Beckfoot School

Knowledgeable And Expert Learners

Year 11

2023/24

Nov - Dec

enjoylearnsucceed

Name: ……

Tutor group: ……

Contents

- Homework Instructions QR Codes 3
- Independent Learning: Revise Like a Beckfooter 4
- Read and Reflect Like a Beckfooter 5
- Self-quizzing and knowledge organisers 6
- Beckfoot Power Hour 59
- Flashcards instructions and templates 62
- Mind-maps instructions and templates 71
- Brain-dumps instructions and templates 77
- Revise Like a Beckfooter Rewards 82

What should you be working on each week?

Homework:

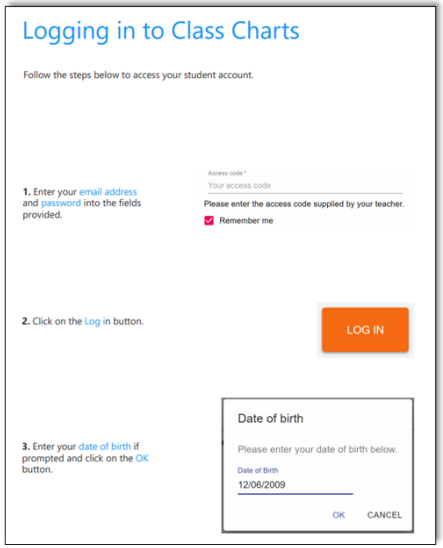
- Your teacher will set specific tasks, with a deadline, on Class Charts
- Instructions for your homework and how to access it are in this booklet
- You must complete and hand in the work by the deadline

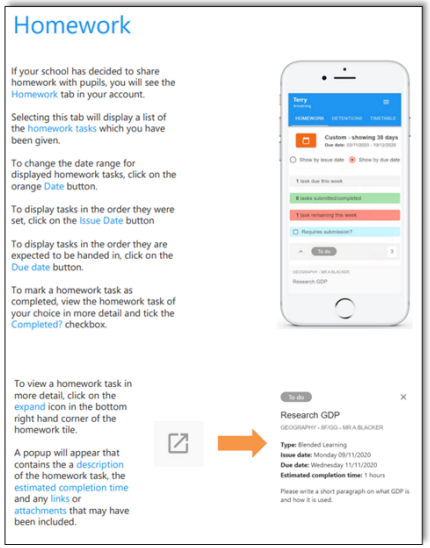
Independent Learning: Revise Like a Beckfooter

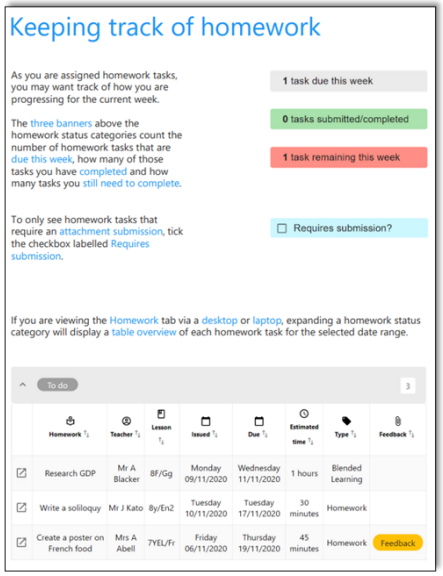
- You should complete 1 task per day, 5 days a week
- The tasks will be set on Class Charts to help you keep track
- You can choose the subject/topic you want to work on
- Your tutor will check your ILB at regular intervals
- You will be rewarded for going above and beyond expectations

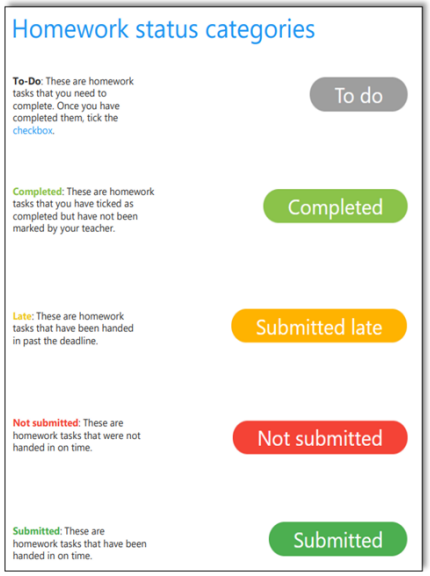
Homework Instructions

- All of your Homework will be set by your teachers using the Class Charts system.
- You should check Class Charts every day to make sure you are up to date, and that you meet all your deadlines.
- In the next few pages, you will find instructions for how to access Class Charts and how to complete your homework assignments in each of your subjects.









Homework Instructions

Scan the QR codes below to find instructions for each subject's homework and access to independent learning resources.

Maths

English

Science

MFL

Humanities

D&T

Perf. Arts

Art

Music

Computing

Knowledgeable & Expert Learners

Confident Communicators

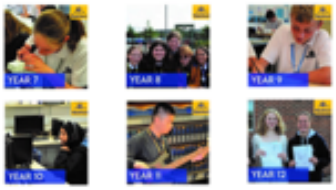
How to access My Learning Resources

My Learning Resources is an online space where you can find all your lesson PowerPoints, knowledge organisers, quizzes and more. This will help you to learn independently and catch up any missed work.

1. Select 'Student Zone' on the homepage of our website

2. Select 'My Learning Resources

You may be asked to enter your school email address and password here



3. Select your year group

3. Select the subject you want to work on

3. Select the relevant half term.

All the resources you need will be here

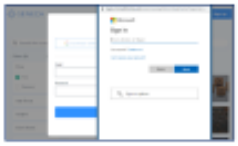
How to access Seneca

Seneca learning is a free online platform that will help you revise for all your subjects.

1. Go to https://senecalearning.com/en-GB/

2. Click 'Log In' at the top right hand corner.

3. Select 'Continue with Microsoft'.



4. Enter your school email and password.

5. Select the course(s) you want to work on.

You can also scan this QR code for a video walkthrough of how to log in as a student

SCAN ME

Independent Learning at KS4: Revise Like a Beckfooter

Independent Learning at KS4 is all about getting you ready for your exams at the end of Y11.

To be successful at exams, it is helpful to understand how memory works. Scientific research into memory and learning tells us that:

- Memories weaken over time
- We forget the most soon after learning
- Stress makes it harder to remember things

You will learn lots of new information over your GCSE years, and you will have to remember that material in your exams at the end. So how can you ensure that you don't forget all that knowledge?

- Revise regularly and repeatedly
- Revise using strategies that are proven to be effective
- Don't leave revision until the last few weeks before exams

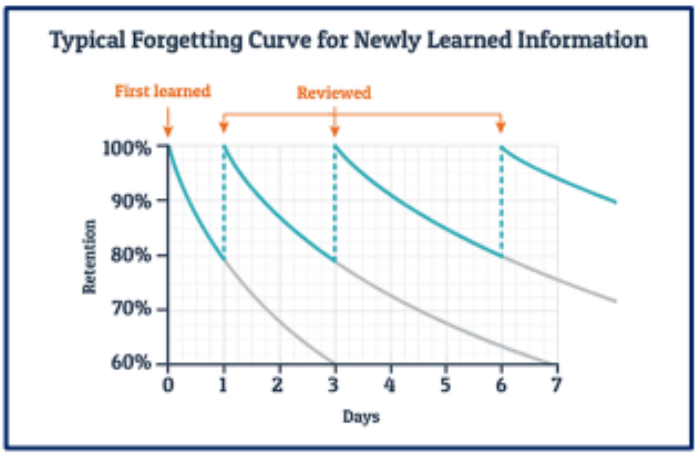
With all this in mind, we have designed a system of structured revision. This will help you develop really strong independent learning habits that will ensure you can:
a) learn more effectively and
b) reduce your stress at exam time

What we expect from you:

- 5 revision tasks per week using the specified revise like a Beckfooter strategy (on Class Charts)
- You choose the subjects – we set the tasks
- Bring your ILB to school every day

What you can expect from us:

- Support with your revision through tutor and lessons
- Revision tasks on Class Charts to help you stay on track
- Your ILB will be checked regularly by your tutor



Our evidence-informed 'Revise Like a Beckfooter' strategies:

1. Self-quizzing
2. Flash Cards
3. Mind-Maps
4. Brain Dumps

Read Like a Beckfooter

Vocabulary

Do you understand the words of the text?

Highlight any you're unsure of, then ask yourself these questions:

1.Can you work out the word from its context? What does it seem like it means?

2. Does it look like any other words you know? Could it mean something similar?

3. If you can't figure it out for yourself, look the word up in a dictionary or online

Comprehension

This means understanding a text. There are two things to think about:

1. Do you understand what it means literally?

2. Can you see what's implied?

To achieve these things:

1. Slow down your reading – many people miss key parts in texts because they go too fast

2. Look carefully at punctuation, which is designed to help you take pauses in the right places

3. Ask a trusted adult to read the text to/with you

Remember: not every text has implied meaning.

In English there will be lots, but there will be very little in many Science and Maths texts.

Summarising

A good summary expresses what really matters about a text as briefly as possible. If you can summarise a text, you must have understood it.

Follow these steps:

1.Summarise the text in five words

2.Summarise the text in twenty words

3.Summarise the text in fifty words

Each time you will have added more information, but you won't have included everything.

By following the process, you've decided what matters and what doesn't.

Reflect Like a Beckfooter

As Knowledgeable and Expert Learners, we are great at being reflective. We ask ourselves lots of questions before, during and after a task, not just at the end! This helps us to make good choices about what we need to do, and the best way to do it. It also helps us to stay motivated, even when things get tough. Finally, it helps to make sure we always complete learning tasks to the very best of our ability.

Before a task, ask yourself:

Comprehension

What is this task about?

What do I understand about it?

What am I being asked to do?

Connection

What do I already know about this?

Have I seen anything like this before?

How is this similar or different to other tasks I have done?

Strategy

Do I know any strategies that would be appropriate for this task?

Which strategy would be most helpful to me now? Have I used this strategy before?

Was it successful?

How can I ensure I am successful this time?

During a task, ask yourself:

Reflection (during the task)

How is this going?

What mistakes do I often make in this kind of task?

How can I avoid making those mistakes?

What am I finding difficult right now?

What am I doing well?

How do I know?

How do I feel about the work?

Am I motivated to complete this task to a high standard?

What can I do to improve my motivation level right now?

After a task, ask yourself:

Reflection (after the task)

Does my finished work look successful?

Does it make sense?

How do I know?

Could I have done this a different way?

Is this work better than I have done in the past?

How do I know?

How did my motivation level affect my performance in the task?

What emotions did I experience during the task?

Why?

How can I motivate myself in a different way in the future? Explain

Self-quizzing

1 Identify knowledge

Identify knowledge/content you wish to cover.

2 Review and create

Spend around 5-10 minutes reviewing content (knowledge organisers/class notes/text book)

Create x10 questions on the content (If your teacher has not provided you with questions)

3 Cover and answer

Cover up your knowledge and answer the questions from memory.

Take your time and where possible answer in full sentences.

4 Self mark & reflect

Go back to the content and self mark your answers in **green** pen.

5 Next time

Revisit the areas where there were gaps in knowledge, and include these same questions next time.

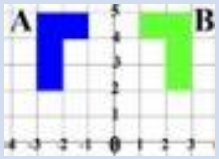
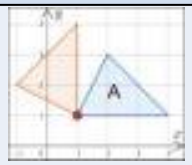
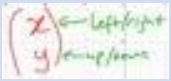
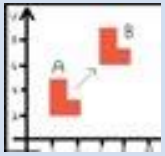
Ensure that you complete all subjects and all topics – not just the subjects you enjoy the most of find easiest.
Practice makes perfect!

Use this table to help you keep track of the knowledge organisers you have self-quizzed on and checked this half term. Blank versions follow every organiser.

