14.00 – 15.00	15.00 – 16.00 (Revision / Intervention)	16.00 – 17.00	17.00 – 18.00	18.00 – 19.00	19.00 – 20.00	20.00 – 21.00	21.00 – 22.00
<b>Monday</b>	School Day					English	Maths	Break	Music	English	Relax	Relax
<b>Tuesday</b>						Science	Break	Break	Maths	Geography	Relax	Relax
<b>Wednesday</b>						Break	Geography	English	Break	Maths	Music	Relax
<b>Thursday</b>						Maths	Science	Break	Business Studies	Relax	Relax	Relax
<b>Friday</b>						Play football	Break	English	Break	Maths	Business Studies	Relax
<b>Saturday</b>	Science	Maths	Geography	Science	Football	Football	Football	Football	English	Relax	Relax	Relax
<b>Sunday</b>	Geography	Football	Football	Relax	Relax	Science	Maths	Break	Geography	RE	Relax	relax



**Remember:** Make sure you give yourself breaks and allow time to relax and do the things you want to do and enjoy doing.

## My Revision Timetable

Day	8.00 – 10.00	10.00 – 12.00	12.00 – 13.00	13.00 – 14.00	14.00 – 15.00	15.00 – 16.00 (Revision / Intervention)	16.00 – 17.00	17.00 – 18.00	18.00 – 19.00	19.00 – 20.00	20.00 – 21.00	21.00 – 22.00
Monday	School Day											
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
Sunday												



***Remember:*** Make sure you give yourself breaks and allow time to relax and do the things you want to do and enjoy doing

# English Hints and Tips

## English Literature

### Top Tips:

- Use the focus of the question to guide your answer: look at where from the text the extract is taken
- Track the given extract/poem from top to bottom to find at least four pieces of evidence which you can comment on
- Annotate the text THINK about methods used and their effect
- Zoom in on key words and phrases and analyse using subject terminology
- Use expressions such as 'the word/verb/adjective suggests/implies/demonstrates...'
- Have a thorough knowledge of the plot, character and themes within the texts you are studying
- Take time each week to learn the Top Ten Quotes from each of the texts you are studying

## In a nutshell... Do I know ...?

<ul style="list-style-type: none"><li>• Plot</li><li>• Character</li><li>• Quotes</li></ul> <b>WHERE?</b>	<ul style="list-style-type: none"><li>• Methods used by writers</li><li>• Themes</li></ul> <b>HOW?</b>	<ul style="list-style-type: none"><li>• Context and how its influenced the writer</li><li>• Writer's intentions &amp; key messages</li></ul> <b>WHY?</b>
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There are two examinations for the English Literature qualification.

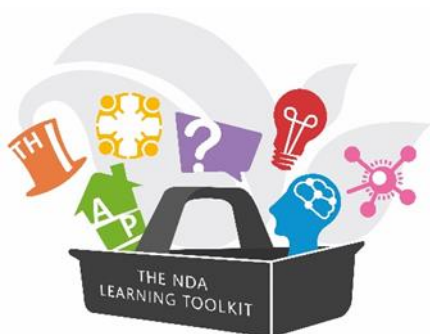
### **Literature Paper 1 is 1 hour 45mins:**

**Section A will focus on the set Shakespeare text 'Macbeth'.** Students should:

- Track the given extract first in answer to the question (make four to five clear and detailed points and spend twenty minutes on this part of the question)
- Write about the rest of the text for 40 minutes making sure they stay focused on the question
- 4 extra marks are available for SPAG – double check your work for accuracy of spelling, punctuation and grammar

**Section B will focus on A Christmas Carol.** Students should:

- Track the given extract first in answer to the question (make four to five clear and detailed points and spend twenty minutes on this part of the question)
- Write about the rest of the text for 40 minutes making sure they stay focused on the question



**Literature Paper 2 is 2 hours 15mins:**

**Section A** will focus on *Animal Farm*. Students should:

- Focus on the question throughout their response
- Back up their points with embedded words and phrases
- Show they have a sound knowledge of the plot and can write thoughtfully about key events, characters, motives and relationships
- Show they understand the themes of the text
- Use the extract from the text and their knowledge of the whole play to answer the question
- Avoid story telling!

**Section B** will focus on **Poetry** (Power and Conflict Anthology AND unseen). Students should:

- Focus on the question throughout their response
- Back up their points with embedded words and phrases
- Show they have a sound knowledge of the plot and can write thoughtfully about key events, characters, motives and relationships
- Show they understand the themes of the text
- Use the extract from the text and their knowledge of the whole novel to answer the question
- Avoid story telling!

**Section C** will focus on Unseen poetry. Students should:

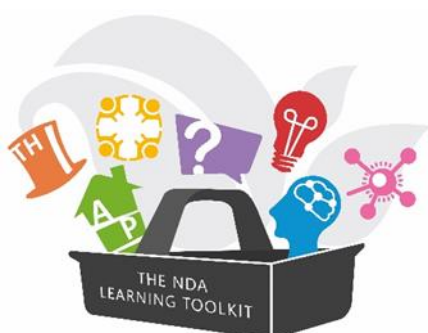
- Get into the habit of reading and re-reading poems before they begin writing about them
- Track the poems through units of meaning or sense, explore 3-4 key images
- Analyse the poems individually first then compare them
- Spend 40 minutes on part (a) of the question and 20 minutes on part (b)

**Recap... Do I know ...?**

**WHERE?**

**HOW?**

**WHY?**



Language Paper 1: 45 mins

**Top Tips:**

- Mood / Panoramic / Sky / Character / senses
- Collate great ambitious vocabulary
- Paragraphs should be at least 5 sentences long
- **Don't use THE to start any sentences!**

**Section B: Writing**

Spend 5 mins planning!

With savage winds and bitter rain, the bus continued to snake its way through the town ...

With savage winds and bitter rain, the bus snaked its way through the town; menace and danger seemed to engulf the streets as the violent thunder storm rolled on.

**Paragraph 1: panoramic**

**Paragraph 5: 1 sentence paragraph linking back to the panoramic**  
Finish with an ellipses (...)

**Paragraph 2: the sky**

Rumbling and bellowing, thunder shattered the silence, obliterating any sense of peace. Mercilessly, the sky began to rain down icy bullets on the bus below.

Lower ... Lower ... Lower ...  
... until

**Paragraph 3: focus on a character**

It seemed as if only she existed in the whole city; she had never felt more alone, more isolated, more abandoned. Warm but weary, her dark chestnut eyes scanned the scene that lay beyond the bus windows. Gathering silently, her troubled, dark thoughts began to whisper and form a plan, whatever happened, she could never return home.

**Paragraph 4: your choice, but focus on 1 thing**

Like a deadly blanket, the dense fog covered and engulfed the city skyline; removing and erasing all signs of life.

**Step 1:**

Look at the picture and choose your mood. Begin to collate vocabulary that will contribute to this mood. In the first instance, these will be **adjectives**.



**Step 2: plan your whole response**

Now you have your mood, you need to think about including ideas that will support it. You need to **sustain** it.

- Paragraph 1 is your panoramic view (avoid going back to the whole scene.)
- Paragraph 2 is always about the sky, what kind of sky will you have? How will you describe it?
- What will be the topics of paragraphs 3 and 4? How will you describe these?



**Paragraph One: Panoramic**

1. Senses & sound opener with semi colon (about something that engulfs, engulfs or encapsulates)
2. Adverb opener that ends in a verb
3. Starts with same verb and ends in main clause
4. Two adjective opener
5. Ing + verb opener (about the clouds)
6. One word sentence (use your mood)

**Paragraph Four: Your choice!**

- Focus on one thing in detail from the image. It could be:
- The lake
  - Windows
  - Windows plan
  - Trees and plants that surround the lake
  - Something we DON'T see but your character WOULD see
- Must be at least 5 sentences. Don't use THE!

**Paragraph Two: Sky**

1. Similar starter
2. Two verb opener
3. Subordinate clause, main clause
4. Adverb opener
5. Lower lower lower...
6. ...until

**Paragraph Three: Character**

1. Similar starter
  2. Two verb opener
  3. Adverb opener that ends in a verb.
  4. Two adjective opener
  5. Ing + verb opener using personification
  6. One word sentence (use your mood)
- Personification



## Language Paper 1: 1 hour 45 mins

### Section A: Reading

#### Top Tips:

- Spend 5 mins reading the information box and underline:
- Character / setting / place in story
- Read the passage WITHOUT looking at the questions - **focus on just understanding what is going on.**

#### Question 1: AO1 Read and Understand Texts List four things... (4 marks) 5mins

Read the question and identify which lines to focus on.

Draw a box around those lines on the insert.

When writing the answer:

- ✓ Use full sentences if it or There are
- ✓ Only have one point per line.
- ✓ DON'T repeat points.



#### Question 3: AO2 Analyse effects of structure techniques and their influence on the reader: #GBO How has the writer structured the text to interest you as a reader? (8 marks) 10mins

You now need to think about the whole source

You need to write about:

- ✓ What the writer focuses your attention on in the beginning
- ✓ How and why the writer changes focus as the source develops
- ✓ Any other structural elements that interest you

• Paragraph 1: What happens and is it **dramatic** or **banal**? What is being **foreshadowed** later and why?

• Paragraph 2: What does the **focus shift** to and why?

• Paragraph 3: How does the source end - is it meant to be interesting or not? Does what was **foreshadowed** actually happen? How is it **cyclical**?



**AIM HIGHER:** To be 'perceptive', you should also include: extra interpretations extra interpretations of the structure techniques used and their potential impact on the reader. #GBO

#### Question 2: AO2 Analyse effects of language techniques and their influence on the reader: #GBO How does the writer use language in this part of the source to... (8 marks) 10mins

Highlight **FOCUS** of the question e.g. describe the journey home

Identify how the writer has used techniques to create effects

- ✓ Words and phrases
- ✓ Language features & techniques (**Figurative language** and **imagery**)
- ✓ Sentence form (if aiming for 7+)

What does the quote mean?

"Quote"

What **image** is being created and why?

Are there any **language features** being used? What effect do they create?  
- Aim to pick out two -

What **mood/atmosphere** is created?

Can you **zoom in** on a specific word?



**AIM HIGHER:** To be 'perceptive', you should also include: extra interpretations of the meaning of language. #GBO

#### STRUCTURE: Key Terms

Dramatic	Shift
Banal	Flashback
Climactic	Epitaph
Anti-climactic	Hubris
Perspective	Introducing
Foreshadow	Developing
Cyclical	Changing
Focus	Concluding



#### Question 4: AO4 Evaluate and Analyse 30mins To what extent do you agree? (20 marks)

You now need to think about a **specific** section of the source

Draw a box around those lines on the insert

- ✓ Start with a short paragraph explaining your viewpoint / partially agree... yet I also disagree as ...
- ✓ Firstly, I personally believe that \_\_\_\_\_ and I therefore agree ...
- ✓ Furthermore, I think the writer ...
- ✓ However, upon reflection, I consider that ...

**Findings:** I personally believe that the extract does seem mysterious and I therefore agree. The writer describes Alice as being "tempted to go down and join her friends". This suggests that Alice is being secretive by refusing to tell anyone, therefore Alice is acting selfishly. Readers would feel that Alice isn't trustworthy and has potentially made a life-changing discovery. Specifically, the use of the adjective "tempted" suggests this discovery could be priceless and worth hiding. So we realise this is an important discovery for Alice.



**AIM HIGHER:** Partially agree & disagree / #GBO with analysis / refer to imagery created and judge the impact on reader - **PERSONAL INTERPRETATIONS & OPINIONS**





Language Paper 2: 45 mins  
**Section B: Writing**  
 Spend 5 mins planning & 5 mins checking for SPaG!

Top Tips:

- TAP the text and plan ideas
- Collate great ambitious vocabulary
- Paragraphs should be at least 5 sentences long
- **Don't use THE** to start any sentences!

**MAGPIE from the sources – what can you steal or adapt?**



How we will structure our overall piece:

In conclusion, if it was just about vanity, if it was just about narcissism, then the selfie disease would be far easier to cure. Together, we must help teens to realise that the perfection they pursue is simply not real; together, we must help them see that they do not need to offer images up to the public in order to be considered worth something.

How much longer can we continue to ignore the truth and label them as narcissistic?

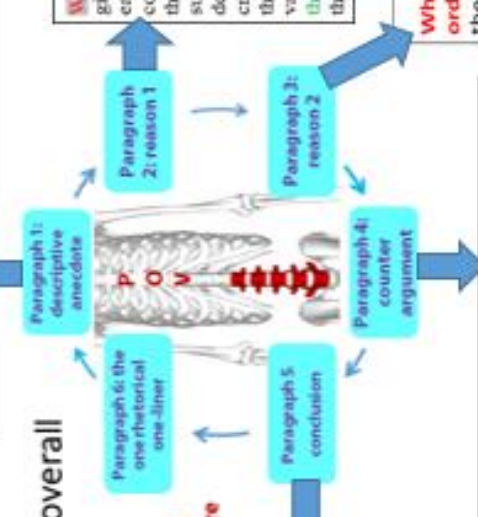


**Build up the opposing argument.**  
 Knock it down with an argument of your own to show its weakness.  
 End with a reinforcement of your argument; clinch your point.

We can agree to some extent that some teens who post selfies on social media may appear vain, ...

... but we must also be careful to ask ourselves why they do this. It's not as simple as saying that their selfie obsession is driven by vanity. They are influenced by celebrities and the world around them. They are greedy for approval from their peers. For every time they are 'liked' it's addictive. Soon, they repeat the whole process, trying out a different pose. Again and again, they offer themselves up to the public.

Unless we prevent it by educating them.




Teenagers – vain or desperate for approval?  
 Envisage this: **Victoria** – young and fresh-faced – tilts her iPhone at a flattering 45 degree angle. **Carefully**, she turns. Turns towards the flattering beam of a backlit window. **As if a celebrity clone**, she poses, gently sucking in cheeks, nonchalantly cocking her head and pouting her rouged lips. **Snap!** Naive and immature, she scrutinises the image, thinking she can improve it. **Filter**. **Tint**. Upload to the masses.

**Why should we** give any thought to this vain, self-obsessed girl? We should give thought to her because, **after all**, we are moral members of society; it is easy for many adults to label teenagers as 'vain' because it's easier than the confronting the truth. **Indeed**, as a collective, we continue to ignore the evidence that allows us to ignore the real, underlying issues of **selfies**. Alarming evidence suggests that the teenage obsession with **selfies** is not about **vanity** but more down to the need to be liked: a staggering 58% of teens have revealed they crave acceptance from the **online** world. **Why?** Worryingly, some even say that they have a much better day if their **selfie** is 'liked' by others because they feel validated or worth something. All they want is for their **screen** to be filled with **thumbs up signs and heart-shaped emoticons**. **That**, adults are harsh to just label them as 'vain' and **superficial**.

**What exactly is it that causes teens to need 'likes' from others in order to feel worthwhile?** **Though it might not be the popular view**, the real reason is not vanity but crushingly low self-confidence. **Why?** **In my 'humble' opinion**, they are confronted with photo shopped images of celebrities constantly through the media. These images are nothing like the original because so many filters and edits have been applied, because so many '**flaws**' have been erased. Teens think and believe they are the real thing. Yet we have done very little to show them this '**perfection**' isn't natural. Therefore they feel the need to filter, to change, to edit images and we have the nerve to call them '**vain**' and '**self-obsessed**' for it.

**TAP stands for:**

- Text Type
- Audience
- Purpose



Non fiction writing - TAP it!



Language Paper 2: 1 hour 45 mins

Section A: Reading

Top Tips:

- READING TIME: spend 15mins reading both sources** – think about what connects and links them
- Annotate and **highlight** key phrases – keep them short!
  - DON'T jump straight into answering questions - **focus on just understanding what is going on.**

**Question 1:** AO1 Read and Understand Texts  
**Identify four true statements ... (4 marks) 5mins**

Read the statements and identify key words.

- ✓ Remember some information is **EXPLICIT** – clear
- ✓ Some information is **IMPLICIT** – hidden



Shade in the circle of the **TRUE** statements only



**Question 3:** AO2 Analyse how the writer uses language to present their ideas: #GBO #Bq Perceptive  
**How has the writer used language to -----? (12 marks) 15mins**

- You now need to think about a **section source**  
You need to write about:
- ✓ Words and phrases the writer uses
  - ✓ Methods the writer uses
  - ✓ Sentence forms and structures

**DRAW A BOX AROUND THOSE LINES ON THE INSERT**

**X3 PEASL**

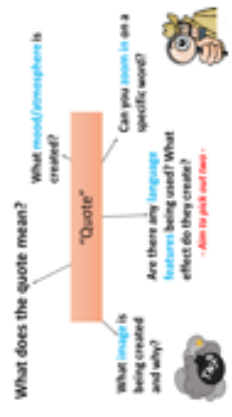
Declarative / Imperative / Interrogative / Exclamatory

**AIM HIGHER:** To be 'perceptive', you should also include: extra interpretations of the structure techniques used and their potential impact on the reader. **LINK** language and sentence types **together**. #GBO

**Question 2:** AO1 Read and Understand Texts #GBO  
**Summarise the differences between the sources ... (8 marks) 10mins**

Highlight **FOCUS** of the question e.g. children's behaviour, attitude towards journey

- ✓ Make a point
- ✓ Support with evidence
- ✓ Make an inference – what we learn from the quote



**AIM HIGHER:** To be 'perceptive', you should also include: extra interpretations of the meaning of language #GBO

**Techniques to analyse:**

Adjectives, verbs, adverbs, nouns

- Alliteration / Anecdote
- Facts
- Opinions
- Repetition / Rhetorical Questions
- Emotive Language / Exaggeration
- Statistics / Similes / Superlatives
- Triple (group of 3)



**Question 4:** AO1, AO2, AO3  
**Compare how the writers present their ideas and perspectives (16marks) 20mins**

- You now need to think about the **whole of both sources**
- ✓ Identify how the writers **feel / think / believe**
  - ✓ Identify **methods** used and the **impact & effect** they have **implied / suggested / connoted**
  - ✓ **Zoom-in on specific vocabulary**
  - ✓ **LINK** to next Source

**Example:**  
In source A the writer **feels** that Stonehenge is a place of wonder. He uses the **metaphor** 'part-broken cluster of fossilised' which implies that this scene is almost magical and is a place extremely connected to nature. Specifically, the adjective 'broken' created the feeling this place should be respected and treasured. Similarly, source B also **thinks** of Stonehenge as a somewhat magical place. The writer here uses the **simile** 'as if they were ancient giants' which creates an **almost mythical feel** to Stonehenge.

**AIM HIGHER:** #GBO with analysis / refer to imagery created / how they help convey the writer's ideas and judge the impact

Number

Topics	Clip Number	R	A	G
Calculating with roots and fractional indices	108, 109, 110			
Converting recurring decimals to fractions	53, 54			
Surd: Definition and estimating	111, 112			
Surd: Simplifying, multiplying and dividing	113, 114, 115			
Surd: Expanding brackets	116, 117			
Surd: Rationalising the denominator	118, 119			
Upper and lower bounds	137, 138, 139			
Error intervals	777			
Best buys	770			

Algebra (continued)

Topics	Clip Number	R	A	G
Speed-time graphs	881, 882, 883, 884, 885, 886			
Rate of change graphs	894, 895, 896			
Estimating gradient from a curve	887, 888, 889, 890			
Estimating area under a curve	891, 892, 893			
Equation of a circle	778, 779, 314, 315, 316, 317			
Circles and straight lines	318, 319, 320			
Linear inequalities as graph regions	273, 274, 275, 276			
Quadratic inequalities	277			
Function notation	288, 289			
Domain and range of functions	290, 291, 292			
Composite functions	293, 294			
Inverse functions	295, 296			
Functions: Problem solving	297			
Other sequences: Recurrence relations	262			
Quadratic sequences	247, 248, 249, 250			
Trial and Improvement*	321			
Iteration and numerical methods	322, 323			
Proof and counter-examples	324			
Direct algebraic proof	325, 326, 327			

Ratio, proportion and rates of change

Topics	Clip Number	R	A	G
Algebraic direct proportion	344, 345			
Algebraic inverse proportion	347			

\*WJEC (Wales) board only

Higher Skills List



Algebra

Topics	Clip Number	R	A	G
Substitution	784, 785, 786, 787			
Substitution: Equations of motion	788, 789			
Substitution: Important formulae	279			
Expanding triple brackets	166			
Expressions with algebraic fractions	172			
Linear equations with algebraic fractions	187			
Factorising quadratic expressions: $ax^2+bx+c$	225, 226, 227, 228			
Quadratic expressions: Algebraic fractions	229			
Quadratic expressions: Completing the square	235, 236, 237			
Quadratic equations: Factorising	231, 232, 233			
Quadratic equations: Quadratic formula	241, 242			
Quadratic equations: Completing the square	238, 239			
Quadratic equations: Algebraic fractions	244			
Quadratic equations in context	245			
Simultaneous equations: Quadratic/linear	246			
Manipulating powers	790, 791, 792, 793, 794, 795			
Exponential equations	796, 797, 798, 799			
Equation of a straight line: Perpendicular lines	215, 216			
Quadratic graphs: Turning points and discriminant	256, 243, 248			
Simultaneous equations on graphs: Quadratic/ linear	259, 260			
Exponential graphs	302, 800, 801, 802, 803			
Exponential growth problems	804, 805, 806, 807			
Exponential decay problems	808, 809, 810, 811			
Trigonometric graphs	303, 304, 305, 306			
Graph transformations	307, 308, 309, 310, 311, 312, 313			

\*WJEC (Wales) board only



Geometry and measures

Topics	Clip Number	R	A	G
Congruence proofs	684, 685, 686, 687, 688, 689, 690			
Enlargements	646, 647			
Invariance	633			
Describe combined transformations	636, 637			
Circle theorems: Angles inside a circle	393, 394, 395, 396, 397			
Circle theorems: Tangents and chords	398, 399, 600, 601			
Circle theorems multi-step	603, 604, 605, 606			
Prove circle theorems	816, 817, 818, 819, 820			
Compound units: Density problem solving	730, 732, 733			
Volume of frustums	578			
Volume: Problem solving	583			
Similar Shapes: Area	615, 616, 617			
Similar Shapes: Volume	618, 619, 620, 621			
Pythagoras' Theorem: Problem solving	303, 304			
Right-angled trigonometry: Non-calculator	306, 843, 846, 847, 848, 849, 850, 851, 852, 853			
Right-angled trigonometry: Problem solving	313, 314			
3D Pythagoras	305, 306, 307			
3D trigonometry	834, 835, 836, 837, 838, 839, 860, 861, 862, 863			
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Sine rule	321, 322, 323, 324, 325			
Cosine rule	327, 328, 329, 330			
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Bearings: Sine and cosine rule	331			
Vectors: Magnitude	627			
Vectors: Geometry problems	628, 629, 630, 631, 632, 633, 634, 635, 636			

Probability

Topics	Clip Number	R	A	G
Product rule for counting	671, 672, 673			
Conditional probability	364, 365, 366, 367, 389, 390			
Probability from Venn diagrams	383, 386, 387, 388, 391			

\*WJEC (Wales) board only

Statistics

Topics	Clip Number	R	A	G
Quartiles and interquartile range	411, 412			
Mean from grouped frequency tables	418			
Averages problems	421			
Cumulative frequency diagrams	437, 438, 439			
Box plots	434, 435, 436, 440			
Frequency polygons	441			
Histograms	442, 443, 444, 445, 446, 447, 448, 449			
Capture-recapture	872, 873			

\*WJEC (Wales) board only

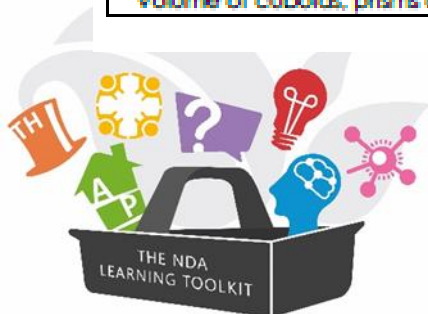
**GCSE Mathematics**  
**Revision List (Foundation)**