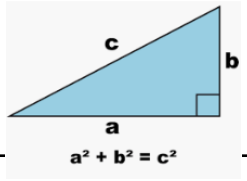
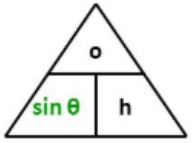
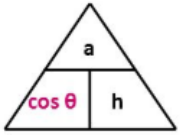
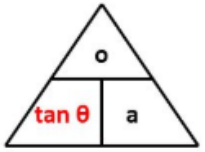
Week 1	Which Subject/Topic?	Week 2	Which Subject/Topic?
Day 1		Day 1	
Day 2		Day 2	
Day 3		Day 3	
Day 4		Day 4	
Day 5		Day 5	

Subject: Maths	Term: Half term 3	Year Group: 11F

Geometry: Transformations

1	**Reflection** (in the y-axis)	
2		**Rotation** 90 degree, anti-clockwise about (1,1)
3	**Translation** Use vector notation	 
4		**Enlargement :** Sf 2 from (0,0)

Geometry: Trigonometry and Pythagoras

1	Pythagoras' Theorem	
2	SOHCAHTOA (cover up the one you need)	  

Key Vocabulary

1	Integer	Whole number that can be positive, negative or zero.
2	Factor	A number that goes into another number with no remainders
3	Product	Another word for multiply
4	Geometric	Multiple by the same value to get the next term
5	Fibonacci	Add the previous 2 terms to get the next .
6	Hypotenuse	The longest side of a right-angled triangle, opposite the right angle
7	Term	Each number in a sequence. The 1st number is the 1st term.

Subject: Maths	Term: Half term 3	Year Group: 11F

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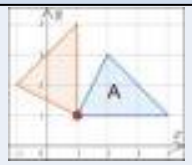
Geometry: Transformations

1	**Reflection** (in the y-axis)	
2		
3	**Translation** Use vector notation	
4		

Geometry: Trigonometry and Pythagoras

1	Pythagoras' Theorem	
2	SOHCAHTOA (cover up the one you need)	

Key Vocabulary

1	Integer	
2	Factor	
3	Product	
4	Geometric	
5	Fibonacci	
6	Hypotenuse	
7	Term	

Subject: Maths	Term: Half term 3	Year Group: 11F

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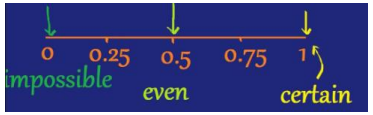
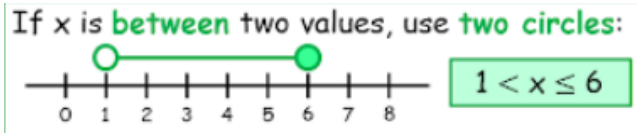
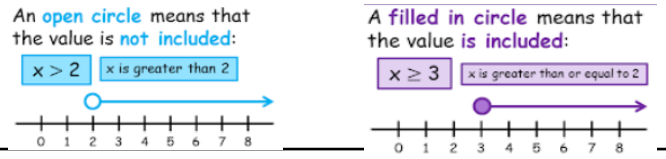
Statistics: Probability

1	Probability scale	
2	Mutually exclusive	Events that cannot happen at the same time. E.g flipping a head and a tail
3	Expected probability	Generating expected numbers based on theory. Eg if you flip a coin 100 times you would expect 50 heads as the probability is 0.5 (0.5 x100 = 50)
4	Relative frequency	Probability generated from an experiment. Eg. If you roll a dice 50 times and get 7 6s. The experimental probability is 7/50

Key Vocabulary		
1	Reciprocal	The reciprocal of a number is: 1 divided by the number



Algebra: Equations

1	Solve one step equations	5x=60 x=60/5 x=12	3	x on both sides	3x+2=6x-5 2=6x-3x-5 (move the smaller x first) 2+5=3x 7=3x 7/3 = x so x = 7/3
2	Solve two step equations	4x - 8 =24 4x = 32 x = 32/4 x = 8	4	Inequalities on a number line	

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Subject: Maths	Term: Half term 3	Year Group: 11F

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Statistics: Probability		
1	Probability scale	
2	Mutually exclusive	
3	Expected probability	
4	Relative frequency	

Key Vocabulary		
1	Reciprocal	

Algebra: Equations					
1	Solve one step equations	5x=60 x=60/5 x=12	3	x on both sides	
2	Solve two step equations	4x - 8 =24 4x = 32 x = 32/4 x = 8	4	Inequalities on a number line	

Subject: Maths	Term: HT3 November – Part 1	Year Group: 11 Higher

Geometry Circle Theorems

1	Arc length & sector area	$\text{arc length} = \frac{\theta}{360°} \times 2\pi r$ $\text{area of sector} = \frac{\theta}{360°} \times \pi r^2$
2	Alternate segment theorem	
3	Prove circle theorems	$(180° - 2w) + (180° - 2y) + a = 360°$ $360° - 2w - 2y + a = 360°$ $a - 2w - 2y = 0$ $a = 2w + 2y$ $a = 2(w + y)$ $w + y = b$ so $a = 2b$
4	Equation of a circle	$x^2 + y^2 = r^2$ r is the radius $x^2 + y^2 = 16$ radius is 4 units

5	Enlarge by a negative SF – This flips the shape. Eg SF -1 about (-1,4)	
6	Prove it's a right angle triangle	A triangle has the sides 3cm, 4cm and 6cm. Is this a right angle triangle? $a^2 + b^2 = c^2$ $3^2 + 4^2 = 6^2$ 9 + 16 = 36 25 ≠36 (they are not equal) It is not a right angle triangle.
7	3D Trig	3D Trigonometry Calculate the angle ∠BHF 3.5cm 3cm 4cm

Key Vocabulary

1	Experimental Vs. Theoretical probability	Experimental probability is the result of an experiment or simulation after a large number of times. Theoretical probability is what is expected to happen based on the possible outcomes, assuming equally likely events.

Number Fractions Decimals

1	+ - x ÷	$= \frac{9 \times 1}{7 \times 5} = \frac{9}{35}$ $1\frac{2}{7} \div 5 = \frac{9}{7} \div \frac{5}{1} = \frac{9}{7} \times \frac{1}{5}$
2	Recurring decimal to fraction	$x = 0.5454545454\ldots$ $100x = 54.5454545454\ldots$ $99x = 54$ $99x = 54$ $x = \frac{54}{99} = \frac{6}{11}$
4	Reciprocal	$0.5 = \frac{1}{2}$ $\frac{1}{2} \quad \frac{2}{1} = 2$ $\frac{4}{3} \quad \frac{3}{4}$
5	Upper lower bounds	Area = wh = ? w = 11.7cm (nearest mm) h = 6.4cm (nearest mm) What are the upper and lower bounds of the area of the rectangle? $11.65 \le w < 11.75$ $6.35 \le h < 6.45$ Lb area = 11.65 x 6.35 Ub area = 11.75 x 6.45

Subject: Maths	Term: HT3 November – Part 1	Year Group: 11 Higher

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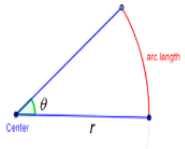
Geometry Circle Theorems

1	Arc length & sector area 	
2	Alternate segment theorem	
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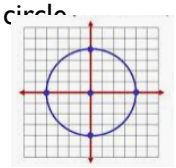
4	Equation of a circle 	
5	Enlarge by a negative SF – This flips the shape. Eg SF -1 about (-1,4)	
6	Prove it's a right angle triangle	g
7	3D Trig	

Key Vocabulary

1	Experimental Vs. Theoretical probability	

1	+ - x ÷	
2	Recurring decimal to fraction	
4	Reciprocal	
5	Upper lower bounds	

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Subject: Maths	Term: HT3 November – Part 2	Year Group: 11 Higher

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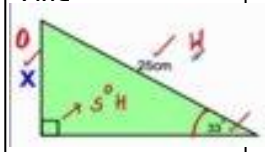
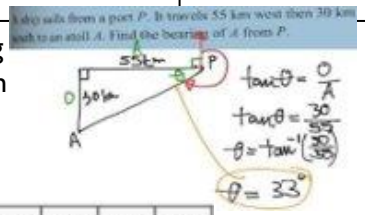
Geometry & Measure – Trigonometry 1

1 Find the r

2 Find



3 Trig with



	0°	30°	45°	60°	90°
sin	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
cos	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
tan	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	–

Exact Trig values

Ratio, Proportion and rates of change – Ratio

1	Divide in a given ratio	eg Divide £350 in the ratio 3:4 between Amy and Bob. 3+4 = 7 (There are 7 parts.) 350 ÷ 7 = 50 (Each part is worth 50) 3 x 50 = £150 for Amy 4 x 50 = £200 for Bob

Algebra

1	Expand and Simplify	Expand and simplify: $2(4a+2b)-2(a+3b)$ $8a+4b-2a-6b$ $6a-2b$
2	Expand double brackets	Multiply each term in the second bracket by each term in the first. $(x+7)(x+2) = x^2+9x+14$
3	Factorise	The **reverse** of **expanding**. Factorising is writing an expression as a product of terms by **'taking out' a common factor**. , where 3 is the common factor.

Algebra Inequalities & Equations

1. Solve inequalities

$-3 \leq 2x-1 \leq 5$
$+1 \quad +1 \quad +1$
$-2 \leq 2x \leq 6$
$\frac{-2}{2} \leq \frac{2x}{2} \leq \frac{6}{2}$
$-1 \leq x \leq 3$

2. Find all the integer solutions which satisfy this inequality:

$-1 \leq x \leq 3$

-1. 0, 1, 2 , 3

3. Solve with unknown both sides

$4m - 3 < 2m + 6$

$-2m \quad -2m$
$2m - 3 < \quad +6$
$+3 \quad +3$
$2m \quad < \quad 9$

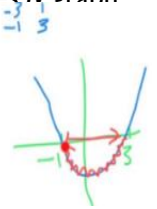
$\frac{2m}{2} < \frac{9}{2}$
$m < \frac{9}{2}$

4. Quadratic inequalities & graph

Solve $x^2 - 2x - 3 < 0$

$(x-3)(x+1) < 0$
$x = 3 \quad x = -1$

$-1 < x < 3$

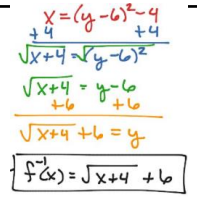


5. Solve fractional equations

Solve $\frac{5}{x-2} = \frac{3}{x}$

$\frac{5}{x-2} = \frac{3}{x}$
$5x = (x-2)(3)$
$5x = 3x - 6$
$2x = -6$
$x = -3$

6. Inverse functions HINT :Change the subject of the formula



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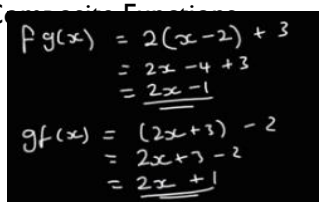
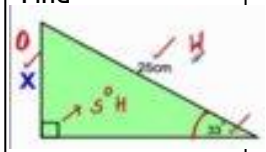


Subject: Maths	Term: HT3 November – Part 2	Year Group: 11 Higher

Geometry & Measure – Trigonometry 1

1	Find the missing angle	
2	Find 	
3	Trig with bearings	Exact Trig values

Ratio, Proportion and rates of change – Ratio

1	Divide in a given ratio	

Algebra

1	Expand and Simplify	
2	Expand double brackets	Multiply each term in the second bracket by each term in the first. $(x+7)(x+2)$
3	Factorise	The **reverse** of **expanding**. Factorising is writing an expression as a product of terms by **'taking out' a common factor**. , where 3 is the common factor.