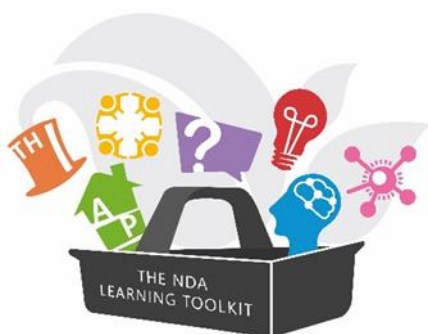
Paper 1 - Non-Calculator

Paper 2 & 3 – Calculator

Topic List	Hegarty Maths Clip Numbers			
<b>Number</b>				
Using place value	<a href="#">13</a> , <a href="#">14</a> , <a href="#">15</a> , <a href="#">16</a> , <a href="#">17</a>			
Decimal multiplication and division	<a href="#">48</a> , <a href="#">49</a> , <a href="#">50</a>			
Add, subtract, multiply and divide fractions	<a href="#">66</a> , <a href="#">68</a> , <a href="#">69</a> , <a href="#">70</a>			
Significant figures and estimation	<a href="#">130</a> , <a href="#">131</a>			
Standard form	<a href="#">122</a> , <a href="#">123</a> , <a href="#">128</a>			
Prime factor decomposition, HCF and LCM	<a href="#">30</a> , <a href="#">32</a> , <a href="#">35</a> , <a href="#">36</a>			
Fractions of an amount (non-calculator)	<a href="#">62</a> , <a href="#">67</a> , <a href="#">80</a>			
Percentages of an amount	<a href="#">84</a> , <a href="#">85</a> , <a href="#">86</a> , <a href="#">87</a>			
Percentage increase and decrease	<a href="#">88</a> , <a href="#">89</a> , <a href="#">90</a> , <a href="#">97</a>			
Compound interest and depreciation	<a href="#">94</a> , <a href="#">95</a>			
Reverse percentages	<a href="#">96</a>			
Value for money (best buy)	Coming soon...			
Ratio and Proportion	<a href="#">332</a> , <a href="#">333</a> , <a href="#">334</a> , <a href="#">339</a>			
<b>Algebra</b>				
Collecting like terms	<a href="#">156</a> , <a href="#">157</a> , <a href="#">158</a> , <a href="#">159</a>			
Simplifying using the index laws	<a href="#">172</a> , <a href="#">174</a> , <a href="#">175</a>			
Expand and simplify expressions with brackets	<a href="#">160</a> , <a href="#">161</a> , <a href="#">162</a> , <a href="#">163</a>			
Factorisation	<a href="#">168</a> , <a href="#">169</a>			
Sequences: finding the $n^{\text{th}}$ term rule	<a href="#">198</a>			
Substitution	<a href="#">155</a> , <a href="#">278</a> , <a href="#">279</a>			
Trial and Improvement	<a href="#">321</a>			
Forming and solving equations	<a href="#">179</a> , <a href="#">180</a> , <a href="#">184</a> , <a href="#">185</a>			
Represent inequalities on a number line; Solving linear inequalities	<a href="#">265</a> , <a href="#">266</a> , <a href="#">267</a>			
Simultaneous linear equations	<a href="#">190</a> , <a href="#">191</a> , <a href="#">192</a> , <a href="#">193</a>			
Drawing straight line graphs; Finding the equation of a straight line	<a href="#">205</a> , <a href="#">206</a> , <a href="#">207</a> , <a href="#">208</a>			
Drawing quadratic graphs	<a href="#">251</a>			
Real life graphs	Coming soon...			
Solving quadratic equations by factorising	<a href="#">223</a> , <a href="#">224</a> , <a href="#">225</a> , <a href="#">230</a>			
Difference of two squares	<a href="#">165</a>			
<b>Geometry &amp; Measures</b>				
Compound area	<a href="#">554</a> , <a href="#">555</a>			
Area of triangles, parallelograms and trapezia	<a href="#">556</a> , <a href="#">557</a> , <a href="#">558</a> , <a href="#">559</a>			
Area of a circle	<a href="#">534</a> , <a href="#">535</a> , <a href="#">536</a> , <a href="#">537</a>			
Circumference of a circle	<a href="#">539</a> , <a href="#">540</a> , <a href="#">541</a> , <a href="#">542</a>			
Volume of cuboids, prisms and cylinders	<a href="#">568</a> , <a href="#">569</a> , <a href="#">571</a> , <a href="#">572</a>			



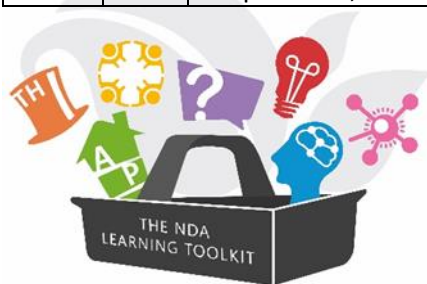
Topic List	Heqarty Maths Clip Numbers			
<b>Geometry &amp; Measures (continued)</b>				
Angles on a line and around a point	<a href="#">477</a> , <a href="#">478</a> , <a href="#">479</a> , <a href="#">480</a>			
Angles in a triangle (including isosceles triangles)	<a href="#">485</a> , <a href="#">486</a> , <a href="#">487</a>			
Alternate and corresponding angles (parallel lines)	<a href="#">481</a> , <a href="#">482</a> , <a href="#">483</a>			
Interior and exterior angles of polygons	<a href="#">561</a> , <a href="#">562</a> , <a href="#">563</a> , <a href="#">564</a>			
Multi-step angle problems	<a href="#">488</a> , <a href="#">489</a> , <a href="#">490</a> , <a href="#">491</a>			
Draw and measure bearings	<a href="#">494</a> , <a href="#">493</a> , <a href="#">494</a> , <a href="#">495</a>			
Constructions and loci	Coming soon...			
Transformations: reflections, rotations, enlargements, translations	Coming soon...			
Pythagoras' theorem	<a href="#">498</a> , <a href="#">499</a>			
Trigonometry in right-angled triangles	<a href="#">509</a> , <a href="#">510</a> , <a href="#">511</a> , <a href="#">512</a>			
Similar shapes	<a href="#">608</a> , <a href="#">609</a> , <a href="#">610</a>			
Compound measures: converting metric units	Coming soon...			
<b>Statistics &amp; Probability</b>				
Stem and leaf diagrams	<a href="#">430</a> , <a href="#">431</a>			
Questionnaires	<a href="#">399</a> , <a href="#">400</a> , <a href="#">401</a>			
Scatter graphs	<a href="#">453</a> , <a href="#">454</a>			
Frequency polygons	<a href="#">441</a>			
Two way tables	<a href="#">422</a> , <a href="#">423</a>			
Mean from a grouped frequency table	<a href="#">417</a> , <a href="#">418</a>			
Pie Charts	<a href="#">427</a> , <a href="#">428</a>			
Box plots	<a href="#">434</a> , <a href="#">435</a> , <a href="#">436</a>			
Cumulative frequency graphs	<a href="#">437</a> , <a href="#">438</a> , <a href="#">439</a>			
Stratified sampling	<a href="#">396</a> , <a href="#">397</a>			
Histograms	<a href="#">442</a> , <a href="#">443</a>			
Probability from a table	<a href="#">351</a> , <a href="#">352</a> , <a href="#">353</a> , <a href="#">354</a>			
Probability: expected outcomes	<a href="#">355</a> , <a href="#">356</a>			
Probability tree diagrams	<a href="#">361</a> , <a href="#">362</a>			



## Science Hints and Tips

### Combined Science Revision Checklist (including required practicals)

Paper	#	Topic (and module number)	Made flashcards / mind maps?	Online revision	Completed Exam Questions	Re-capped unknown content?
<b>Biology</b>						
<b>1</b>	B1	Cell biology, osmosis, diffusion, active transport <b>Microscopes; Osmosis</b>				
	B2	Mitosis, Stem cell ethics				
	B3	Digestive system, tissues/organs, catalysts (different types), <b>Food Tests; Enzymes</b>				
	B4	The blood, circulatory system, the heart, tissues and organs in plants, evaporation and transpiration				
	B5	Communicable disease, pathogens and disease, viral/bacterial disease, defence mechanisms (skin/white blood etc)				
	B6	Vaccination, antibiotics, discovering new drugs, developing drugs				
	B7	Non-communicable diseases, cancer, smoking, diet and exercise				
	B8	Photosynthesis, use of glucose, factors (light, CO <sub>2</sub> , temperature) → links to enzymes <b>Photosynthesis Light Intensity</b>				
	B9	Respiration (anaerobic and aerobic), metabolism				
<b>2</b>	B10	Homeostasis, reflex actions, the reflex arc, nervous system <b>Reaction Times</b>				
	B11	Hormone control, diabetes, negative feedback, human reproduction, contraception				
	B13	Types of reproduction (mitosis vs. meiosis), DNA structure, genes, inheritance, Punnett squares, genetic disorders and testing				
	B14	Variation, natural selection, selective breeding, genetic engineering, ETHICS				
	B15	Evidence for evolution (fossils), extinction, antibiotic resistant bacteria, classification				
	B16	Communities, ecology project, adaptations, competition, abiotic and biotic factors <b>Using Quadrats/Transects</b>				
	B17	Food chains and food webs, carbon cycle, water cycle, decay cycle, decomposition				
	B18	Air pollution, deforestation, global warming, biodiversity				





## Chemistry

<b>1</b>	C1	History of the atom, fractional distillation, atomic structure, electronic structure, ions, isotopes				
	C2	Development of the periodic table, group 1 and group 7 reactivity trends, halogen displacement				
	C3	States of matter, covalent, ionic, metallic bonding, giant ionic structures, giant covalent structures, fullerenes, alloys				
	C4	Relative mass, moles, using moles in calculations				
	C5	Reactivity series, making salts, metal extraction <b><u>Making Salts (1+2)</u></b>				
	C6	Electrolysis, changes at electrodes, electrolysis of aluminium oxide ( $\text{Al}_2\text{O}_3$ ) and sodium chloride (NaCl) <b><u>Electrolysis of Solutions</u></b>				
	C7	Endothermic and exothermic reactions, reaction profiles, bond energy calculations <b><u>Investigating</u></b>				
<b>2</b>	C8	Rates of reaction (effect of temperature, surface area, catalysts, concentration) collision theory, reversible reactions, Le Chatelier principle <b><u>Concentration and ROR</u></b>				
	C9	Hydrocarbons, alkanes, fractional distillation, cracking				
	C12	Pure and mixed substances, chromatography and $R_f$ values, Gas tests (hydrogen, oxygen, carbon dioxide, chlorine) <b><u>Calculating <math>R_f</math> values</u></b>				
	C13	History of our atmosphere, evolving atmosphere, climate change				
	C14	Finite and renewable resources, making safe water, treating waste water, extracting metals from ores, life cycle assessments, recycling <b><u>Testing and purifying water</u></b>				

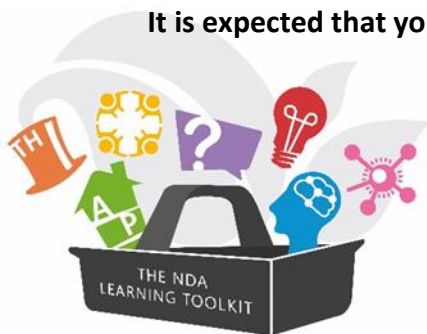


## Physics

<b>1</b>	P1	Conservation of energy, energy and work done, kinetic energy, dissipation, efficiency, power				
	P2	Energy transfers, specific heat capacity, insulation of buildings <b>Investigating Thermal Insulators; Specific Heat Capacity</b>				
	P3	Energy resources (renewable/non-renewable), solar/wind/nuclear/coal etc, energy issues				
	P4	Electricity, potential difference (voltage), current, resistance, circuit symbols, series and parallel circuits <b>Investigating Circuits</b>				
	P5	Alternating current and direct current, cables and plugs, power and PD in the home, appliances and efficiency				
	P6	Density, states of matter (SLG), changes of state, internal energy, latent heat, gas pressure <b>Calculating Densities</b>				
	P7	Atoms and radiation, alpha/gamma/beta, activity and half-life				
<b>2</b>	P8	Vectors and scalars, forces, resultant forces, Centre of mass, parallelogram of forces, resolution of forces				
	P9	Speed/distance-time graphs, velocity and acceleration				
	P10	Forces and acceleration, terminal velocity, braking forces, momentum <b>Springs; Forces and Acceleration</b>				
	P12	Waves (longitudinal/transverse), diagrams of waves, reflection and refraction <b>Ripple Tanks and Waves</b>				
	P13	EM spectrum (GXUVIMR), using waves for communication, X-rays in medicine, gamma rays, dangers, ionisation of cells etc <b>Absorption/Emission of IR Radiation</b>				
	P15	Magnetic fields in standard magnets and electric circuits, electromagnets, solenoids, motor effect				

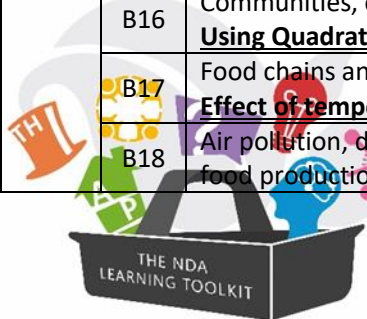
**Remember, you will have 6 exam papers (2 x Biology, 2 x Chemistry, 2 x Physics).**

**It is expected that you are able to write the methods for each of the required practicals, including results you'd hope to see for each.**