Algebra Inequalities & Equations

1. Solve inequalities	2. Find all the integer solutions which satisfy this inequality: $-1 \leq x \leq 3$
3. Solve with unknown both sides	4. Quadratic inequalities & graph
5. Solve fractional equations **Solve** $\frac{5}{x-2} = \frac{3}{x}$	6. Inverse functions HINT :Change the subject of the formula
	7. Composite Functions

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English Language Paper 2

Writers' viewpoints and perspectives

Year Group: 11

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Question Summary

	Skill(s) assessed	Marks, timings and question stems	Paragraph structure
1	**Retrieval and inference**	• **4 marks** • (10 minutes including reading source A) • "Choose four statements…"	Shade the circles in the four boxes of the ones that you think are true.
2	**Summarise and Compare**	• **8 marks** • (15 minutes including reading source B) • "Use details from **both** sources to write a summary of …" • 2 paragraphs	**P**oint **E**vidence **I**nference **C**ompare **P**oint **E**vidence **I**nference
3	**Analysis**	• **12 marks** • (15 minutes) • "How does the writer use language to describe…" • 3 paragraphs	**P**oint **E**vidence **A**nalysis
4	**Compare Writers' Perspectives**	• **16 marks** • (20 minutes) • *"Compare how the writers convey their different perspectives on…"* • *3-4 paragraphs*	**P**erspective **O**pinion **M**ethod **C**ompare **P**erspective **O**pinion **M**ethod
5	**Transactional writing**	• **40 marks** • *24 marks for content and organisation* • *16 marks for technical accuracy* • (45 minutes) • You will be asked to write either an article, leaflet, speech, essay or letter	*Describe* *Promote* *Crush the counter argument* *Conclude* *You also need to ensure you use the correct features for the form you have been asked to write in.*

Useful paragraph ideas for (Q5)

1	**Plan**	Consider Purpose, audience and form. Consider which language and structural choices will be appropriate.
2	**Introduction**	An interesting introduction that grabs the examiners attention not "I'm writing to you because"
3	**Comparison**	Make a comparison to a different place, time, group of people, idea, situation
4	**Counter Argument**	Recognise and appreciate how your intended reader may counter argue your points and explain why they're wrong.
5	**Descriptions**	Spend at least three sentences describing the quality, condition feeling etc. Lots of marks for imagery available here!
6	**Examples**	Give an example from your own knowledge or historical understanding. Don't make up statistics.
7	**Metaphors**	Think of a metaphor that could be used to represent this situation
8	**Use a short paragraph**	Don't forget one sentence paragraphs for impact

Types of Transactional Writing (Q5)

1	**Article**	Attention grabbing headline, strapline, subheadings An overview paragraph Effectively sequenced paragraphs
2	**Leaflet**	Title, subheadings Effective paragraphs/sections
3	**Speech**	Clear address to audience and clear sign off Rhetorical indicators that the audience is being addressed throughout Effective paragraphing
4	**Essay**	Effective introduction and conclusion Effectively sequenced ideas and paragraphs
5	**Letter**	Formal mode of address and an appropriate mode of signing off Effective paragraphing

Key Language Terminology (Q3, 4 and 5)

1	**Hyperbole**	Exaggeration
2	**Alliteration**	Using the same sound at the starts of words and placing them close together.
3	**Facts and opinions**	We need to be able to differentiate between facts and opinions. Both are used to support arguments.
4	**Repetition**	Repeating something for impact.
5	**Rhetorical questions**	A question that the writer already knows the answer to.
6	**Emotive language**	Causing an emotional response from the reader
7	**Statistics**	Facts which use numbers. Recognise how these are persuasive but it's best to avoid making statistics up.
8	**Rule of three**	Listing three adjectives or ideas.
9	**Inclusive pronouns**	Makes the reader feel as though they are a community working towards something together E.g. We, us, our
10	**Direct address**	Makes the reader feel as though it is their responsibility E.g. you
11	**Metaphor**	Suggesting something is something it isn't as a means of comparison
12	**Imperative**	Command

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English Language Paper 2

Writers' viewpoints and perspectives

Year Group: 10 & 11

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Question Summary

	Skill(s) assessed	Marks, timings and question stems	Paragraph structure
1	Retrieval and inference		
2	Summarise and Compare		
3	Analysis		
4	Compare Writers' Perspectives		
5	Transactional writing		

Useful paragraph ideas for (Q5)

1	Plan	
2	Introduction	
3	Comparison	
4	Counter Argument	
5	Descriptions	
6	Examples	
7	Metaphors	
8	Use a short paragraph	

Types of Transactional Writing (Q5)

1	Article	
2	Leaflet	
3	Speech	
4	Essay	
5	Letter	

Key Language Terminology (Q3, 4 and 5)

1	Hyperbole	
2	Alliteration	
3	Facts and opinions	
4	Repetition	
5	Rhetorical questions	
6	Emotive language	
7	Statistics	
8	Rule of three	
9	Inclusive pronouns	
10	Direct address	
11	Metaphor	
12	Imperative	

Beckfoot	Subject: Trilogy Science (Biology)	Topic: **Inheritance, Variation & Evolution**	Year Group: 11	enjoy learn succeed

Knowledge: Mitosis Vs Meiosis

	Mitosis (for growth & repair)	Meiosis (makes gametes)
1	Produces two daughter cells	Produces four daughter cells
2	Daughter cells are genetically identical	Daughter cells are not genetically identical
3	The cells divide once	The cells divides twice
4	The chromosome number of the daughter cell is the same as the parent cell. In humans this is 46 chromosomes.	The chromosome number is reduced by half. In humans, this is 23 chromosomes.
5	Used for growth and repair, and asexual reproduction.	Produces gametes for sexual reproduction.

Additional Information:

How to complete a Punnet square
How to determine offspring using a Punnet square
How to work out probability using a Punnet square
Examples and features of inherited diseases

Key Vocabulary

1	Allele	An alternative form of a gene
2	Asexual reproduction	The production of offspring from a single parent by mitosis. Offspring are clones of the parent.
3	Chromosome	Structure that contains the DNA of an organism, found in the nucleus
4	DNA	A polymer that is made up of two strands that form a double helix
5	Dominant	An allele that is always expressed, even if only one copy is present
6	Gene	A small section of DNA that codes for a specific protein
7	Genome	The entire genetic material of an organism

Key Vocabulary

8	Genotype	The combination of Alleles
9	Heterozygous	A genotype that has two different alleles, one dominant one recessive
10	Homozygous	A genotype that has two of the same alleles, either two dominant or two recessive
11	Mutation	A change in DNA
12	Phenotype	The characteristic expressed because of the combination of alleles
13	Recessive	An allele that is only expressed if two copies of it are present
14	Sexual reproduction	The production of offspring by combining genetic information from the gametes of two parents. Leads to variation in offspring

Beckfoot	Subject: Trilogy Science (Biology)	Topic: **Inheritance, Variation & Evolution**	Year Group: 11	enjoy learn succeed

Knowledge: Mitosis Vs Meiosis

	Mitosis (for growth & repair)	Meiosis (makes gametes)
1		
2	Daughter cells are genetically identical	Daughter cells are not genetically identical
3	The cells divide _____	The cells divide _____
4	The chromosome number	The chromosome
5	Used for _____	Produces gametes for _____.

Additional Information:

How to complete a Punnet square
How to determine offspring using a Punnet square
How to work out probability using a Punnet square
Examples and features of inherited diseases

Key Vocabulary

1	Allele	
2	Asexual reproduction	
3		
4	DNA	
5		An allele that is always expressed, even if only one copy is present
6	Gene	
7		The entire genetic material of an organism

Key Vocabulary

8	Genotype	The combination of Alleles
9	Heterozygous	
10	Homozygous	
11		A change in DNA
12		The characteristic expressed because of the combination of alleles
13	Recessive	
14		The production of offspring by combining genetic information from the gametes of two parents. Leads to variation in offspring

Beckfoot	Subject: Trilogy Science (Biology)	Topic: Inheritance, Variation & **Evolution**	Year Group: 11	enjoy learn succeed

Knowledge: Fossils

Fossils could be:

1	The actual remains of an organism that has not decayed
2	Mineralised forms of the harder parts of an organism, such as bones
3	Traces of organisms such as footprints or burrows

Many early life forms were soft bodied so have left few traces behind.

Fossils help us understand how much or little organisms have changed as life developed on earth

Knowledge: Classification

1	Linnaeus classified living things into Kingdom, Phylum, Class, Order, Family, Genus and Species
2	Organisms are named by the binomial system of genus and species
3	Due to evidence from chemical analysis, there is now a 'three-domain system' developed by Carl Woese –Bacteria, Archaea, Eukaryota

Knowledge: Evolution

All species of living things have evolved from simple life forms by natural selection

1	If a variant/characteristic is advantageous in an environment, then the individual will be better able to compete
2	This means they are more likely to survive and reproduce
3	The offspring will inherit the advantageous allele

Knowledge: Variation

May be due to differences in:

1	The genes that have been inherited (genetic causes)
2	The conditions in which they have developed (environmental causes)
3	A Combination of genes and the environment

Knowledge: Reducing antibiotic resistance

1	Antibiotics should only be used when really needed and for serious bacterial infections only (not viral)
2	Patients should complete their courses of antibiotics, even if they feel better.
3	The agricultural use of antibiotics should be restricted.

Key Vocabulary

1	Evolution	A change in the inherited characteristics of a population over time through natural selection
2	Extinction	The permanent loss of all members of a species
3	Natural selection	The process by which organisms that are better suited to an environment are more likely to survive and reproduce
4	Speciation	Two species evolve from one organism but can no longer breed to produce fertile offspring

Additional Information: The process of Genetic Engineering, The process of Selective Breeding, The process of Antibiotic resistance

Subject: Trilogy Science (Biology)	Topic: Inheritance, Variation & **Evolution**	Year Group: 11

Knowledge: Fossils

Fossils could be:

1	
2	
3	

Many early life forms were soft bodied so have left few traces behind.

Fossils help us

_____

_____

_____

Knowledge: Classification

1	Linnaeus classified living things into
2	
3	_____ _____

Knowledge: Evolution

All species of living things have evolved from simple life forms by natural selection

1	
2	This means they are
3	The offspring will

Knowledge: Variation

May be due to differences in:

1	
2	
3	

Knowledge: Reducing antibiotic resistance

1	
2	
3	The agricultural use of antibiotics should be restricted.

Key Vocabulary

1	Evolution	
2		The permanent loss of all members of a species
3	Natural selection	
4	Speciation	

Additional Information: The process of Genetic Engineering, The process of Selective Breeding, The process of Antibiotic resistance

Beckfoot

Subject: Science	Topic: Waves (6)	Year Group: 11

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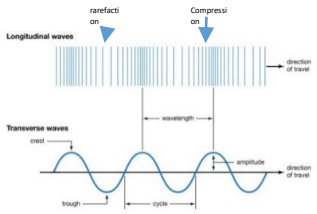
Properties of Waves

1	**Transverse waves** oscillate perpendicular (at right angles) to the direction of travel, e.g. ripples on water.	
2	**Longitudinal waves** oscillate parallel (in the same direction) to the direction of travel e.g. sound waves.	
3	Wavelength	The distance from one point on a wave to the equivalent point on the next wave.
4	Frequency	The number of waves that pass a point in one second.
5	Amplitude	The maximum displacement of a point on the wave from its undisturbed position.

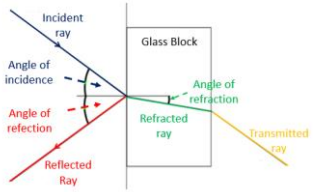
Properties of Waves Equations

1	Frequency	T = 1 / f T = time period in seconds, s f = frequency in hertz, Hz
2	Wave speed, frequency and wavelength	v = f x λ v = wave speed in metres per second, m/s f = frequency in hertz, Hz λ = wavelength in metres, m

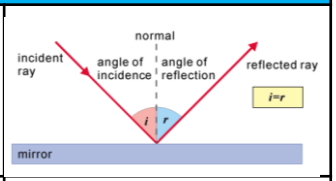
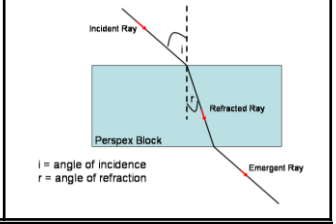
Measuring Wave Speed (RP)

1	**Investigating waves using a ripple tank.**	Oscillator creates waves in ripple tank. A light shines through meaning the waves can be seen on the screen below. If a strobe is set on the ripple tank at the same frequency as the waves, it appears as though they are standing still.
2	**Investigating waves using a string.**	An oscillator creates waves along the string, because the wave 'bounces back' when it reaches the end it can create a 'standing wave'.
3	Measuring speed of sound waves in air	Stand 100m from a wall, bang two wooden blocks together and time how long it takes to hear the echo. Divide this time by 200 (the distance travelled to the wall and back). Equation: Speed = distance /time.
4	Wavelength	Can be calculated by measuring the distance between waves – remember to take into account the effect of magnification on the screen. For a standing wave on a string, a measurement between two nodes is half a wavelength.
	Frequency	Frequency is shown on the oscillator or by calculating the number of waves passing a single point.
	Wave speed	Calculate using the equation v = f x λ.