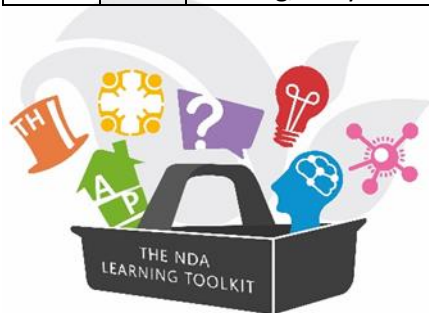


## Triple Science Revision Checklist (including required practicals)

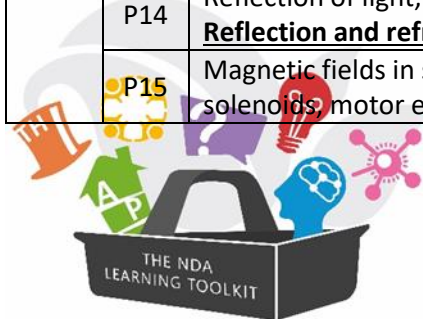
Paper	#	Topic (and module number)	Made flashcards / mind maps?	Online revision	Completed Exam Questions	Re-capped unknown content?
<b>Biology</b>						
1	B1	Cell biology, osmosis, diffusion, active transport <b>Microscopes; Osmosis</b>				
	B2	Mitosis, Stem cell ethics				
	B3	Digestive system, tissues/organs, catalysts (different types), <b>Food Tests; Enzymes</b>				
	B4	The blood, circulatory system, the heart, tissues and organs in plants, evaporation and transpiration				
	B5	Communicable disease, growing bacteria in the lab pathogens and disease, viral/bacterial disease, defence mechanisms (skin/white blood etc) <b>Effect of antiseptics/antibiotics on bacteria</b>				
	B6	Vaccination, antibiotics, discovering new drugs, developing drugs, monoclonal antibodies				
	B7	Non-communicable diseases, cancer, smoking, diet and exercise				
	B8	Photosynthesis, use of glucose, factors (light, CO <sub>2</sub> , temperature) → links to enzymes <b>Photosynthesis Light Intensity</b>				
	B9	Respiration (anaerobic and aerobic), metabolism				
2	B10	Homeostasis, reflex actions, the reflex arc, nervous system, the brain, the eye, common eye problems <b>Reaction Times</b>				
	B11	Hormone control, diabetes, negative feedback, human reproduction, contraception <b>Effect of light/gravity on seedlings</b>				
	B12	Controlling body temperature, the human kidney, dialysis, kidney transplants				
	B13	Types of reproduction (mitosis vs. meiosis), DNA structure, protein synthesis, genes, inheritance, Punnett squares, genetic disorders and testing				
	B14	Variation, natural selection, selective breeding, genetic engineering, ETHICS				
	B15	Theories of evolution (Darwin/Lamarck), Evidence for evolution (fossils), extinction, antibiotic resistant bacteria, classification				
	B16	Communities, ecology project, adaptations, competition, abiotic and biotic factors <b>Using Quadrats/Transects</b>				
	B17	Food chains and food webs, carbon cycle, water cycle, decay cycle, decomposition <b>Effect of temperature on milk decay</b>				
	B18	Air pollution, deforestation, global warming, biodiversity, biomass transfer, sustainable food production and efficiency				



Paper	#	Topic (and module number)	Made flashcards / mind maps?	Online revision (Primrose / Shaun)	Completed Exam Questions	Re-capped unknown content?
<b>Chemistry</b>						
<b>1</b>	C1	History of the atom, fractional distillation, atomic structure, electronic structure, ions, isotopes				
	C2	Development of the periodic table, group 1 and group 7 reactivity trends, halogen displacement, transition metals vs. group 1				
	C3	States of matter, covalent, ionic, metallic bonding, giant ionic structures, giant covalent structures, fullerenes, alloys, nanoparticles and applications				
	C4	Relative mass, moles, using moles in calculations, chemical yield and atom economy, titration calculations, <b><u>Titration</u></b>				
	C5	Reactivity series, making salts, metal extraction <b><u>Making Salts (1+2)</u></b>				
	C6	Electrolysis, changes at electrodes, electrolysis of aluminium oxide (Al <sub>2</sub> O <sub>3</sub> ) and sodium chloride (NaCl) <b><u>Electrolysis of Solutions</u></b>				
	C7	Endothermic and exothermic reactions, reaction profiles, bond energy calculations, chemical cells, hydrogen fuel cells, <b><u>Investigating energy changes</u></b>				
<b>2</b>	C8	Rates of reaction (effect of temperature, surface area, catalysts, concentration) collision theory, reversible reactions, Le Chatelier principle <b><u>Concentration and ROR</u></b>				
	C9	Hydrocarbons, alkanes, fractional distillation, cracking				
	C10	Reactions of alkenes, alcohols, carboxylic acids, esters				
	C11	Addition and condensation polymerisation, DNA and other natural polymers				
	C12	Pure and mixed substances, chromatography and R <sub>f</sub> values, Gas tests (hydrogen, oxygen, carbon dioxide, chlorine), positive/negative ion tests <b><u>Calculating R<sub>f</sub> values</u></b>				
	C13	History of our atmosphere, evolving atmosphere, climate change				
	C14	Finite and renewable resources, making safe water, treating waste water, extracting metals from ores, life cycle assessments, recycling <b><u>Testing and purifying water</u></b>				
	C15	Rusting, alloys and uses, class/ceramics/composites, Haber Process, fertilisers				

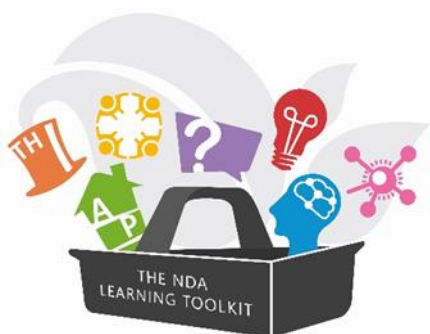


Paper	#	Topic (and module number)	Made flashcards / mind maps?	Online revision (Primrose / Shaun)	Completed Exam Questions	Re-capped unknown content?
<b>Physics</b>						
<b>1</b>	P1	Conservation of energy, energy and work done, kinetic energy, dissipation, efficiency, power				
	P2	Energy transfers, specific heat capacity, insulation of buildings, Infrared radiation <b><u>Investigating Thermal Insulators; Specific Heat Capacity</u></b>				
	P3	Energy resources (renewable/non-renewable), solar/wind/nuclear/coal etc, energy issues				
	P4	Electricity, charges and fields, potential difference (voltage), current, resistance, circuit symbols, series and parallel circuits <b><u>Investigating Circuits</u></b>				
	P5	Alternating current and direct current, cables and plugs, power and PD in the home, appliances and efficiency				
	P6	Density, states of matter (SLG), changes of state, gas pressure, internal energy, latent heat, gas pressure <b><u>Calculating Densities</u></b>				
	P7	Atoms and radiation, alpha/gamma/beta, activity and half-life, fission, fusion, nuclear issues				
<b>2</b>	P8	Vectors and scalars, forces, resultant forces, Centre of mass, parallelogram of forces, resolution of forces, levers and gears, momentum and moment calculations				
	P9	Speed/distance-time graphs, velocity and acceleration				
	P10	Forces and acceleration, terminal velocity, braking forces, momentum and conservation <b><u>Springs; Forces and Acceleration</u></b>				
	P11	Pressure and surfaces, pressure in liquids, atmospheric pressure, upthrust/floating				
	P12	Waves (longitudinal/transverse), diagrams of waves, reflection and refraction, ultrasound and uses, seismic waves and activity <b><u>Ripple Tanks and Waves</u></b>				
	P13	EM spectrum (GXUVIMR), using waves for communication, X-rays in medicine, gamma rays, dangers, ionisation of cells etc <b><u>Absorption/Emission of IR Radiation</u></b>				
	P14	Reflection of light, refraction of light, light and colour, lenses, using lenses <b><u>Reflection and refraction of light</u></b>				
	P15	Magnetic fields in standard magnets and electric circuits, electromagnets, solenoids, motor effect				



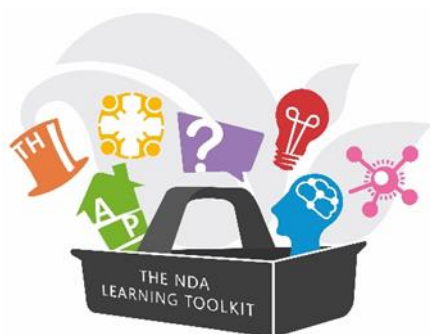
**Formulae to Learn**

<p><b>REVENUE = NUMBER OF SALES X PRICE PER UNIT</b></p>	<p><b>CURRENT RATIO</b></p> <p><b>CURRENT ASSETS / CURRENT LIABILITIES</b></p>
<p><b>TOTAL COSTS = FIXED COSTS + VARIABLE COSTS</b></p>	<p><b>LIQUID CAPITAL RATIO</b></p> <p><b>(CURRENT ASSETS – INVENTORIES)/CURRENT LIABILITIES</b></p>
<p><b>PROFIT = TOTAL REVENUE – TOTAL COSTS</b></p>	<p><b>(CASH FLOW FORECASTS)</b></p> <p><b>CASH INFLOWS (RECEIPTS) – CASH OUTFLOWS (PAYMENTS) = NET CASH FLOW + OPENING BALANCE = CLOSING BALANCE</b></p>
<p><b>GROSS PROFIT = TURNOVER – COST OF SALES</b></p> <p><b>NET PROFIT = GROSS PROFIT – EXPENDITURE</b></p>	<p><b>(CASH FLOW FORECASTS)</b></p> <p><b>NET CASH FLOW + MONEY IN THE BANK = CLOSING (CASH) BALANCE</b></p>
<p><b>(STATEMENT OF COMPREHENSIVE INCOME)</b></p> <p><b>REVENUE – COST OF SALES = GROSS PROFIT – EXPENSES = NET PROFIT</b></p>	<p><b>(STATEMENT OF FINANCIAL POSITION)</b></p> <p><b>NET CURRENT ASSETS = CURRENT ASSETS – CURRENT LIABILITIES</b></p>



Learning Aim and Link	Content	Completed (☺)
A1 – Elements of the Promotional Mix and their Purposes	Can you explain the two basic aspects of advertising? o the message: what the communication needs to say o the medium: how to get the message across.	
	Can you explain the different advertising methods: moving image, print, ambient, digital, audio?	
	Do you know the different types of sales promotion: providing incentives to customers? Methods: coupons, competitions, money off, loyalty incentives, 'buy one get one free', discounts.	
	Can you describe the different methods of personal selling: face-to-face, by telephone, via email, through video or web conferencing?	
	Do you know all of the different public relations activities? Promoting a product/service, brand or enterprise by placing information about it in the media without paying for the time or media space directly: o methods: exhibitions, sponsorship, press releases.	
	Can you explain how direct marketing is used to establish an individual relationship between the enterprise and the customer? Methods: direct mail (junk mail), mail order catalogues, magazines, telemarketing.	
A2 – Targeting and Segmenting the Market	What are the types of market: Business to Business (B2B), Business to Consumer (B2C)?	
	Do you know why enterprises segment the market to identify which customers its promotions will target through? o demographics: age, race, religion, gender, family size, ethnicity, income, education level, socio-economic group o geographic: location o psychographic: social class, attitudes, lifestyle and personality characteristics o behavioural: spending, consumption, usage, loyalty status and desired benefits.	
A3 – Factors influencing the choice of promotional methods	Can you explain what influences the choice of promotion? Size of enterprise. Budgetary constraints. Appropriateness for product/service. Target market.	
B1 – Financial Documents	Can you explain the types of financial documents? invoices, delivery notes, purchase orders, credit notes, receipts, statement of account.	
	Do you know the importance to a business of accuracy when these documents are being used?	
B2 – Payment Methods	Do you know the different payment methods: cash, credit cards, debit cards, direct debit, payment technologies?	
	Can you explain the impact on customers and enterprises of using different methods?	
B3 – Sources of Revenue and Costs	Do you know the sources of revenue? Income from sales and from assets.	
	Can you identify and explain start-up costs and running costs?	
B4 – Terminology in Financial statements	Can you describe the following terms? Turnover (net sales) and cost of sales (cost of goods sold). Gross profit, expenses, net profit, retained profit	
	Fixed assets and current assets Current liabilities and long-term liabilities Debtors and creditors Net current assets Capital?	
B5 – Statement of Comprehensive Income	Can you complete a statement of comprehensive income which shows the profit or loss of an enterprise over time?	
	Can you calculate profit/loss using a simple statement of comprehensive income?	
B6 – Statement of Financial Position	Can you complete a statement of financial position which shows the financial performance of an enterprise at a point in time?	
	Can you categorise total assets and liabilities using a statement of financial position?	
B7 – Profitability and Liquidity	Can you explain the difference between cash and profit?	
	Can you explain the difference between liquidity and profitability?	
	Can you calculate profitability ratios from given formulae? o gross profit margin percentage (GPM): $(\text{gross profit}/\text{revenue}) \times 100$ o net profit margin percentage (NPM): $(\text{net profit}/\text{revenue}) \times 100$ .	
	Can you calculate liquidity ratios from given formulae?	