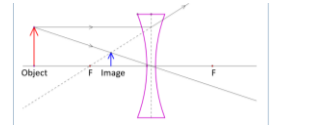
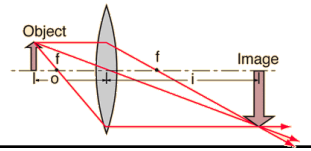
Reflection and Refraction (RP)

1	Use **a ray box** with a slit to create a beam of light. Place a **Perspex box** on a piece of white paper- draw an outline. **Shine the beam** towards the Perspex. Draw on the paper **where it enters and exits**. Some light will also reflect. Now find the angles with a protractor. Measure from the normal (a straight line 90˚ from the perspex).	 Angle of incidence = Angle of reflection. The angle of refraction tells you the refractive index (the difference in speed that light travels compared to air. Refractive index = sin (angle of incidence) / sin (angle of refraction).

Reflection and refraction

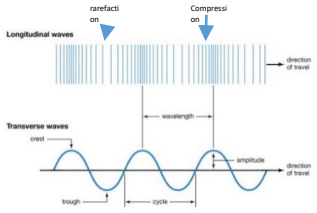
1	Waves can be **reflected** at a boundary between two different materials.	
2	Waves can be **refracted** when the density of the material it is travelling through changes, this makes the wave change speed and so the direction of travel.	

Lenses

1	**Concave** lenses make parallel waves spread out.	
2	**Convex** lenses make parallel waves converge (come together) to a focus.	
3	Focal length	Is the distance from the principal focus (where the rays are focused) to the lens.
4	Real image	Can be formed on a screen behind the lens.
5	Virtual image	Is formed where the rays appear to come from (e.g. a magnifying glass).

Subject: Science	Topic: Waves (6)	Year Group: 11

Properties of Waves

1	**Transverse waves**	
2	**Longitudinal waves**	
3	Wavelength	The distance from
4	Frequency	
5	Amplitude	

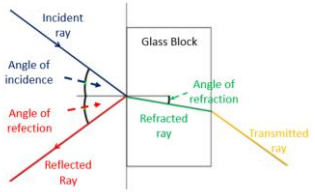
Properties of Waves Equations

1	Frequency	T = T = f =
2	Wave speed, frequency and wavelength	v = v = f = λ =

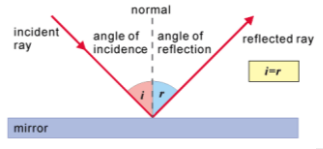
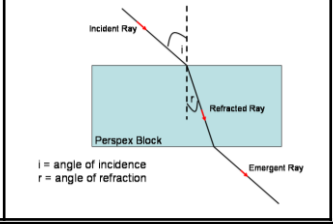
Measuring Wave Speed (RP)

1	**Investigating waves using a ripple tank.**	
2	**Investigating waves using a string.**	
3	Measuring speed of sound waves in air	Stand 100m from a wall,
4	Wavelength	Can be calculated by
	Frequency	
	Wave speed	Calculate using the equation

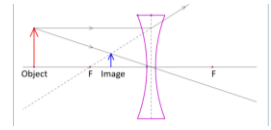
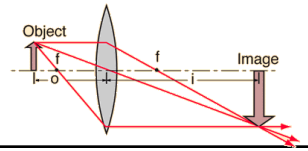
Reflection and Refraction (RP)

1	Use **a ray box** **Shine the beam** towards the Perspex. Draw on the paper **where**	 Angle of incidence = The angle of refraction tells

Reflection and refraction

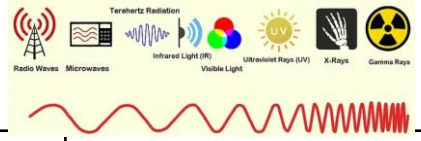
1	Waves can	
2	Waves can be	

Lenses

1	make parallel waves spread out.	
2	make parallel waves converge (come together) to a focus.	
3	Focal length	
4	Real image	
5	Virtual image	

Subject: Science	Topic: Waves (6)	Year Group: 11

Electromagnetic Spectrum (Transverse waves)

1	Electromagnetic waves are electric and magnetic disturbances that can be used to transfer energy from a source to an absorber. This makes them useful for certain technologies.	
2	EM waves form a continuous spectrum, and all types can travel through a vacuum or air. 	
3	Radio waves – long λ / low f	Used for communication (TV & Radio) When absorbed may create an AC with the same f
4	Microwaves	Used for communication. (satellite communications) Used for heating up food.
5	Infrared (IR)	All objects emit infrared radiation – the hotter the object, the more infrared it emits. Different surfaces absorb and emit different levels of IR radiation. Infrared cameras can be used to detect heat, so can be used for night vision or for medical purposes.
6	Visible light (ROYGBIV)	Light from the sun or from bulbs is white light, can be used for fibre optic communications
7	Ultraviolet (UV)	Can be used to mark valuable objects, then visible under certain light. Used for energy efficient lamps. Can be harmful to eyes and skin, link to skin cancer
8	X-Rays	Can travel straight through objects, if the are not too dense. Used for medical purposes. Can cause ionising radiation.
9	Gamma rays – short λ / high f	Can travel straight through objects, if they are not too dense, so used for medical imaging. Used for killing harmful bacteria e.g. on food. Used for cancer treatments.

Visible Light

1	White light can be split into the colours of the rainbow (spectrum) using a prism.	Red, Orange, Yellow, Green, Blue, Indigo, Violet. Red has the longest wavelength Violet has the shortest wavelength
2	Objects absorb and reflect different wavelengths depending on their colour.	E.g. A red top will reflect light of red's wavelength, but absorb all other wavelengths.
3	Colours can mix to form different shades. There are 3 primary colours and 3 secondary. The 3 primary colours form white light.	Primary – Red, green, blue. Secondary – Cyan (green + blue), magenta (red + blue), yellow (red + green). (These primary and secondary colours are different to the ones you learn in art, because light is different to colour pigments, like paint).
4	Opaque	Allows no light through
5	Translucent	Allows light to pass through but distorts the image.
6	Transparent	Allows light through and provides a clear image (includes coloured filters).

Key Vocabulary

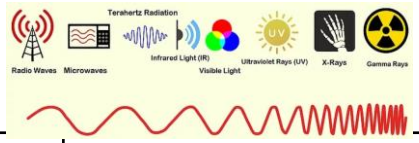
1	Longitudinal Wave	Oscillate parallel (in the same direction) to the direction of travel e.g. sound waves.
2	Transverse Wave	Oscillate perpendicular (at right angles) to the direction of travel, e.g. ripples on water.
3	Wavelength	The distance from one point on a wave to the equivalent point on the next wave.
4	Frequency	The number of waves that pass a point in one second.

Key Vocabulary Continued…

5	Amplitude	The maximum displacement of a point on the wave from its undisturbed position.
6	Oscillator	Machine used to make waves at a specific frequency.
7	Ray diagram	A symbol drawing used to demonstrate how light rays move.
8	Normal	A straight line perpendicular (90°) from the object light is travelling towards.
9	Angle of incidence	Angle between the incident ray and the normal
10	Angle of reflection	Angle between the reflected ray and the normal (equal to angle of incidence).
11	Angle of refraction	Angle between the refracted ray and the normal.
12	Convex	A lens that makes light rays parallel to the principle axis meet at a point.
13	Concave	A lens that makes parallel rays spread out.
14	Principle focus	The point where light rays parallel to the principle axis of a lens focus.
15	Real image	An image formed by a lens that can be projected onto a screen.
16	Virtual image	An image seen in a lens or mirror, from which light rays appear to come after being refracted by a lens or reflected by a mirror.
17	Electro-magnetic spectrum	The continuous spectrum of electromagnetic waves, which have various uses.
18	Sievert (Sv)	A measure of radiation dose, a measure of the risk of harm resulting from an exposure of the body to radiation

Subject: Science	Topic: Waves (6)	Year Group: 11

Electromagnetic Spectrum (Transverse waves)

1	Electromagnetic waves are	
2	EM waves form a continuous spectrum, 	
3	Radio waves – long λ / low *f*	
4	Microwaves	
5	Infrared (IR)	
6	Visible light (ROYGBIV)	
7	Ultraviolet (UV)	
8	X-Rays	
9	Gamma rays – short λ / high *f*	

Visible Light

1	White light can be split into the colours of the rainbow (spectrum) using a prism.	
2	Objects absorb and reflect different wavelengths depending on their colour.	
3	Colours can mix to form different shades. There are 3 primary colours and 3 secondary. The 3 primary colours form white light.	
4	Opaque	
5	Translucent	
6	Transparent	

Key Vocabulary

1	Longitudinal Wave	
2	Transverse Wave	
3	Wavelength	
4	Frequency	

Key Vocabulary Continued…

5	Amplitude	
6	Oscillator	
7	Ray diagram	
8	Normal	
9	Angle of incidence	
10	Angle of reflection	
11	Angle of refraction	
12	Convex	
13	Concave	
14	Principle focus	
15	Real image	
16	Virtual image	
17	Electro-magnetic spectrum	
18	Sievert (Sv)	

Beckfoot

Subject: Science (Chemistry)	Topic: Quantitative Chemistry	Year Group: 11

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Calculation Types I

1	Relative atomic mass (A_r)	A_r = sum of (isotope abundance x isotope mass no.) / sum of abundances of all the isotopes Example: ^{35}Cl 75% abundance & ^{37}Cl 25% abundance (35 x 75) + (37 x 25) ÷ 100 = **35.5 A_r of Chlorine**
2	Relative formula or molecular mass (M_r)	Sum of the relative atomic masses of all the atoms shown in the formula Example $MgSO_4$ contains: 1 x Mg: 1 x 24 = 24 1 x S: 1 x 32 = 32 4 x O: 4 x 16 = 64 So the relative formula mass = 24 + 32 + 64 = **120**
3	% mass of an element in a compound	A_r x (No. of atoms of that element / M_r of the compound) x 100 Example: Find the % mass of O in Na_2O A_r of Na is 23; A_r of O is 16 1 x O atom so 1 x16 = 16 M_r of Na_2O so (2 x 23) + (1 x 16) = 62 % mass = A_r ÷ M_r x 100 so 16 ÷ 62 x 100 = **26%**
4	The mole & A_r / M_r	The mass of one mole of a substance in grams is equal to its relative atomic mass or relative formula mass. **Number of moles = mass in g (of an element or compound) / M_r (of the element or compound)** Example: how many moles is 48 g of sulfur? A_r of S is 32 So mass in g divided by A_r is 48 ÷ 32 = **1.5 moles**

Calculations Types II

5	**HT Only**: The mole & Avogadro's Constant	A mole of a substance **ALWAYS** contains the same number of molecules/ions/particles/atoms – this is called Avogadro's Constant: 1 mole = 6.02x10^{23} $$\text{number of moles} = \frac{\text{number of particles}}{6.02 \times 10^{23}}$$ Example: How many atoms are in 11.5 g of sodium? • Calculate number of moles first = 11.5 ÷ 23 = 0.5 moles • No. of moles (0.5) x 6.02 x 10^{23} = **3.01 x 10^{23} atoms**
6	Concentration	Concentration is the amount of substance in a specific volume of a solvent. It can be expressed as mass (in g) per unit volume, g/dm^3 or g dm^{-3} ***or*** moles in a specific volume of solvent, mol/dm^3 or mol dm^{-3} (**Chemistry only**). *You can increase the concentration of a solution by adding more solute/solid or reducing the volume of solvent.* Concentration (g/dm^3) = mass (g) / volume (dm^3) Examples: What volume of water do I need to add to 25 g of common salt to get a concentration 0.65 g / dm^3? Volume = mass ÷ concentration so 25 ÷ 0.65 = **38.5 dm^3** **Chemistry Only**: Concentration = number of moles / volume (dm^3) (mol/dm^3) Calculate the number of moles in a 0.55 dm^3 solution with a concentration of 0.35 mol/dm^3 No. of moles = concentration x volume 0.35 x 0.55 = **0.19 moles**