	<ul style="list-style-type: none"> <li>o current ratio: current assets/current liabilities</li> <li>o liquid capital ratio: (current assets – inventory)/current liabilities.</li> </ul>	
C1 – Using Cash Flow Data	Do you know what cash is? – liquid assets of the business; bank balance plus cash in the business	
	Do you know the difference between the cash flowing into the business (inflows) and the cash flowing out of the business (outflows)?	
	Do you know the difference between positive and negative liquidity?	
	Do you know the difference between sales and purchases?	
	Can you produce a cash flow statement: the cash inflows and the cash outflows over the past 12 months?	
	Can you complete a cash flow forecast which outlines the forecasted future cash inflows (from sales) and the outflows (such as raw materials, wages) per month over a period of time?	
C2 – Financial Forecasting	Do you know the purpose of a cash flow forecast?	
	<ul style="list-style-type: none"> <li>o to identify money coming in (inflows) and going out (outflows) of the enterprise over time</li> <li>o to determine net current asset requirements and make business decisions.</li> </ul>	
	Can you give examples of Inflows: sales, capital introduced, loans?	
	Can you give examples of Outflows: purchases, running costs?	
C3 – Suggesting Improvements to Cash Flow Problems	Can you complete an analysis of cash flow information? – considering changes in inflows and outflows over a period and how this affects the enterprise, considering differences between predicted and actual cash flow.	
	Can you analyse cash flow problems – not having enough cash to pay employees and suppliers?	
	Do you know the impact of timings of inflows and outflows, and suggested solutions to problems?	
	<ul style="list-style-type: none"> <li>o increasing revenue</li> <li>o selling off unused assets</li> <li>o selling off inventory</li> <li>o chasing debtors for monies owed</li> <li>o cutting costs</li> <li>o delaying payment to suppliers</li> <li>o reducing credit period offered to customers</li> <li>o cutting back or delaying expansion plans.</li> </ul>	
C4 – Break-even Analysis and Break-Even Point	Can you construct and interpret a break-even chart, and recognise its limitations?	
	Can you identify and use the margin of safety?	
	Do you know the formula for Break-even = fixed costs/ (selling price per unit – variable cost per unit)?	
	Do you know the value and importance of break-even analysis to enterprises when planning?	
	Do you know the limitations of break-even analysis?	
C5 – Sources of Business Finance	Do you know why enterprises may plan different sources of finance for different purposes or at different stages and the relevance of each source?	
	Can you describe the different sources of finance?	
	<ul style="list-style-type: none"> <li>o owner funds</li> <li>o retained profits</li> <li>o loans</li> <li>o credit cards</li> <li>o government grants</li> <li>o hire purchase and leasing</li> <li>o trade credit</li> <li>o venture capital</li> <li>o peer-to-peer lending.</li> </ul>	
	Do you know the advantages and disadvantages of each source?	





## Some Key Points

Mathematical symbols are different in Enterprise

Remember:

MULTIPLICATION USE THE \* SYMBOL

DIVISION USE THE / SYMBOL

NEGATIVE NUMBER USE THE ( ) BRACKETS

### CASH FLOW

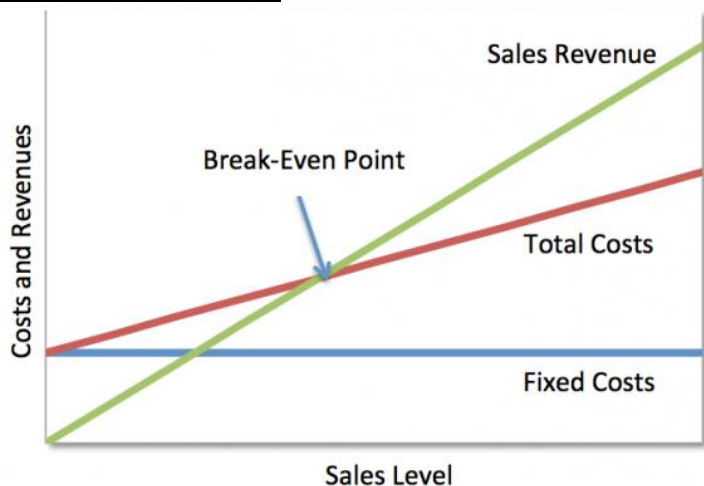


Don't forget, the Closing Balance of one month is the Opening Balance of the next month, e.g. if you have £1000 at the end of January, you will have £1000 at the start of February

You work out the Cash Inflows and subtract Cash Outflows to get your NET CASH FLOW

Then, add the opening balance to get closing balance

### BREAK EVEN CHARTS



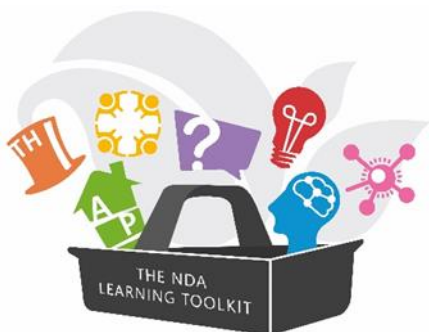
Remember – Sales Revenue is also known as Turnover, Income and Sales

**This line always starts at the 0 mark**

Remember – Total Costs are Fixed Costs + Variable Costs

**This line always starts at the Fixed Costs line**

Fixed Costs is always a straight line because it stays the same



**Break Even Point** = Fixed Costs / (Selling Price Per Unit – Variable Cost Per Unit)

**Margin of Safety** = The amount your sales or quantity can fall before you hit the Break-Even Point where you will still make a profit

**STATEMENT OF COMPREHENSIVE INCOME**

Gross Profit (Revenue – Cost of Sales) How to improve this figure?	Net Profit (Gross Profit – Expenses) How to improve this figure?
Cheaper Supplier Advertise More	Lower Bills Lower Gross Profit

**Cost of Sales** are the raw materials which you need to make the goods and services which you are selling

**Expenses** are the overheads or costs associated with running the business – these are usually variable e.g. phone bill, utilities

**STATEMENT OF FINANCIAL POSITION**

**Assets – Current and Fixed**

**Current Assets** are those which you can sell or use up quickly e.g. bank account

**Fixed Assets** are items of value which may take a while to sell and could have value e.g. machinery, or a debtor

**Liabilities – Current and Long-Term**

**Current Liabilities** – Short term debt less than a year e.g. bank loan

**Long-Term Liabilities** – Debt which lasts longer than a year e.g. mortgage

**PROMOTION**

**Message** – What the promotional method is trying to tell people

**Media (Medium!)** – Which promotional method have you chosen to use?



**Market Segmentation**

The way in which people are grouped and products are targeted at them: age, income, lifestyle, hobbies, gender, geographical location, psychographic, demographic

Enterprises will have to think about how many people will see the information and how much it will cost (budgetary constraints) before they decide upon a method of promotion to use for their products/brands



# Computer Science Hints and Tips

## How do I revise Computer science?

### 1. Craig n Dave

- We know you hate them. But they talk sense. Their content is related to the exam board so watch the videos, for the topics you struggle with, over and over, until you remember it. <https://student.craigndave.org/gcse-videos>



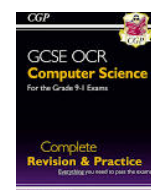
### 2. Revision cards

- We bought you a pack of revision cards each. Use them. Choose a topic, write down the question answers and self-assess yourself when you're done. Or ask a friend or someone you live with to test you. You could do one card per night leading up to the exam.



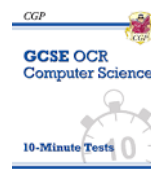
### 3. Use revision guides

- We've given you a copy of the revision guide. Use it to help you with your gap analysis. You've been told which topics you are underperforming in, look them up, read the relevant pages and try the practice questions.



### 4. 10 minute tests

- Test yourself on the topics you have revised or need to improve on. Use the 10 minute test book to practice exam style questions, they use the same command words we've practiced in lessons to prepare you for the exam and get you used to how OCR want you to answer the questions. Time yourself to help with your time management.



### 5. Come to intervention sessions

- The sessions are aimed at the things you couldn't answer in the test. If you miss the session, you'll miss the re-teaching of the topic and mightn't get another opportunity.



### 6. Read the handy Top 5 tips for Paper 1 + Paper 2

#### • Tips for Paper 1 – Computer systems

1. Read the question carefully
2. Revise the command words
3. Don't give similar examples if multiple marks are awarded
4. Answer all questions
5. Use the bullet points given when answering 8 mark questions. Make at least one explained point about each

#### • Tips for Paper 2 – Programming

1. Write an algorithm if you can't remember Pseudocode
2. Break down programs and work out what they are doing
3. Try to think logically
4. Work on your numeracy
5. Practice writing programs and identifying errors

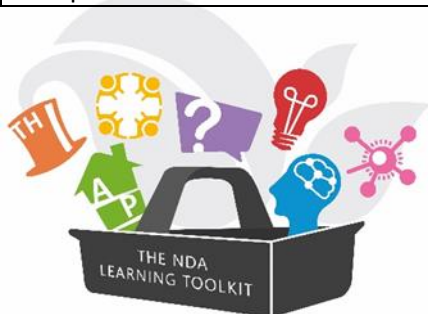
### 7. Read and use the Revision list

Use this as a checklist alongside the one in your revision guide, to help you focus.



Paper 1 – Computer systems				
Topic	Unsure	Heard of it	Can think of some examples	I'm confident with this
CPU				
Memory				
Utility software				
Operating systems				
Open source and Proprietary				
LANs + WANs				
Hardware				
Client server and Peer to Peer				
Topologies				
Protocols				
The internet				
Security threats				
Ethical and Cultural issues				
Environmental issues				
Computer Legislation				

Paper 1 – Computer systems				
Topic	Unsure	Heard of it	Can think of some examples	I'm confident with this
Computational thinking				
Pseudocode				
Flow diagrams				
Search and Sort Algorithms				
Data Types and Operators				
Constants and Variables				
Strings + program flow				
Boolean Operators				
Arrays				
File handling				
Storing and searching data				
Sub programs				
Defensive design				
Testing				
Translators				
Integrated development environments				
Logic and Units				
Binary and Hex				
Characters, storing images and sound				
Compression				



## Spanish Hints and Tips

### Foundation Question 1: Photo Question ( / 8)

¿Qué hay en la foto? Escribe cuatro frases en español.

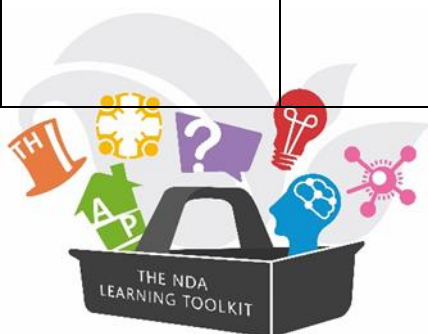
What's in the photo? Write four phrases in Spanish.

 <b>WHO?</b> <b>En la foto hay...</b>	 <b>WHERE?</b> <b>Están en...</b>	 <b>WHAT?</b> <b>Están -ando /-iendo...</b>	 <b>WEATHER?</b> <b>Hace...</b>
<ul style="list-style-type: none"> <li>• <b>dos/tres/muchas personas</b> 2/3/many people</li> <li>• <b>una familia</b> a family</li> <li>• <b>una pareja</b> a couple</li> <li>• <b>unos estudiantes</b> some students</li> <li>• <b>unos niños</b> some children</li> <li>• <b>unos adultos</b> some adults</li> </ul>	<ul style="list-style-type: none"> <li>• <b>un edificio</b> a building</li> <li>• <b>un colegio</b> a school</li> <li>• <b>una casa</b> a house</li> <li>• <b>el aire libre</b> the fresh air</li> <li>• <b>el parque</b> the park</li> <li>• <b>la playa</b> the beach</li> <li>• <b>el jardín</b> the garden</li> </ul>	<ul style="list-style-type: none"> <li>• <b>bailando</b> dancing</li> <li>• <b>sonriendo</b> smiling</li> <li>• <b>escuchando música</b> listening to music</li> <li>• <b>comiendo</b> eating</li> <li>• <b>hablando</b> talking</li> <li>• <b>mirando una película</b> Watching a film</li> <li>• <b>bebiendo</b> drinking</li> <li>• <b>trabajando</b> working</li> <li>• <b>jugando</b> playing</li> </ul>	<ul style="list-style-type: none"> <li>• <b>buen tiempo</b> good weather</li> <li>• <b>mal tiempo</b> bad weather</li> <li>• <b>sol</b> sunny</li> <li>• <b>frío</b> cold</li> </ul>

### Foundation Question 2: 40 word bullet point ( / 16)

Write ten words about each bullet point.

<u>Opinion phrase</u>	<u>Opinión verb</u>	<u>because</u>	<u>Is/are</u>	<u>adjectives</u>
En mi opinión	me gusta(n)	porque	(no) es	divertido
Pienso que	me fascina(n)		(no) son	aburrido
Creo que	me importa(n)			interesante
Según yo	me chifla(n)			importante
	me encanta(n)			útil
	odio			cómodo
				gracioso



**Foundation Question 3: Translation ( / 10)**

Translate 5 sentences into Spanish

**Higher Question 3: Translation ( / 12)**

Translate a paragraph of about 50 words into Spanish

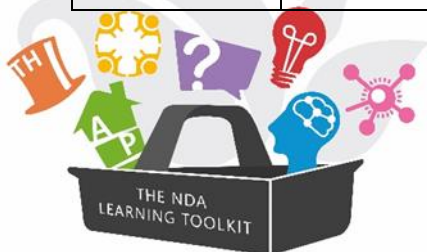
- Time Phrases

<u>Time Phrase</u>	
<b>Normalmente</b> Normally	↓
<b>Actualmente</b> Currently	
<b>Ahora</b> Now	
<b>Cada día/semana/año</b> Every day/week/year	
<b>Todos los días</b> Every day	
<b>Los fines de semana</b> At the weekends	
<b>Siempre</b> Always	
<b>A menudo</b> Often	<b>A veces</b> Sometimes
<b>En el pasado</b> In the past	←
<b>Ayer</b> Yesterday	
<b>Cuando era joven</b> When i was younger	
<b>El año pasado</b> Last year	
<b>La semana pasada</b> Last week	
<b>Desde hace mucho tiempo</b> A long time ago	
<b>En el futuro</b> In the future	
<b>Mañana</b> Tomorrow	
<b>El año que viene</b> Next year	
<b>La semana que viene</b> Next week	
<b>Cuando sea mayor</b> When I'm older	

- Little Words

un/una	a
el/la/los/las	the
en	on
mi/mis	my
más	more
menos	less
a	to
con	with
hay	There are
hay	There is
a las ocho	At 8 O'clock
o	or
de	From, of
para	For, in order to
sin	without

Presente	Preterit	Imperfect	Future 1	Future 2	Conditional
-ar/-er/-er <b>+O</b>	-ar <b>+ é</b>  -er/-ir <b>+ í</b>	-ar <b>+ aba</b>  -er/-ir <b>+ ía</b>	<b>Voy a +</b> infinitive verb	Infinitive verbs <b>+ é</b>	Infinitive verb <b>+ ía</b>






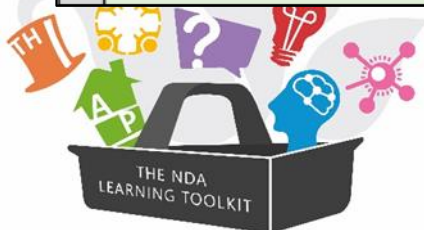
Foundation Question 4: 90 word bullet point ( / 16)

Higher Question 1: 90 word bullet point ( / 16)

Write 20-25 words per bullet point.

- Opinions
- Reasons
- Contradiction
- THREE tenses

Time Phrase	Opinion Phrase	Intensifier	Adjective	Reason	Verbs of Opinion	Contradiction
<b>Normalmente</b> Normally <b>Actualmente</b> Currently <b>Ahora</b> Now <b>Cada día/semana/año</b> Every day/week/year <b>Todos los días</b> Every day <b>Los fines de semana</b> At the weekends <b>Siempre</b> Always <b>A menudo</b> Often <b>A veces</b> Sometimes	<b>En mi opinión</b> In my opinion <b>Pienso que</b> I think that <b>Personalmente</b> Personally <b>Creo que</b> I believe that <b>Según yo</b> According to me <b>Se dice que</b> People say that <b>Me parece que</b> It seems that <b>Desde mi punto de vista</b> From my point of view	<b>Muy</b> Very <b>Bastante</b> Quite <b>Un poco</b> A little <b>Demasiado</b> Too <b>De verdad</b> Really <b>Totalmente</b> Totally	<b>Grande - Pequeño</b> <b>Divertido - Aburrido</b> <b>Fácil - Difícil/ Duro</b> <b>Seguro - Peligroso</b> <b>Débil - Fuerte</b> <b>Antipático - Simpático</b> <b>Barato - Caro</b> <b>Bueno - Malo</b> <b>Trabajador - Perezoso</b> <b>Listo - Tonto</b> <b>Gracioso - Triste</b> <b>Ruidoso - Tranquilo</b> <b>Rápido - Lento</b> <b>Limpio - Sucio</b> <b>Mejor - Peor</b> <b>Rico - Pobre</b> <b>Animado - Timido</b> <b>Útil - Inútil</b> <b>Cortés - Travieso</b> <b>Moderno - Antiguo</b> <b>Nuevo - Viejo</b> <b>Agradable - Desagradable</b> <b>Mismo - Distinto</b> <b>Estupendo - Fatal</b> <b>Sorprendido</b> <b>Genial/Fantástico/Emocionante</b> <b>Justo</b> <b>Interesante</b> <b>Importante</b> <b>Sensible</b>	<b>Porque</b> Because <b>Ya que</b> Since 	<b>Me gusta/encanta/mola/flipa</b> I like/love/mad about <b>Me molesta/fastidia/aburre</b> I'm annoyed about/bores me <b>Me interesa/importa/apasiona</b> I'm interested/important/passionate about <b>Me relaja/ayuda/enseña</b> It relaxes/helps/teaches me <b>Me mantiene feliz/en forma</b> It keeps me happy/in shape	<b>Pero - but</b> <b>Sin embargo - however</b> <b>No obstante - however</b> <b>Aunque - although</b> <b>Por el otro lado</b> on the other hand <b>Según otros</b> According to others <b>Le gusta(n) - he/she likes</b> <b>Les gusta(n) - they like</b> <b>Piensa que - he/she thinks that</b> <b>Piensan que - they think that</b> <b>Complex reasons</b>
<b>En el pasado</b> In the past <b>Ayer</b> Yesterday <b>Cuando era joven</b> When I was younger <b>El año pasado</b> Last year <b>La semana pasada</b> Last week <b>Desde hace mucho tiempo</b> A long time ago	<b>Los adjetivos</b> Agree with number and gender Come AFTER the noun 	<b>Conectivos</b> <b>Y</b> And <b>También</b> Also <b>Además</b> In addition <b>Entonces</b> Therefore <b>Así que</b> Therefore <b>Que</b> Which <b>Por ejemplo</b> For example <b>Tan como</b> Such as <b>Por eso</b> For this	<b>(no) me gustaba/encantaba</b> I used to like/love <b>Me molestaba/fastidiaba/aburría</b> It used to annoy/bore me <b>Me interesaba/importaba</b> It used to interest me/important <b>Me relajaba/ayudaba/enseñaba</b> It used to relax/help/teach me <b>Me mantenía feliz/en forma</b> It used to keep me happy/in shape	<b>(no) me gustaría/encantaría</b> It would annoy me <b>Me molestaría/aburriría</b> It would interest/important <b>Me interesaría/importaría</b> It would relax/help/teach me <b>Me relajaría/ayudaría/enseñaría</b> It would keep me happy/in shape	<b>no se puede - You can (not)</b> <b>(no) suelo - I (don't) usually</b> <b>Puede ser - it can be</b> <b>(no) suelo - I (don't) usually</b> <b>Me hace sentir feliz</b> - It makes me feel happy	
<b>En el futuro</b> In the future <b>Mañana</b> Tomorrow <b>El año que viene</b> Next year <b>La semana que viene</b> Next week <b>Cuando sea mayor</b> When I'm older	<b>Masculine singular</b> pequeño grande fácil	<b>Feminine singular</b> pequeña grande fácil	<b>Masculine plural</b> pequeños grandes fáciles	<b>Feminine plural</b> pequeñas grandes fáciles		













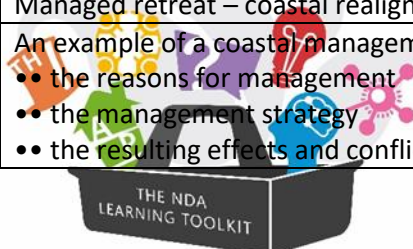
## Geography Hints and Tips

### River landscapes in the UK

			
The long profile and changing cross profile of a river and its valley.			
Erosion – hydraulic action, abrasion, attrition, solution, vertical and lateral erosion			
Transportation – traction, saltation, suspension and solution			
Deposition – why rivers deposit sediment.			
Characteristics and formation of landforms resulting from erosion – interlocking spurs, waterfalls and gorges.			
Characteristics and formation of landforms resulting from erosion and deposition – meanders and ox-bow lakes.			
Characteristics and formation of landforms resulting from deposition – levées, flood plains and estuaries.			
How physical and human factors affect the flood risk – precipitation, geology, relief and land use.			
The use of hydrographs to show the relationship between precipitation and discharge.			
Hard engineering – dams and reservoirs, straightening, embankments, flood relief channels			
Soft engineering – flood warnings and preparation, flood plain zoning, planting trees and river restoration.			
An example of a flood management scheme in the UK to show: <ul style="list-style-type: none"> <li>• why the scheme was required</li> <li>• the management strategy</li> <li>• the social, economic and environmental issues.</li> </ul>			

### Coastal landscapes in the UK







			
Wave types and characteristics.			
Weathering processes – mechanical, chemical			
Mass movement – sliding, slumping and rock falls			
Erosion – hydraulic power, abrasion and attrition			
Transportation – longshore drift			
Deposition – why sediment is deposited in coastal areas.			
How geological structure and rock type influence coastal forms.			
Characteristics and formation of landforms resulting from erosion – headlands and bays, cliffs and wave cut platforms, caves, arches and stacks.			
Characteristics and formation of landforms resulting from deposition – beaches, sand dunes, spits and bars.			
Hard engineering – sea walls, rock armour, gabions and groynes			
Soft engineering – beach nourishment and re-profiling, dune regeneration			
Managed retreat – coastal realignment.			
An example of a coastal management scheme in the UK to show: <ul style="list-style-type: none"> <li>• the reasons for management</li> <li>• the management strategy</li> <li>• the resulting effects and conflicts.</li> </ul>			