Key Vocabulary

1	Law of Conservation of Mass	No atoms can be created or destroyed in a chemical reaction so the total mass of reactants must equal the total mass of the products
2	Relative atomic mass (A_r)	Average mass of an element taking into account the mass & amount of each isotope it contains on a scale where the mass of a ^{12}C atom is 12
3	Relative formula (or molecular) mass (M_r)	The sum of the relative atomic masses of all the atoms shown in the formula
4	**HT only:** Mole	Measurement of the amount of substance / mass of a substance that contains 6.02 x 10^{23} particles
5	**HT only:** Avogadro's constant	The number of atoms, molecules or ions in one mole of a given substance (6.02 x 10^{23}). *One mole of any substance contains the same number of particles as the number of atoms in one mole of carbon 12.*
6	Uncertainty	The range of values within which the true value is expected to lie. So, for example, a volume of gas collected would be 10cm^3 plus or minus 1cm^3 so expressed as 10cm^3 +/- 1cm^3 so true value is anywhere between 9-11cm^3

Subject: Science (Chemistry)	Topic: Quantitative Chemistry	Year Group: 11

Calculation Types I

1	Relative atomic mass (A_r)	A_r = sum of (_____ x _____) / sum of Example: ^{35}Cl 75% abundance & ^{37}Cl 25% abundance
2	Relative formula or molecular mass (M_r)	Sum of the... Example $MgSO_4$ contains: 1 x Mg: 1 x 24 = 24 1 x S: 1 x 32 = 32 4 x O: 4 x 16 = 64 So the relative formula mass =
3	% mass of an element in a compound	A_r x No. of / M_r of the x 100 Example: Find the % mass of O in Na_2O A_r of Na is 23; A_r of O is 16
4	The mole & A_r / M_r	The mass of is equal to its or . **Number of moles = mass in g (of an element or compound) / M_r (of the element or compound)** Example: how many moles is 48 g of sulfur? A_r of S is 32

Calculations Types II

5	**HT Only**: The mole & Avogadro's Constant	A mole of a substance **ALWAYS** contains the – this is called Avogadro's Constant: 1 mole : $\text{number of moles} = \frac{\text{number of particles}}{6.02 \times 10^{23}}$ Example: How many atoms are in 11.5 g of sodium?
6	Concentration	Concentration is the amount of... It can be expressed as... (**Chemistry only**). *You can increase the concentration of a solution by adding more... or...* Concentration (g/dm^3) = Examples: What volume of water do I need to add to 25 g of common salt to get a concentration 0.65 g / dm^3? **Chemistry Only**: Concentration = number of moles (mol/dm^3) / volume (dm^3) Calculate the number of moles in a 0.55 dm^3 solution with a concentration of 0.35 mol/dm^3

Key Vocabulary

1	Law of Conservation of Mass	
2	Relative atomic mass (A_r)	
3	Relative formula (or molecular) mass (M_r)	
4	**HT only:** Mole	
5	**HT only:** Avogadro's constant	
6	Uncertainty	

Subject: Science (Chemistry)	Topic: Quantitative Chemistry	Year Group: 11

Calculations Types III

5	**Chemistry Only** Percentage yield (%)	The amount of product formed in a reaction compared to the maximum theoretical mass that could be produced as a percentage $\text{percentage yield} = \frac{\text{mass of product actually made}}{\text{maximum theoretical mass of product}} \times 100$ Example: 25g of salt was produced in a reaction but the expected mass was 80g. What is the % yield? 25 ÷ 80 x 100 = **31.3%**
6	**Chemistry Only** Atom economy	A way of measuring what percentage of the mass of all the atoms in the reactants ends up in the desired product $\text{atom economy} = \frac{\text{relative formula mass of desired product}}{\text{relative formula mass of all reactants}} \times 100$ Example: The reaction below is used to produce calcium oxide (CaO). Calculate the atom economy of the reaction: $CaCO_3 \rightarrow CaO + CO_2$ M_r of CaO = 40 + 16 = 56 (desired product) M_r of $CaCO_3$ = 100 (Formula mass of all reactants) Therefore, 56 ÷ 100 x 100 = **56%**
	Chemistry Only Gas volumes	1 mole of a gas at room temperature (20°C) and pressure (1 atm) occupies a volume of 24dm³ $\text{Volume of gas (in dm}^3\text{)} = \frac{\text{Mass of gas (in g)}}{M_r \text{ of gas}} \times 24$ Example: What volume will 88g of CO_2 gas occupy at room temperature & pressure? Volume = mass ÷ M_r x 24 so 88 ÷ 44 = 2 x 24 = **48 dm³**

Mass Conservation in Chemical Reactions

1	The law of mass conservation in terms of a chemical reaction…	The total number of each type of atom in a chemical reaction is the same before and after the reaction
2	How can we show conservation of mass in a chemical equation?	The total M_r of all the reactants will be equal to the total M_r of all the products
3	Why might mass appear to go up in a reaction?	Due to one or more reactants being a gas found in air, that 'adds on' to the substance
4	Why might mass appear to go down?	One of the products is a gas that escapes

HT only: Reacting Mass Calculations: the steps

1	Example question	*What mass of calcium chloride ($CaCl_2$) is produced when 3.7g of calcium hydroxide ($Ca(OH)_2$) reacts with an excess of hydrochloric acid (HCl)?*
2	Write out the balanced equation & identify what we know & don't know	$Ca(OH)_2 + 2HCl \rightarrow CaCl_2 + 2H_2O$ 3.7g ?
3	Work out the moles of what you know	$Ca(OH)_2 + 2HCl \rightarrow CaCl_2 + 2H_2O$ Remember moles = mass ÷ Mr 3.7 ÷ 74 Mr of $Ca(OH)_2$ is 74 = 0.05 mol
4	Check ratio in the balanced equation	1 unit of $CaCl_2$ is formed from 1 unit of $Ca(OH)_2$ So whatever moles of what you have worked out ($Ca(OH)_2$) will make the same moles of what you need to work out (calcium chloride)
5	Calculate the number of moles of what you don't know	We will make 0.05 moles of $Ca(OH)_2$ as the ratio of both compounds in the equation is 1:1
6	Calculate the mass of what you don't know	So in the last step we are converting moles to a mass in grams Mass = M_r x Moles M_r of $CaCl_2$ is 111 111 x 0.05 = **5.6g**

Key Vocabulary

7	Thermal decomposition	Reaction where heat causes a substance to break down into simpler substances
8	**HT only**: Limiting reactant / reagent	The reactant in a reaction that determines the amount of products formed. Any other reagents are in excess & some of them will be left over, unreacted
9	**HT only**: Excess	When the amount of a reactant is greater than the amount that can react
10	**Chemistry Only:** Yield	The amount of product formed in a reaction
11	**Chemistry Only:** Titration	A technique used to find the concentration of a solution using a solution of known concentration
12	**Chemistry only:** Concordant	Two or more results from titration where the values are very close together (within 0.10cm³)
13	**Chemistry only:** End point	The moment when the indicator changes colour in a titration showing that the moles of acid & alkali are equal

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Subject: Science (Chemistry)	Topic: Quantitative Chemistry	Year Group: 11

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Calculations Types III

5	**Chemistry Only** Percentage yield (%)	The amount of product formed... $\text{percentage yield} = \frac{\text{mass of product actually made}}{\text{maximum theoretical mass of product}} \times 100$ Example: 25g of salt was produced in a reaction but the expected mass was 80g. What is the % yield?
6	**Chemistry Only** Atom economy	A way of measuring... $\text{atom economy} = \frac{\text{relative formula mass of desired product}}{\text{relative formula mass of all reactants}} \times 100$ Example: The reaction below is used to produce calcium oxide (CaO). Calculate the atom economy of the reaction:
	Chemistry Only Gas volumes	$\text{Volume of gas (in dm}^3\text{)} = \frac{\text{Mass of gas (in g)}}{M_r \text{ of gas}} \times 24$ Example: What volume will 88g of CO_2 gas occupy at room temperature & pressure?

Mass Conservation in Chemical Reactions

1	The law of mass conservation in terms of a chemical reaction…	
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3	Why might mass appear to go up in a reaction?	
4	Why might mass appear to go down?	

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2	Write out the balanced equation & identify what we know & don't know	
3	Work out the moles of what you know	
4	Check ratio in the balanced equation	
5	Calculate the number of moles of what you don't know	
6	Calculate the mass of what you don't know	

Key Vocabulary

7	Thermal decomposition	
8	**HT only**: Limiting reactant / reagent	
9	**HT only**: Excess	
10	**Chemistry Only:** Yield	
11	**Chemistry Only:** Titration	
12	**Chemistry only:** Concordant	
13	**Chemistry only:** End point	

Subject: Science (Chemistry)	Topic: Quantitative Chemistry	Year Group: 11

Titration Method (Chemistry only)

A student investigated the volume of hydrochloric acid that reacted with 25 cm^3 potassium hydroxide. Describe a titration method the student could use in this investigation.

- Measure 25 cm^3 potassium hydroxide using a pipette
- Place the potassium hydroxide into a conical flask
- Fill the burette with hydrochloric acid and record the starting volume
- Add a suitable indicator to the conical flask, e.g., Phenolphthalein
- Place a white tile under flask
- Add the hydrochloric acid until the indicator changes colour
- Add acid slowly and dropwise whilst at the same time swirling the flask
- Phenolphthalein will change from pink to colourless permanently at the endpoint
- Record the volume of hydrochloric acid added
- The tire value is the difference between the initial and final burette reading
- Repeat until you get 2 concordant titres/within 0.1 cm^3 of each other

Titration Calculation – the steps (Chemistry only)

In a different titration, a student used 25.00 cm^3 of potassium hydroxide, KOH. This volume reacted with exactly 26.00 cm^3 of 0.100 mol dm^{-3} sulfuric acid. The equation for the reaction is: $2KOH + H_2SO_4 \rightarrow K_2SO_4 + 2H_2O$. What is the concentration of the potassium hydroxide solution in mol dm^{-3}?

1	Calculate the moles of the reactant that you have the volume and concentration for (in this case it is the sulfuric acid). Remember, moles = volume (dm^3) x concentration (mol dm^{-3}) (26.00 / 1000) x 0.100 = 0.00260 mol
2	Now determine the moles of potassium hydroxide you have. Look at the equation. You can see you have a 2:1 ratio. This means you have double the moles of KOH. 2 x 0.00260 = 0.0052 mol
3	Now you can work out the concentration of KOH using concentration (mol dm^{-3}) = moles / volume (dm^3) 0.0052 x (25/1000) = 0.208 mol dm^{-3}

Subject: Science (Chemistry)	Topic: Quantitative Chemistry	Year Group: 11

Titration Method (Chemistry only)

A student investigated the volume of hydrochloric acid that reacted with 25 cm^3 potassium hydroxide. Describe a titration method the student could use in this investigation.

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Titration Calculation – the steps (Chemistry only)

In a different titration, a student used 25.00 cm^3 of potassium hydroxide, KOH. This volume reacted with exactly 26.00 cm^3 of 0.100 mol dm^{-3} sulfuric acid. The equation for the reaction is: $2KOH + H_2SO_4 \rightarrow K_2SO_4 + 2H_2O$. What is the concentration of the potassium hydroxide solution in mol dm^{-3}?

1	Calculate the moles of the reactant that you have the volume and concentration for (in this case it is the sulfuric acid). Remember, moles = volume (dm^3) x concentration (mol dm^{-3})
2	Now determine the moles of potassium hydroxide you have. Look at the equation. You can see you have a 2:1 ratio. This means you have double the moles of KOH.
3	Now you can work out the concentration of KOH using concentration (mol dm^{-3}) = moles / volume (dm^3)

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Present Tense		
1	Je suis	I am
2	J'ai	I have
3	Je fais	I do/make
4	Je vais	I go
5	J'aime	I like
6	Je déteste	I hate
7	Je joue	I play
8	Je mange	I eat
9	Je bois	I drink
10	Je lis	I read
11	J'achète	I buy
12	Je trouve	I find
13	Je travaille	I work
14	Je pense	I think
15	c'est	it's

Perfect Tense		
1	Je suis allé(e)	I went
2	Je suis parti(e)	I left
3	J'ai fait	I did/made
4	J'ai aimé	I liked
5	J'ai détesté	I hated
6	J'ai joué	I played
7	J'ai mangé	I ate
8	J'ai acheté	I bought
9	J'ai trouvé	I found
10	J'ai travaillé	I worked
11	J'ai regardé	I watched
12	J'ai vu	I saw
13	J'ai bu	I drank
14	J'ai lu	I read

Near Future Tense – I am going to…		
1	Je vais être	be
2	Je vais avoir	have
3	Je vais aller	go
4	Je vais faire	do
5	Je vais jouer	play
6	Je vais regarder	watch
7	Je vais manger	eat
8	Je vais achèter	buy
9	Je vais travailler	work
10	Je vais voir	see
11	Je vais boire	drink
12	Je vais devenir	become
13	Je vais voyager	travel
14	ce sera	it will be

Conditional Tense – I would like to…		
1	Je voudrais être	be
2	Je voudrais avoir	have
3	Je voudrais aller	go
4	Je voudrais faire	do
5	Je voudrais jouer	play
6	Je voudrais regarder	watch
7	Je voudrais manger	eat
8	Je voudrais achèter	buy
9	Je voudrais travailler	work
10	Je voudrais voir	see
11	Je voudrais boire	drink
12	Je voudrais devenir	become
13	Je voudrais voyager	travel
14	ce serait	it would be

Il y a		
1	Il y a	There is/are
2	Il y avait	There was/were
3	Il y aura	There will be
4	Il y aurait	There would be

Structures with infinitives		
1	J'aime aller/faire	I like going/doing
2	Je n'aime pas aller/faire	I don't like going/doing
3	il faut aller/jouer	you have to go/play
4	on peut/doit aller	you can/must go

Imperfect Tense		
1	J'étais	I was/I used to be
2	J'avais	I had/I used to have
3	C'était	It was
4	il y avait	there was/were

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Subject: French — Foundation Tier Knowledge Organiser — KS4

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Sentence Starters

1	je pense que	I think that
2	je crois que	I believe that
3	à mon avis	in my opinion
4	selon moi	in my opinion
5	je dirais que	I would say that

Connectives

1	et	and
2	ou	or
3	où	why
4	parce que	because
5	car	as
6	mais	but
7	pourtant	however
8	aussi	also

Intensifiers

1	un peu	a bit
2	assez	quite
3	très	very
4	vraiment	really
5	beaucoup	much/ a lot
6	trop	too

Adjectives

1	amusant	fun
2	intéressant	interesting
3	passionnant	exciting
4	utile	useful
5	beau	beautiful
6	fantastique	fantastic
7	incroyable	incredible
8	ennuyeux/ barbant	boring
9	fatigant	tiring
10	difficile	difficult
11	cher	expensive

Signposting Time Frames

1	l'année dernière	last year
2	la semaine dernière	last week
3	hier	yesterday
4	normalement	normally
5	d'habitude	usually
6	ce soir	this evening
7	la semaine prochaine	next week
8	l'année prochaine	next year
9	dans l'avenir	in the future

Frequency

1	tous les jours	every day
2	de temps en temps	from time to time
3	une fois par semaine	once a week
4	deux fois par mois	twice a month
5	ne…jamais	never
6	toujours	always
7	souvent	often
8	quelquefois	sometimes

Exclamations!!!

1	Quel dommage!	What a shame!
2	Quel plaisir!	What a pleasure!

Fancy Phrases

1	je l'ai trouvé génial	I found it great
2	je me suis bien amusé(e)	I really enjoyed myself
3	j'ai tellement hâte	I'm really looking forward to it

Perfect Phrases For Any Essay

1	Hier je suis allé au cinema/au stade/au restaurant/au parc/au café/à la piscine et c'était…	Yesterday I went to the cinema/stadium/restaurant/park/ café/swimming pool and it was…
2	J'ai mangé une pizza/des frites/un hamburger/du jambon/du poisson/une glace et c'était…	I ate a pizza/fries/a hamburger/some ham/fish/an ice-cream and it was…
3	J'ai joué au foot/au tennis/au rugby/au golf et c'était…	I played football/tennis/rugby/golf and it was…
4	J'ai bu un coca/un jus d'orange et c'était…	I drank a coke/an orange juice and it was…

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Present Tense		
1	Je suis	
2	J'ai	
3	Je fais	
4	Je vais	
5	J'aime	
6	Je déteste	
7	Je joue	
8	Je mange	
9	Je bois	
10	Je lis	
11	J'achète	
12	Je trouve	
13	Je travaille	
14	Je pense	
15	c'est	

Perfect Tense		
1	Je suis allé(e)	
2	Je suis parti(e)	
3	J'ai fait	
4	J'ai aimé	
5	J'ai détesté	
6	J'ai joué	
7	J'ai mangé	
8	J'ai acheté	
9	J'ai trouvé	
10	J'ai travaillé	
11	J'ai regardé	
12	J'ai vu	
13	J'ai bu	
14	J'ai lu	

Near Future Tense – I am going to…		
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8	Je vais achèter	
9	Je vais travailler	
10	Je vais voir	
11	Je vais boire	
12	Je vais devenir	
13	Je vais voyager	
14	ce sera	

Conditional Tense – I would like to…		
1	Je voudrais être	
2	Je voudrais avoir	
3	Je voudrais aller	
4	Je voudrais faire	
5	Je voudrais jouer	
6	Je voudrais regarder	
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10	Je voudrais voir	
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14	ce serait	

Il y a		
1	Il y a	
2	Il y avait	
3	Il y aura	
4	Il y aurait	

Structures with infinitives		
1	J'aime aller/faire	
2	Je n'aime pas aller/faire	
3	il faut aller/jouer	
4	on peut/doit aller	

Imperfect Tense		
1	J'étais	
2	J'avais	
3	C'était	
4	il y avait	

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Subject: French — Foundation Tier Knowledge Organiser — KS4

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Sentence Starters		
1	je pense que	
2	je crois que	
3	à mon avis	
4	selon moi	
5	je dirais que	

Connectives		
1	et	
2	ou	
3	où	
4	parce que	
5	car	
6	mais	
7	pourtant	
8	aussi	

Intensifiers		
1	un peu	
2	assez	
3	très	
4	vraiment	
5	beaucoup	
6	trop	

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Signposting Time Frames		
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Exclamations!!!		
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2	Quel plaisir!	

Perfect Phrases For Any Essay		
1	Hier je suis allé au cinema/au stade/au restaurant/au parc/au café/à la piscine et c'était…	
2	J'ai mangé une pizza/des frites/un hamburger/du jambon/du poisson/une glace et c'était…	
3	J'ai joué au foot/au tennis/au rugby/au golf et c'était…	
4	J'ai bu un coca/un jus d'orange et c'était…	

Fancy Phrases		
1	je l'ai trouvé génial	
2	je me suis bien amusé(e)	
3	j'ai tellement hâte	

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Subject: French — Higher Tier Knowledge Organiser — KS4

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Present Tense		
1	Je suis	I am
2	J'ai	I have
3	Je fais	I do/make
4	Je vais	I go
5	J'aime	I like
6	Je déteste	I hate
7	Je joue	I play
8	Je mange	I eat
9	Je bois	I drink
10	Je lis	I read
11	Je vois	I see
12	J'achète	I buy
13	Je trouve	I find
14	Je travaille	I work
15	Je pense	I think
16	Je crois	I believe
17	Je dois	I have to
18	Je peux	I can
19	Je veux	I want to
20	c'est	it's

Perfect Tense		
1	Je suis allé(e)	I went
2	Je suis parti(e)	I left
3	J'ai fait	I did/made
4	J'ai aimé	I liked
5	J'ai détesté	I hated
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8	J'ai acheté	I bought
9	J'ai trouvé	I found
10	J'ai travaillé	I worked
11	J'ai regardé	I watched
12	J'ai vu	I saw
13	J'ai bu	I drank
14	J'ai lu	I read

Il y a		
1	Il y a	There is/are
2	Il y avait	There was/were
3	Il y aura	There will be
4	Il y aurait	There would be

Imperfect Tense - I used to		
1	J'étais	… be
2	J'allais	… go
3	J'avais	… have
4	Je faisais	… do
5	Je jouais	… play
6	Je regardais	… watch
7	J'écoutais	… listen
8	Je mangeais	… eat
9	Je buvais	… drink
10	J'achetais	… buy
11	J'aimais	… like
12	C'était	It was

Future Tense		
1	Je serai	I will be
2	J'aurai	I will have
3	J'irai	I will go
4	Je ferai	I will do
5	Je jouerai	I will play
6	Je regarderai	I will watch
7	Je mangerai	I will eat
8	J'acheterai	I will buy
9	Je travaillerai	I will work
10	Je verrai	I will see
11	Je boirai	I will drink
12	Il sera	It will be

Structures with infinitives		
1	J'aime aller/faire	I like going/doing
2	Je n'aime pas aller/faire	I don't like going/doing
3	Je vais aller/jouer	I am going to go/to play
4	Je voudrais aller/jouer	I would like to go/play
5	il faut aller/jouer	you have to go/play
6	on peut/doit aller	you can/must go

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Subject: French — Higher Tier Knowledge Organiser — KS4

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Sentence Starters

1	je pense que	I think that
2	je crois que	I believe that
3	à mon avis	in my opinion
4	selon moi	in my opinion
5	je dirais que	I would say that
6	il me semble que	it seems to me that
7	d'un point de vue personnel	from a personal point of view
8	bien que je sache que	although I know that
9	à cause du fait que	due to the fact that
10	Je considerais que	I would consider that
11	il faut que je dise que	I have to say that

Connectives

1	parce que	because
2	car	as
3	mais	but
4	pourtant	however
5	en revanche	however
6	néanmoins	nevertheless
7	certes	admittedly
8	aussi	also
9	donc	therefore
10	d'ailleurs	besides
11	bien que (+subj)	although
12	à moins que (+subj)	unless

Intensifiers

1	un peu	a bit
2	assez	quite
3	très	very
4	vraiment	really
5	beaucoup	much/ a lot
6	trop	too
7	tellement	so
8	extrêmement	extremely

Exclamations!!!

1	Quel dommage!	What a shame!
2	Quel plaisir!	What a pleasure!

Adjectives

1	amusant	fun
2	intéressant	interesting
3	passionnant	exciting
4	utile	useful
5	beau	beautiful
6	fantastique	fantastic
7	incroyable	incredible
8	ennuyeux/ barbant	boring
9	fatigant	tiring
10	difficile	difficult
11	cher	expensive

Signposting Time Frames

1	l'année dernière	last year
2	la semaine dernière	last week
3	hier	yesterday
4	normalement	normally
5	d'habitude	usually
6	ce soir	this evening
7	la semaine prochaine	next week
8	l'année prochaine	next year
9	dans l'avenir	in the future

Frequency

1	tous les jours	every day
2	de temps en temps	from time to time
3	une fois par semaine	once a week
4	deux fois par mois	twice a month
5	ne…jamais	never
6	toujours	always
7	souvent	often
8	quelquefois/ parfois	sometimes

Fancy Phrases

1	après avoir mangé	after having eaten
2	je l'ai trouvé génial	I found it great
3	je me suis bien amusé(e)	I really enjoyed myself
4	ça m'a vraiment plu	I really enjoyed it
5	ça en valait la peine	It was worth it
6	je n'aurais jamais pensé	I would never have thought
7	j'ai tellement hâte	I'm really looking forward to it
8	le jeu en vaudra la chandelle	it will be worth it

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Subject: French — Higher Tier Knowledge Organiser — KS4

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Present Tense		
1	Je suis	
2	J'ai	
3	Je fais	
4	Je vais	
5	J'aime	
6	Je déteste	
7	Je joue	
8	Je mange	
9	Je bois	
10	Je lis	
11	Je vois	
12	J'achète	
13	Je trouve	
14	Je travaille	
15	Je pense	
16	Je crois	
17	Je dois	
18	Je peux	
19	Je veux	
20	c'est	

Perfect Tense		
1	Je suis allé(e)	
2	Je suis parti(e)	
3	J'ai fait	
4	J'ai aimé	
5	J'ai détesté	
6	J'ai joué	
7	J'ai mangé	
8	J'ai acheté	
9	J'ai trouvé	
10	J'ai travaillé	
11	J'ai regardé	
12	J'ai vu	
13	J'ai bu	
14	J'ai lu	

Il y a		
1	Il y a	
2	Il y avait	
3	Il y aura	
4	Il y aurait	

Imperfect Tense - I used to		
1	J'étais	
2	J'allais	
3	J'avais	
4	Je faisais	
5	Je jouais	
6	Je regardais	
7	J'écoutais	
8	Je mangeais	
9	Je buvais	
10	J'achetais	
11	J'aimais	
12	C'était	

Future Tense		
1	Je serai	
2	J'aurai	
3	J'irai	
4	Je ferai	
5	Je jouerai	
6	Je regarderai	
7	Je mangerai	
8	J'acheterai	
9	Je travaillerai	
10	Je verrai	
11	Je boirai	
12	Il sera	

Structures with infinitives		
1	J'aime aller/faire	
2	Je n'aime pas aller/faire	
3	Je vais aller/jouer	
4	Je voudrais aller/jouer	
5	il faut aller/jouer	
6	on peut/doit aller	

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Sentence Starters

1	je pense que	
2	je crois que	
3	à mon avis	
4	selon moi	
5	je dirais que	
6	il me semble que	
7	d'un point de vue personnel	
8	bien que je sache que	
9	à cause du fait que	
10	Je considerais que	
11	il faut que je dise que	

Connectives

1	parce que	
2	car	
3	mais	
4	pourtant	
5	en revanche	
6	néanmoins	
7	certes	
8	aussi	
9	donc	
10	d'ailleurs	
11	bien que (+subj)	
12	à moins que (+subj)	

Intensifiers

1	un peu	
2	assez	
3	très	
4	vraiment	
5	beaucoup	
6	trop	
7	tellement	
8	extrêmement	

Exclamations!!!