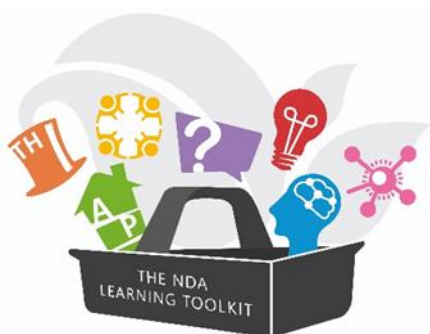
# The Living world

	Covered in class?	😊	😐	☹️	Revision undertaken
Using an example from the UK, I can explain the <b>interrelationship</b> within the natural system.					
I can define and give UK <u>examples</u> of <b>producers consumers, decomposer, food chain, food web and nutrient cycle</b>					
I can explain their <b>interdependence</b> of each of the above and explain how changes might affect each other.					
I can describe the <b>distribution</b> and characteristics of <b>global ecosystems</b> around the world.					
<b>Tropical rainforests (core content)</b>					
I can describe the physical characteristics of the <b>tropical rainforests</b>					
I can explain the <b>interdependence</b> of the climate, water, soils, plants, animals and people in a tropical rainforest					
I can explain how plants and animals have <b>adapted</b> to the physical conditions of tropical rainforests.					
I can describe and explain the problems and issues with changing <b>biodiversity</b> within the tropical rainforest.					
I can describe and explain the changing rates of <b>deforestation</b> .					
I can <u>use a case study</u> to explain the causes of <b>deforestation</b> subsistence and commercial farming, <ol style="list-style-type: none"> <li>1. Logging,</li> <li>2. Road Building</li> <li>3. Mineral Extraction</li> <li>4. Energy Development,</li> <li>5. Settlement</li> <li>6. Population Growth</li> </ol>					
I can <u>use a case study</u> to explain the impacts of <b>deforestation</b> <ol style="list-style-type: none"> <li>1. Economic development</li> <li>2. Soil erosion,</li> <li>3. Contribution to climate change.</li> </ol>					
I can explain the importance and <b>value</b> of the tropical rainforest on a local, national and international scale.					
I can explain why it is important the tropical rainforest should be <b>managed sustainably</b> .					
I can explain how the tropical rainforest can be managed sustainably using a range of methods <ol style="list-style-type: none"> <li>1. Selective logging and replanting</li> <li>2. Conservation and education</li> <li>3. Ecotourism</li> <li>4. International agreements about the use of tropical hardwoods,</li> <li>5. Debt reduction.</li> </ol>					
<b>Hot deserts (option)</b>					
I can describe the physical characteristics of the hot desert					
I can explain the <b>interdependence</b> of the climate, water, soils, plants, animals and people in a hot desert					
I can explain how plants and animals have <b>adapted</b> to the physical conditions of hot deserts					
I can describe and explain the problems and issues with changing <b>biodiversity</b> within the hot desert.					
I can <u>use a case study to</u> explain the causes of <b>desertification</b> subsistence and commercial farming, <ol style="list-style-type: none"> <li>1. Mineral Extraction</li> <li>2. Energy Development</li> <li>3. Farming</li> <li>4. Tourism</li> </ol>					
I can <u>use a case study</u> to explain the challenges of <b>desertification</b> <ol style="list-style-type: none"> <li>1. Extreme temperature</li> <li>2. Water supply</li> <li>3. Inaccessibility</li> </ol>					
I can define and describe <b>desertification</b>					
I can explain the causes of <b>desertification</b> both human and natural					
I can explain a how <b>desertification</b> can be managed using: <ol style="list-style-type: none"> <li>1. Water and soil management</li> <li>2. Tree planting</li> </ol>					

## GCSE: Natural Hazards

Key Idea	What you need to know	  
Natural hazards pose major risks to people and property.	What is a natural hazard?	
	Types of natural hazard	
	Factors that affect hazard risk	
Earthquakes and volcanic eruptions are the result of physical processes.	The theory of plate tectonics	
	Distribution of earthquakes and volcanoes	
	3 different types of plate margin	
The effects of, and responses to, a tectonic hazard vary between areas of contrasting levels of wealth.	Case study – Chile Vs Haiti <ul style="list-style-type: none"> <li>• Primary and secondary effects of the earthquakes.</li> <li>• Immediate and long-term responses to the earthquakes.</li> <li>• Use examples to show how the effects and responses to an earthquake vary between Chile and Haiti</li> </ul>	
Management can reduce the effects of a tectonic hazard.	Reasons why people continue to live in areas at risk from a volcano.	
	How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard.	
Global atmospheric circulation helps to determine patterns of weather and climate.	General atmospheric circulation model: pressure belts and surface winds.	
Tropical storms (hurricanes, cyclones, typhoons) develop as a result of particular physical conditions.	Global distribution of tropical storms (hurricanes, cyclones, typhoons).	
	An understanding of the relationship between tropical storms and general atmospheric circulation.	
	Causes of tropical storms and the sequence of their formation and development.	
	The structure and features of a tropical storm.	
<b>Key Idea</b>	<b>What you need to know</b>	  

Tropical storms have significant effects on people and the environment.	Primary and secondary effects of tropical storms.	
	Immediate and long-term responses to tropical storms.	
	The effects and responses to Typhoon Haiyan.	
	How monitoring, prediction, protection and planning can reduce the effects of tropical storms.	
The UK is affected by a number of weather hazards.	An overview of types of weather hazard experienced in the UK.	
Extreme weather events in the UK have impacts on human activity.	Case study of extreme weather - Cockermonth: <ul style="list-style-type: none"> <li>• Causes</li> <li>• Social, economic and environmental impacts</li> <li>• How management strategies can reduce risk.</li> </ul> Evidence that weather is becoming more extreme in the UK.	
Climate change is the result of natural and human factors, and has a range of effects.	Evidence for climate change from the beginning of the Quaternary period to the present day.	
	Possible causes of climate change: <ul style="list-style-type: none"> <li>• natural factors – orbital changes, volcanic activity and solar output</li> <li>• human factors – use of fossil fuels, agriculture and deforestation.</li> </ul>	
	Overview of the effects of climate change on people and the environment.	
Managing climate change involves both mitigation And adaptation.	Managing climate change: <ul style="list-style-type: none"> <li>• mitigation – alternative energy production, carbon capture, planting trees, international agreements</li> <li>• adaptation – change in agricultural systems, managing water supply, reducing risk from rising sea levels.</li> </ul>	



## Paper 2 – Revision Checklist

Unit 2 Challenges in the Human Environment: 88 marks (including 3 SPaG marks) - 1 hour 30 minutes 35%

### Section A Urban Issues & Challenges (33 marks)

#### A growing percentage of the world's population lives in urban areas

- The global pattern of urban change
- Urban trends in different parts of the world including HICs and LICs
- Factors affecting the rate of urbanisation – migration (push-pull theory), natural increase
- The emergence of megacities

#### Urban growth creates opportunities and challenges for cities in LICs and NEEs

- Opportunities & Challenges of urban growth – social, economic & environmental
- Improving the life of the urban poor: **Favela-Bairro Project, Brazil**
- **Case Study of Challenges and Opportunities of Urban growth in a NEE: Rio-de Janeiro**

#### Urban change in cities in the UK leads to a variety of social, economic and environmental opportunities and challenges

- Overview of the distribution of population and the major cities in the UK
- Opportunities & Challenges of urban growth – social, economic & environmental
- Urban regeneration project: **Grainger Town, Newcastle**
- **Case Study of Challenges and Opportunities of major UK city: Newcastle**

#### Urban sustainability requires management of resources and transport

- Features of sustainable urban living; water and energy conservation, waste recycling, creating green space **Curitiba, Brazil**
- How urban transport strategies are used to reduce traffic congestion **Curitiba, Brazil**

### Section B The Changing Economic World (30 marks)

#### Global Variations in economic development and quality of life

- Measuring levels of development
- Classifying the World in terms of economic development & quality of life
- Development and the Demographic Transition Model - DTM
- Causes and consequences of uneven development

#### Strategies to reduce the global development gap

- Investment, industrial development, tourism, aid, intermediate technology, fair trade, debt relief, microfinance loans
- Growth of tourism to reduce development gap in LIC or NEE: **Jamaica**

#### Rapid economic growth in LICs and NEEs has led to significant social, environmental and cultural change

- **Case Study: Nigeria**
- Location & Importance of Nigeria on a regional and global scale
- Political, social, cultural and environmental context of Nigeria
- Changing industrial structure and growth of manufacturing sector
- Role of transnational corporations in Nigeria (TNCs); advantages and disadvantages **Case study, Shell Oil**
- Political and trading relationships of Nigeria with the rest of the world
- International aid and Nigeria – types of aid & impacts of aid
- Environmental impacts of economic development
- Effects of economic development and the quality of life for the people of Nigeria

#### Impact of changes in the UK economy on employment patterns and regional growth

- Causes of economic change; de-industrialisation, globalisation & government policies
- Post-industrial economy; new industries including IT, service, finance, research, science & business parks
- Social and economic changes in the rural landscape in one area of population growth (**South Cambridgeshire**) and on area of population decline (**Outer Hebrides**)
- The North-South divide and strategies to reduce this divide
- Improvements and developments in the UK's transport networks
- UK's position in the wider world; trade, culture, transport, electronic communication. Economic & political links with the European Union (EU) and the Commonwealth countries
- Impacts of industry on the environment & how industrial development can become more sustainable: **Cambridge Science Park**

### Section C The Challenge of Resource Management (25 marks)

#### Food, water and energy are fundamental to human development

- The significance of food, water and energy to economic and social well-being
- An overview of global inequalities in the supply and consumption of resources

#### The changing demand and provision of resources in the UK creates opportunities and challenges

- **Food**
- The growing demand for high-value food exports from low income countries and all-year demand for seasonal food and organic produce
- Larger carbon footprints due to the increasing number of 'food miles' travelled and moves towards local sourcing of food
- The trend towards agri-business.

#### **Water**

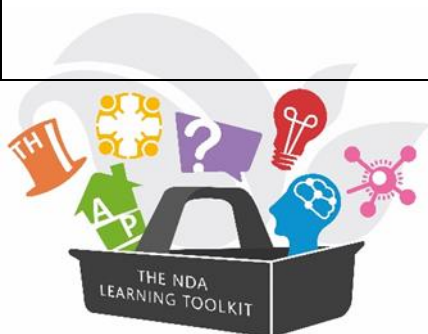
- The changing demand for water
- Water quality and pollution management
- Matching supply and demand – areas of deficit and surplus
- The need for transfer to maintain supplies

#### **Energy**

- The changing energy mix – reliance on fossil fuels, growing significance of renewables
- Reduced domestic supplies of coal, gas and oil
- Economic and environmental issues associated with exploitation of energy sources

#### Our Chosen Topic – Food (Question 4 in the exam) (Don't answer question 5 or 6 on water or energy)

- Areas of surplus (security) and deficit (insecurity)
- Impacts of food insecurity – famine, undernutrition, soil erosion, rising prices, social unrest.
- Strategies to increase food supply (irrigation, aeroponics and hydroponics, the new green revolution and use of biotechnology, appropriate technology)
- Large scale agricultural development to show how it has both advantages and disadvantages. **Almeria, Spain**
- Sustainable food supplies (organic farming, permaculture, urban farming initiatives, fish and meat from sustainable sources, seasonal food consumption, reduced waste and losses)
- A local scheme in an LIC or NEE to increase sustainable supplies of food. **Rice Farming, Bangladesh**



## History Hints and Tips



### Paper 1 – Medicine through Time, 1250-Present & Medicine on the Western Front

1 hour & 15 mins, worth 30% of overall grade



#### Topic 1: 1250-1500: Medieval Britain

- Ideas about the causes of disease and illness
- Approaches to treatment and prevention
- Case Study: Dealing with the Black Death, 1348-1349

#### Topic 2: 1500-1700: Renaissance Britain

- Ideas about the causes of disease and illness
- Approaches to treatment and prevention
- Case Study: Dealing with the Great Plague in London, 1665

#### Topic 3: 1700-1900: Industrial Britain

- Ideas about the causes of disease and illness
- Approaches to treatment and prevention
- Case Study: Fighting cholera in London, 1854

#### Topic 4: 1900-Present: Modern Britain

- Ideas about the causes of disease and illness
- Approaches to treatment and prevention
- Case Study: The fight against lung cancer in the 21st century

#### Topic 5: Historic Environment: Medicine on the Western Front

- The historical context of medicine in the early 20<sup>th</sup> Century
- The context of the British sector of the Western Front
  - Trench system
  - Key Battles
  - Problems of transport & communication
- Conditions requiring medical treatment on the Western Front
- The work of the RAMC and the FANY
  - Chain of evacuation
  - Role of RAMC & FANY in chain of evacuation
- The significance of the Western Front for experiments in surgery and medicine
  - Thomas Splint
  - Mobile x-ray units
  - Blood banks/transfusions
  - Development of plastic surgery/brain surgery





Paper 2 – Early Elizabethans 1558-1588 &  
Superpower relations & the Cold War, 1941-1991



1 hour & 45 mins, worth 40% of overall grade

Elizabethans

Topic 1: Queen, Government and Religion, 1558-1569

- The situation on Elizabeth's succession
- The 'settlement' of religion
- Challenge to the religious settlement
- The problem of Mary Queen of Scots

Topic 2: Challenges to Elizabeth at home and abroad, 1569-1588

- Plots and revolts at home
- Relations with Spain
- Outbreak of War with Spain, 1585-1588
- The Armada

Topic 3: Elizabethan society in the Age of Exploration, 1558-1588

- Education and leisure
- The problem of the poor
- Exploration and voyages of discovery
- Raleigh and Virginia

Cold War

Topic 1: Origins of the Cold War, 1941-1958

- Early tensions between the East and West
- The developments of the Cold War
- The Cold War intensifies

Topic 2: Cold War crises, 1958-1970

- Berlin 1958-1963: Increased tensions and the impact of the Berlin Wall
- The Cuban Missile Crisis
- Czechoslovakia, 1968-1969

Topic 3: The end of the Cold War, 1970-1991

- Attempts to reduce tension between East and West, 1969-1979
- Flashpoints in superpower relations, 1979-1984
- The collapse of Soviet control in Eastern Europe, 1985-1991