1	Quel dommage!	
2	Quel plaisir!	

Adjectives

1	amusant	
2	intéressant	
3	passionnant	
4	utile	
5	beau	
6	fantastique	
7	incroyable	
8	ennuyeux/ barbant	
9	fatigant	
10	difficile	
11	cher	

Signposting Time Frames

1	l'année dernière	
2	la semaine dernière	
3	hier	
4	normalement	
5	d'habitude	
6	ce soir	
7	la semaine prochaine	
8	l'année prochaine	
9	dans l'avenir	

Frequency

1	tous les jours	
2	de temps en temps	
3	une fois par semaine	
4	deux fois par mois	
5	ne...jamais	
6	toujours	
7	souvent	
8	quelquefois/ parfois	

Fancy Phrases

1	après avoir mangé	
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3	je me suis bien amusé(e)	
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5	ça en valait la peine	
6	je n'aurais jamais pensé	
7	j'ai tellement hâte	
8	le jeu en vaudra la chandelle	

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Present Tense

1	Ich bin	I am
2	Ich habe	I have
3	Ich mache	I do/make
4	Ich gehe	I go
5	Ich fahre	I travel
6	Ich mag	I like
7	Ich hasse	I hate
8	Ich spiele	I play
9	Ich esse	I eat
10	Ich trinke	I drink
11	Ich lese	I read
12	Ich sehe	I see
13	Ich kaufe	I buy
14	Ich finde	I find
15	Ich arbeite	I work
16	Ich denke	I think
17	Ich muss	I have to
18	Ich kann	I can
19	Ich will	I want to
20	es ist	it's

Perfect Tense

1	Ich bin gegangen	I went
2	Ich bin gefahren	I travelled
3	Ich bin geflogen	I flew
4	Ich bin geblieben	I stayed
5	Ich habe gemacht	I did/made
6	Ich habe gespielt	I played
7	Ich habe gegessen	I ate
8	Ich habe getrunken	I drank
9	Ich habe gekauft	I bought
10	Ich habe gearbeitet	I worked
11	Ich habe gesehen	I watched
12	Ich habe gelesen	I read
13	Ich habe gefunden	I found
14	ich habe besucht	I visited

Using Geben

1	es gibt	There is/are
2	es gab	There was/were
3	es wird...geben	There will be
4	es würde...geben	There would be

Simple Past

1	ich war	I was
2	es war	it was
3	sie waren	they were
4	ich hatte	I had
5	es gab	there was/were

Conditional Fancy

1	ich wäre	I would be
2	es wäre	it would be
3	sie wären	they would be
4	ich hätte	I would have
5	es gäbe	there would be

Future/Conditional Tense

ich werde/möchte....(I will/would like to)

1	...sein	be
2	...werden	become
3	...gehen	go
4	...fahren	travel
5	...spielen	play
6	...essen	eat
7	...trinken	drink
8	...sehen	see
9	...arbeiten	work
10	...lesen	read
11	...machen	make/do
12	...besuchen	visit

Structures With Infinitives

1	ich muss...machen	I have to do
2	ich darf...machen	I am allowed to do
3	ich kann...machen	I can do
4	ich soll...machen	I should do
5	ich will...machen	I want to do
6	man muss/kann/soll...machen	you must/can/should do

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Sentence Starters

1	meiner Meinung nach	in my opinion
2	meines erachtens	in my opinion
3	im Großen und Ganzen	all in all
4	ich denke, dass…	I think that
5	ich würde sagen, dass	I would say that
6	ich muss sagen, dass	I have to say that

Connectives

1	und	and
2	aber	but
3	denn	because
4	oder	or
5	jedoch	however
6	außerdem	furthermore
7	weil/da	because
8	dass	that

Intensifiers

1	ein bisschen	a bit
2	ziemlich	quite
3	sehr	very
4	wirklich	really
5	echt	genuinely
6	zu	too
7	so	so
8	ganz	totally

Adjectives

1	lustig	funny
2	interessant	interesting
3	spannend	exciting
4	nützlich	useful
5	schön	beautiful
6	toll	great
7	unglaublich	incredible
8	langweilig	boring
9	anstrengend	tiring
10	schwierig	difficult
11	teuer	expensive
12	billig	cheap

Signposting Time Frames

1	letztes Jahr	last year
2	letzte Woche	last week
3	gestern	yesterday
4	normalerweise	normally
5	gewöhnlich	usually
6	dieses Abend	this evening
7	nächste Woche	next week
8	nächstes Jahr	next year
9	in der Zukunft	in the future
10	am Wochenende	at the weekend

Frequency

1	jeden Tag	every day
2	ab und zu	from time to time
3	einmal pro Woche	once a week
4	zweimal pro Woche	twice a month
5	nie	never
6	immer	always
7	oft	often
8	manchmal	sometimes

Exclamations!!!

1	Wie Schade!	What a shame!
2	Wahnsinn!	Wow!

Fancy Phrases

1	es hat eine Menge Spaß gemacht	it was loads of fun
2	es hat sich wirklich gelohnt	it was really worth it
3	das hat mir gefallen	I liked it
4	ich freue mich schon darauf	I am already looking forward to it
5	ich werde mich amüsieren	I will enjoy myself

Perfect Past Examples

1	Letztes Wochenende bin ich ins Kino/Café/Restaurant/Stadion/Museum gegangen und es hat eine Menge Spaß gemacht.	Last weekend I went to the cinema/café/restaurant/stadium/ museum and it was loads of fun.
2	Ich habe Hähnchen, Pommes und Salat gegessen und ich habe Cola getrunken. Das Essen war sehr lecker und es hat sich wirklich gelohnt. Wahnsinn!	I ate chicken, chips and salad and I drank cola. The food was very tasty and it was really worth it. Wow!

Fantastic Future Examples

1	Nächstes Jahr werde ich mit meinen Freunden nach Berlin fahren und ich freue mich schon darauf.	Next year I will travel with my friends to Berlin. I am already looking forward to it.
2	Ich möchte ins Café gehen und ich möchte Pizza essen. Ich werde mich amüsieren, weil ich Pizza liebe.	I would like to go to café and I would like to eat pizza. I will enjoy myself I love pizza.

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Present Tense

1	Ich bin	
2	Ich habe	
3	Ich mache	
4	Ich gehe	
5	Ich fahre	
6	Ich mag	
7	Ich hasse	
8	Ich spiele	
9	Ich esse	
10	Ich trinke	
11	Ich lese	
12	Ich sehe	
13	Ich kaufe	
14	Ich finde	
15	Ich arbeite	
16	Ich denke	
17	Ich muss	
18	Ich kann	
19	Ich will	
20	es ist	

Perfect Tense

1	Ich bin gegangen	
2	Ich bin gefahren	
3	Ich bin geflogen	
4	Ich bin geblieben	
5	Ich habe gemacht	
6	Ich habe gespielt	
7	Ich habe gegessen	
8	Ich habe getrunken	
9	Ich habe gekauft	
10	Ich habe gearbeitet	
11	Ich habe gesehen	
12	Ich habe gelesen	
13	Ich habe gefunden	
14	ich habe besucht	

Using Geben

1	es gibt	
2	es gab	
3	es wird...geben	
4	es würde...geben	

Simple Past

1	ich war	
2	es war	
3	sie waren	
4	ich hatte	
5	es gab	

Conditional Fancy

1	ich wäre	
2	es wäre	
3	sie wären	
4	ich hätte	
5	es gäbe	

Future/Conditional Tense

ich werde/möchte....(I will/would like to)

1	...sein	
2	...werden	
3	...gehen	
4	...fahren	
5	...spielen	
6	...essen	
7	...trinken	
8	...sehen	
9	...arbeiten	
10	...lesen	
11	...machen	
12	...besuchen	

Structures With Infinitives

1	ich muss...machen	
2	ich darf...machen	
3	ich kann...machen	
4	ich soll...machen	
5	ich will...machen	
6	man muss/kann/soll...machen	

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Sentence Starters		
1	meiner Meinung nach	
2	meines erachtens	
3	im Großen und Ganzen	
4	ich denke, dass…	
5	ich würde sagen, dass	
6	ich muss sagen, dass	

Connectives		
1	und	
2	aber	
3	denn	
4	oder	
5	jedoch	
6	außerdem	
7	weil/da	
8	dass	

Intensifiers		
1	ein bisschen	
2	ziemlich	
3	sehr	
4	wirklich	
5	echt	
6	zu	
7	so	
8	ganz	

Adjectives		
1	lustig	
2	interessant	
3	spannend	
4	nützlich	
5	schön	
6	toll	
7	unglaublich	
8	langweilig	
9	anstrengend	
10	schwierig	
11	teuer	
12	billig	

Signposting Time Frames		
1	letztes Jahr	
2	letzte Woche	
3	gestern	
4	normalerweise	
5	gewöhnlich	
6	dieses Abend	
7	nächste Woche	
8	nächstes Jahr	
9	in der Zukunft	
10	am Wochenende	

Frequency		
1	jeden Tag	
2	ab und zu	
3	einmal pro Woche	
4	zweimal pro Woche	
5	nie	
6	immer	
7	oft	
8	manchmal	

Exclamations!!!		
1	Wie Schade!	
2	Wahnsinn!	

Fancy Phrases		
1	es hat eine Menge Spaß gemacht	
2	es hat sich wirklich gelohnt	
3	das hat mir gefallen	
4	ich freue mich schon darauf	
5	ich werde mich amüsieren	

Perfect Past Examples		
1	Letztes Wochenende bin ich ins Kino/Café/Restaurant/Stadion/Museum gegangen und es hat eine Menge Spaß gemacht.	
2	Ich habe Hähnchen, Pommes und Salat gegessen und ich habe Cola getrunken. Das Essen war sehr lecker und es hat sich wirklich gelohnt. Wahnsinn!	

Future Tense Examples		
1	Nächstes Jahr werde ich mit meinen Freunden nach Berlin fahren und ich freue mich schon darauf.	
2	Ich möchte ins Café gehen und ich möchte Pizza essen. Ich werde mich amüsieren, weil ich Pizza liebe.	