## Paper 3 – Weimar & Nazi Germany, 1918-1939

1 hour & 20 mins, worth 30% of overall grade



### Topic 1: The Weimar Republic, 1918-1929

- Origins of the Republic, 1918-1919
- Early challenges to the Republic, 1919-1923
- The recovery of the Republic, 1924-1929
- Changes in society, 1924-1929

### Topic 2: Hitler's rise to power 1919-1933

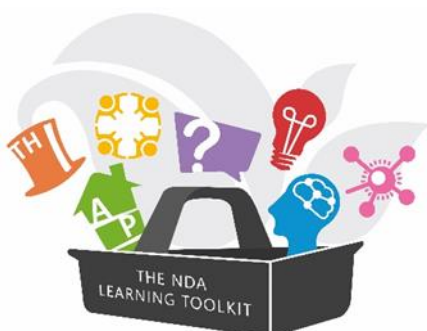
- Early developments of the Nazi Party, 1920-1922
- Munich Putsch and lean years, 1923-1929
- Growth in Nazi support, 1929-1932
- How Hitler became Chancellor, 1932-33

### Topic 3: Nazi Control and Dictatorship, 1933-39

- The creation of a dictatorship, 1933-1934
- The police state
- Controlling and influencing attitudes
- Opposition, resistance and conformity

### Topic 4: Life in Nazi Germany, 1933-1939

- Nazi policies towards women
- Nazi policies towards the young
- Employment and living standards
- Persecution of minorities



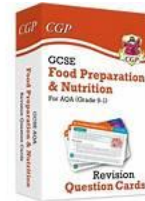


# Food Hints and Tips

## How do I revise Food Preparation & Nutrition?

### 1. Revision cards

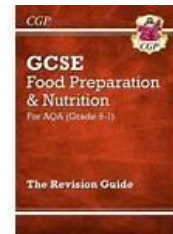
- We have packs of revision cards available for you to use. Use them. Choose a topic, write down the question answers and self-assess yourself when you're done. Or ask a friend or someone you live with to you. You could do one card per night leading up to the exam.



test

### 2. Use. revision guides

- We've given you a copy of the revision guide. Use it to help you with your analysis. You've been told which topics you are underperforming in, look them up, read the relevant pages and try the practice questions.



gap

### 3. Remember the CUSTARD! technique

- C**USTARD - Circle the exam command word to remind yourself they are asking.
- U**STARD - Underline other key words in the question.
- CU**STARD - Scribble some key words.
- CUS**TARD - Think it through and try to make sentences using key words.
- CUST**ARD - Answer all parts of the question.
- CUSTAR**D - Re-read your answer.
- CUSTARD** - Do not rush, do not panic.



what

### Thinking maps



#### Maximise Impact

- Read up on chosen topic from revision guide.
- Create mind map on what you can remember.
- Use revision guide to add anything you forgot.
  - Add pictures and colour.
- Get family/friends to test you on what's on the mind map or try rewriting key points without looking.

#### Revision Guide

- Recall Q's
- Helpful tips and hints
- Identifies keywords



### Index Cards

#### Maximise Impact

#### What can I use index cards for or?

- Use for 'mini mindmaps'
- Create a card per topic
- Key word and definitions
- Questions and answers
- Snap (key words/definitions)
- Answering exam questions

### Comic Strips



#### Maximise Impact

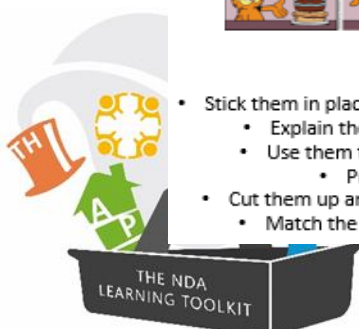
- Stick them in places you do nothing EG: Toilet, Kettle and car.
  - Explain the content to family, friends and pets.
  - Use them to answer exam questions on a topic.
    - Present the topic to the class.
- Cut them up and put them back in the right order again.
  - Match the picture with the description of stage.

## Revision choices

### Practice Games

#### Maximise Impact

- March cards
- Bingo/snap
- Key word domino
- Key word/question crosswords
- Revision Dominoes
- Revision Pong



#### 4. Read and use the Revision list

Use this as a checklist alongside the one in your revision guide, to help you focus.

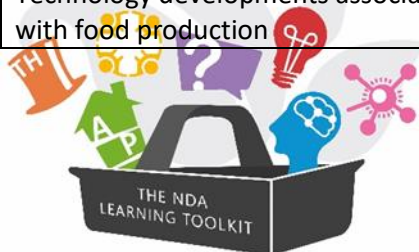
Section 1: Food, Nutrition & Health				
Topic	Unsure	Heard of it	Slightly wobbly	I'm confident
Macronutrient: Protein				
Macronutrient: Fats				
Macronutrient: Carbohydrates				
Micronutrient: Vitamins				
Micronutrient: Minerals				
Water				

Section 2 : Food Science				
Topic	Unsure	Heard of it	Slightly wobbly	I'm confident
Why food is cooked and how heat is transferred to food				
Methods of Heat Transfer				
Selecting appropriate cooking methods				
Functional & Chemical Properties of food				
Why food is cooked and how heat is transferred				

Section 3 : Food Safety				
Topic	Unsure	Heard of it	Slightly wobbly	I'm confident
Micro-organisms and enzymes				
The signs of food spoilage				
Micro-organisms in food production				
Bacterial Contamination				
Buying and Storing Food				
Preparing, cooking and serving food				

Section 4 : Food Choice				
Topic	Unsure	Heard of it	Slightly wobbly	I'm confident
Factors that influence food choice				
Food Choices				
Food labelling and marketing influences				
Traditional Cuisines				
Sensory Evaluation				

Section 5 : Food Provenance				
Topic	Unsure	Heard of it	Slightly wobbly	I'm confident
Food Sources				
Food & Environment				
Sustainability of food				
Food production				
Technology developments associated with food production				



# Health and Social Care Hints and Tips

**How to complete yr11 Exam Paper. 2 hours- 60 marks**

## Section A

**Guidance: Read the case study in detail for 10 minutes and highlight for positive and negative factors in different colours**

**Q1: Case Study 12 marks** 15 minutes

Positive impact on health & Wellbeing

Negative impact on health & wellbeing

**Q2: Case Study 6 marks** 15 minutes

Three impacts on PIES (could be a variety eg. Two social and one emotional)

**Q3 (12 marks)** 15 minutes for all three sections

**Guidance: Read the lifestyle data and highlight the Lifestyle Data, Indicator 1 and Indicator 2 in two colours for current and future**

Lifestyle Data- state data

Describe **current** physical health (2 marks) *peak flow is 300, should be 400. BMI is obese= strain on cardiovascular system due to excess weight*

Describe risk to **future** health (2 marks) *cancers types*

**Indicator 1** (either Blood Pressure, BMI or Peak Flow) *e.g. Peak Flow*

Describe **current** physical health (2 marks) *poor breathing, increase weight as unable to exercise*

Describe risk to **future** health (2 marks) *breathing problems, Asthma*

**Indicator 2** (either Blood Pressure, BMI or Peak Flow) *e.g. BMI*

Describe **current** physical health (2 marks) *reduced mobility, poor nutrition*

Describe risk to **future** health (2 marks) *risk of heart disease, stroke*

**Q4- Design improvement plan (12 marks)** 20 minutes

**Target 1:** State recommended action *e.g. stop smoking*

- Short term target *cut 30 to 5 cigarettes per day*
- Long term target *use nicotine patches*
- Sources of support/how they will help *GP, NHS 'quit smoking' app, work colleagues*

**Target 2:** State recommended action

- Short term target
- Long term target
- Sources of support/how they will help

**Target 3:** State recommended action

- Short term target
- Long term target
- Sources of support/how they will help

Read and **highlight** case study on front page

**TWO HIGHLIGHTERS NEEDED**

Put + against positive factor

Put – against negative factor

Short term= less than 6 months,

Long term= more than 6 months.

*Reduce the number of cigarettes smoked each day*

*Reduce snacking*

*Increase exercise*

*Take up dancing*

*Join a parenting group*

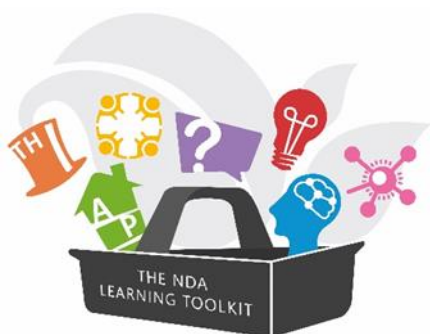
*Plan and eat healthier meals*

*Grow fruit and vegetables in the garden*

*Adopt relaxation techniques.*

Parents • Friends • GP • Support group • Weightwatchers/Slimming World • Pharmacist • Other parents at nursery • Work colleagues • Online apps.

**Q5 Explain how your health improvement plan takes into account the case study's Needs, Wishes and Circumstances (10 marks)** 20 minutes



**Recommended Action 1:**

Needs- (beginning of Q3) *obese= needs to lose weight*  
Wishes- (beginning of Q4) *likes dancing= join dancing class*  
Circumstances- (beginning of Q1) *works part time, find a class on her days off*

Look at your 3 recommended actions from Q, write a sentences on how it takes into account their;

*Needs- Lifestyle data/indicators*

*Wishes- what they want/do not want to do*

**Recommended Action 2:**

Needs- (beginning of Q3)  
Wishes- (beginning of Q4)  
Circumstances- (beginning of Q1)

**Recommended Action 3:**

Needs- (beginning of Q3)  
Wishes- (beginning of Q4)  
Circumstances- (beginning of Q1)

**Q6 Describe possible barriers/obstacles the case study may experience when following the improvement plan and how can they be overcome (8 marks) 20 minutes**

**Barrier 1**

- Name of barrier *Geography*
- Describe how the barrier will affect the case study *Lives in small village with no access to dancing gym*
- How to overcome the barrier *download dance app and do it in the lounge*

Types of Barriers- must relate to case study:

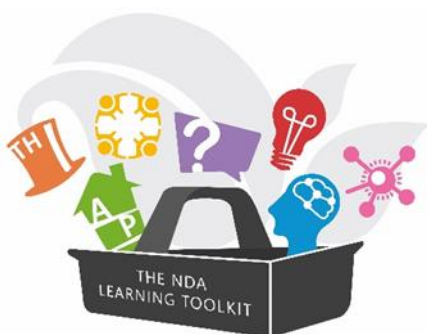
- Physical (Disability)
- Psychological (self-esteem)
- Geographical (lives in a village far away from gym)
- Cultural (Muslim women can't be seen by male doctor)
- Financial (unable to pay for gym membership)
- Resources (time)
- Lack of support from friends
- Sensory

**Barrier 2**

- Name of barrier *psychology*
- Describe the barrier will affect the case study *motivation to attend fitness class*
- How to overcome the barrier *have a friend join same fitness class/listen to music*

**Barrier 3**

- Name of barrier
- Describe how the barrier will affect the case study
- How to overcome the barrier



**Learning Aim A:**  
Factors that affect health and wellbeing

**A1: Factors affecting health and wellbeing**

- Definition of health and wellbeing
- Physical and lifestyle factors
- Social, emotional and cultural
- Economic factors
- Environmental factors
- The impact of life events relating to relationship changes and changes in life circumstances



**Learning Aim B:**  
Interpreting health indicators

**B1: Physiological indicators**

- Physiological indicators that are used to measure health:
  - pulse (resting and recovery rate after exercise)
  - blood pressure
  - peak flow
  - body mass index (BMI).
- Using published guidance to interpret data relating to these physiological indicators
- The potential significance of abnormal readings: risks to physical health



**B2: Lifestyle indicators**

- Interpretation of lifestyle data, specifically risks to physical health associated with:
  - smoking
  - alcohol consumption
  - inactive lifestyles



**Component 3: Health and Wellbeing**

**Learning Aim C:**  
Health and wellbeing improvement plans

**C1: Health and wellbeing improvement plans**

- the importance of a person-centred approach that takes into account an individual's needs, wishes and circumstances.
- information to be included in plan:
  - recommended actions to improve health and wellbeing
  - short-term (less than 6 months) and long-term targets
  - appropriate sources of support (formal and/or informal).

**C2: Obstacles to implementing plans**

- Potential obstacles:
  - emotional/psychological - lack of motivation, low self-esteem, acceptance of current state
  - time constraints - work and family commitments
  - availability of resources - financial, physical, e.g. equipment
  - unachievable targets - unachievable for the individual or unrealistic timescale
  - lack of support, e.g. from family and friends
  - other factors specific to individual - ability/disability, addiction
  - barriers to accessing identified services.