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Present Tense

1	Ich bin	I am
2	Ich habe	I have
3	Ich mache	I do/make
4	Ich gehe	I go
5	Ich fahre	I travel
6	Ich mag	I like
7	Ich hasse	I hate
8	Ich spiele	I play
9	Ich esse	I eat
10	Ich trinke	I drink
11	Ich lese	I read
12	Ich sehe	I see
13	Ich kaufe	I buy
14	Ich finde	I find
15	Ich arbeite	I work
16	Ich denke	I think
17	Ich muss	I have to
18	Ich kann	I can
19	Ich will	I want to
20	es ist	it's

Perfect Tense

1	Ich bin gegangen	I went
2	Ich bin gefahren	I travelled
3	Ich bin geflogen	I flew
4	Ich bin geblieben	I stayed
5	Ich habe gemacht	I did/made
6	Ich habe gespielt	I played
7	Ich habe gegessen	I ate
8	Ich habe getrunken	I drank
9	Ich habe gekauft	I bought
10	Ich habe gearbeitet	I worked
11	Ich habe gesehen	I watched
12	Ich habe gelesen	I read
13	Ich habe gefunden	I found
14	ich habe besucht	I visited

Using Geben

1	es gibt	There is/are
2	es gab	There was/were
3	es wird...geben	There will be
4	es würde...geben	There would be

Simple Past

1	ich war	I was
2	es war	it was
3	sie waren	they were
4	ich hatte	I had
5	es gab	there was/were

Conditional Fancy

1	ich wäre	I would be
2	es wäre	it would be
3	sie wären	they would be
4	ich hätte	I would have
5	es gäbe	there would be

Future/Conditional Tense

ich werde/möchte....(I will/would like to)

1	...sein	be
2	...werden	become
3	...gehen	go
4	...fahren	travel
5	...spielen	play
6	...essen	eat
7	...trinken	drink
8	...sehen	see
9	...arbeiten	work
10	...lesen	read
11	...machen	make/do
12	...besuchen	visit

Structures With Infinitives

1	ich muss...machen	I have to do
2	ich darf...machen	I am allowed to do
3	ich kann...machen	I can do
4	ich soll...machen	I should do
5	ich will...machen	I want to do
6	man muss/kann/soll...machen	you must/can/should do

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Subject: German | Higher Tier Knowledge Organiser | KS4

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Sentence Starters

1	meiner Meinung nach	in my opinion
2	meines erachtens	in my opinion
3	im Großen und Ganzen	all in all
4	auf der einen Seite	on the one hand
5	aber auf der anderen Seite	but on the other hand
6	es scheint mir, dass	it seems to me that
7	ich denke, dass…	I think that
8	ich würde sagen, dass	I would say that
9	obwohl ich weiß, dass	although I know that
10	ich glaube, dass…	I believe that
11	ich muss sagen, dass	I have to say that

Connectives

1	und	and
2	aber	but
3	denn	because
4	sondern (neg)	but
5	jedoch	however
6	deshalb	therefore
7	trotzdem	nevertheless
8	außerdem	furthermore
9	weil/da	because
10	dass	that
11	obwohl	although
12	wenn	if/when

Intensifiers

1	ein bisschen	a bit
2	ziemlich	quite
3	sehr	very
4	wirklich	really
5	echt	genuinely
6	zu	too
7	so	so
8	ganz	totally

Exclamations!!!

1	Wie Schade!	What a shame!
2	Wahnsinn!	Wow!

Adjectives

1	lustig	funny
2	interessant	interesting
3	spannend	exciting
4	nützlich	useful
5	schön	beautiful
6	toll	great
7	unglaublich	incredible
8	langweilig	boring
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Signposting Time Frames

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5	nie	never
6	immer	always
7	oft	often
8	manchmal	sometimes

Fancy Phrases

1	es hat eine Menge Spaß gemacht	it was loads of fun
2	ich habe mich wirklich amüsiert	I really enjoyed myself
3	es hat sich wirklich gelohnt	it was really worth it
4	das hat mir gefallen	I liked it
5	ich hätte nie gedacht	I would have never thought
6	je (heißer), desto besser	the (hotter) the better
7	ich freue mich schon darauf	I am already looking forward to it
8	es wird bestimmt viel Spaß machen	it will definitely be lots of fun

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Present Tense		
1	Ich bin	
2	Ich habe	
3	Ich mache	
4	Ich gehe	
5	Ich fahre	
6	Ich mag	
7	Ich hasse	
8	Ich spiele	
9	Ich esse	
10	Ich trinke	
11	Ich lese	
12	Ich sehe	
13	Ich kaufe	
14	Ich finde	
15	Ich arbeite	
16	Ich denke	
17	Ich muss	
18	Ich kann	
19	Ich will	
20	es ist	

Perfect Tense		
1	Ich bin gegangen	
2	Ich bin gefahren	
3	Ich bin geflogen	
4	Ich bin geblieben	
5	Ich habe gemacht	
6	Ich habe gespielt	
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8	Ich habe getrunken	
9	Ich habe gekauft	
10	Ich habe gearbeitet	
11	Ich habe gesehen	
12	Ich habe gelesen	
13	Ich habe gefunden	
14	ich habe besucht	

Using Geben		
1	es gibt	
2	es gab	
3	es wird...geben	
4	es würde...geben	

Simple Past		
1	ich war	
2	es war	
3	sie waren	
4	ich hatte	
5	es gab	

Conditional Fancy		
1	ich wäre	
2	es wäre	
3	sie wären	
4	ich hätte	
5	es gäbe	

Future/Conditional Tense		
ich werde/möchte....(I will/would like to)		
1	...sein	
2	...werden	
3	...gehen	
4	...fahren	
5	...spielen	
6	...essen	
7	...trinken	
8	...sehen	
9	...arbeiten	
10	...lesen	
11	...machen	
12	...besuchen	

Structures With Infinitives		
1	ich muss...machen	
2	ich darf...machen	
3	ich kann...machen	
4	ich soll...machen	
5	ich will...machen	
6	man muss/kann/soll...machen	

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5	aber auf der anderen Seite	
6	es scheint mir, dass	
7	ich denke, dass…	
8	ich würde sagen, dass	
9	obwohl ich weiß, dass	
10	ich glaube, dass…	
11	ich muss sagen, dass	

Connectives

1	und	
2	aber	
3	denn	
4	sondern (neg)	
5	jedoch	
6	deshalb	
7	trotzdem	
8	außerdem	
9	weil/da	
10	dass	
11	obwohl	
12	wenn	

Intensifiers

1	ein bisschen	a bit
2	ziemlich	
3	sehr	
4	wirklich	
5	echt	
6	zu	
7	so	
8	ganz	

Exclamations!!!

1	Wie Schade!	
2	Wahnsinn!	

Adjectives

1	lustig	
2	interessant	
3	spannend	
4	nützlich	
5	schön	
6	toll	
7	unglaublich	
8	langweilig	
9	anstrengend	
10	schwierig	
11	teuer	
12	billig	

Signposting Time Frames

1	letztes Jahr	
2	letzte Woche	
3	gestern	
4	normalerweise	
5	gewöhnlich	
6	dieses Abend	
7	nächste Woche	
8	nächstes Jahr	
9	in der Zukunft	

Frequency

1	jeden Tag	
2	ab und zu	
3	einmal pro Woche	
4	zweimal pro Woche	
5	nie	
6	immer	
7	oft	
8	manchmal	

Fancy Phrases

1	es hat eine Menge Spaß gemacht	
2	ich habe mich wirklich amüsiert	
3	es hat sich wirklich gelohnt	
4	das hat mir gefallen	
5	ich hätte nie gedacht	
6	je (heißer), desto besser	
7	ich freue mich schon darauf	
8	es wird bestimmt viel Spaß machen	

Beckfoot

Subject: Geography	Topic: changing economic world	Year Group: 11

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A. There are global variations in economic development and quality of life.

1	**Economic** and social measures of development	**Gross Domestic Product per capita-** This is the total value of goods and services produced in a country per person, per year. **Gross National Income per capita-** An average of gross national income per person, per year in US dollars. **Infant mortality-** The number of children who die before reaching 1 per 1000 babies born. **Literacy rate-** The percentage of population over the age of 15 who can read and write. **Life expectancy-** The average lifespan of someone born in that country.
2	The Demographic transition model	**The demographic transition model (DTM) shows population change over time. It studies how birth rate and death rate affect the total population of a country.**
3	Causes of uneven development.	Physical- location, climate, natural disasters, landlocked Economic- trade, political, corruption Historical- colonialism, political, war
4	Consequences of uneven development: disparities in wealth and health, international migration.	**Levels of development are different in different countries.** People in more developed countries have higher incomes than less developed countries. Better healthcare means that people in more developed countries live longer than those in less developed countries. If nearby countries have higher levels of development or are secure, people will move to seek better opportunities and standard of living.

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
High DR High BR Steady	BR Low Declining DR Very High	Rapidly falling DR Low BR High	Low DR Low BR Zero	Slowly Falling DR Low BR Negative

B. Various strategies exist for reducing the global development gap.

1	strategies used to reduce the development gap	investment, industrial development and tourism, aid, using intermediate technology, Fairtrade, debt relief, microfinance loans.
2	Tourism in JAMAICA	-In 2015, **2.12 million** visited. -Tourism **contributes 27% of GDP** and will increase to **38% by 2025**. -**130,000 jobs** rely on tourism. -**Global recession** 2008 caused a **decline in tourism**. Now tourism is beginning to recover. -Jobs from tourism have meant more money has been spent in shops and other businesses. -Government has invested in infrastructure to support tourism. -New sewage treatment plants have reduced pollution.

C. Some LICs and NEEs are experiencing rapid economic development which leads to significant social, environmental and cultural change: NIGERIA

1	Nigeria in the wider world	Nigeria is a NEE in West Africa. Nigeria is just north of the Equator and experiences a range of environments. Nigeria is the most populous and economically powerful country in Africa. Economic growth has been base on oil exports
2	TNC'S in Nigeria- SHELL	TNCs such as Shell have played an important role in its economy. + Investment has increased employment and income. - Profits move to HICs. - Many oil spills have damaged fragile environments.
3	International relationships with Nigeria	Nigeria plays a leading role with the **African Union** and **UN**. **Growing links** with **China** with huge **investment in infrastructure**. Main import includes petrol from the EU, cars from Brazil and phones from China.

D. Key idea Specification content major changes in the economy of the UK have affected, and will continue to affect, employment patterns and regional growth.

1	De-industrialisation	De-industrialisation and the **decline** of the UK's industrial base. **Globalisation** has meant many industries have moved overseas, where labour costs are lower. **Government investing** in supporting vital businesses.
2	North- south divide	- Wages are lower in the North. - Health is better in the South. - Education is worse in the North. + The government is aiming to support a Northern Powerhouse project to resolve regional differences. + More devolving of powers to disadvantaged regions.
3	The UK's place In the wider world-changing industry	The influence of science parks: A major **quaternary industry** on the outskirts. Good transport access to the **A14** and **M11**. A good **location for sourcing highly educated workers** from **Cambridge University**. Staff benefit from **attractive working conditions**. Attracts **clusters** of related **high-tech businesses**.

Subject: Geography	Topic: changing economic world	Year Group: 11

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A. There are global variations in economic development and quality of life.

1	 	
2		
3		
4		

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
High DR High BR Steady	BR Low Declining DR Very High	Rapidly falling DR Low BR High	Low DR Low BR Zero	Slowly Falling DR Low BR Negative

B. Various strategies exist for reducing the global development gap.

1	 	
2		

C. Some LICs and NEEs are experiencing rapid economic development which leads to significant social, environmental and cultural change: NIGERIA

1		
2		
3		

D. Key idea Specification content major changes in the economy of the UK have affected, and will continue to affect, employment patterns and regional growth.

1		
2		
3		

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Subject: Geography	Topic: Changing economic world	Year Group: 11

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1. Death rate	The number of deaths in a year per 1000 of the total population.
2. Gross national income	A measurement of economic activity that is calculated by dividing the gross (total) national income by the size of the population. GNI takes into account not just the value of goods and services, but also the income earned from investments overseas.
3. Infant mortality	The average number of deaths of infants under 1 year of age, per 1000 live births, per year.
4. Literacy rate	The percentage of people who have basic reading and writing skills.
5. Demographic transition model	A model showing how populations should change over time in terms of their birth rates, death rates and total population size.
6. Trade	The buying and selling of goods and services between countries.
7. Intermediate technology	The simple, easily learned and maintained technology used in a range of economic activities serving local needs in LICs.

8. Birth rate	The number of births in a year per 1000 of the total population.
9. Human development index	A method of measuring development in which GDP per capita, life expectancy and adult literacy are combined to give an overview. This combined measure of development uses economic and social indicators to produce an index figure that allows comparison between countries.
10. Life expectancy	The average number of years a person might be expected to live.
11. Development gap	The difference in standards of living and wellbeing between the world's richest and poorest countries (between HICs and LICs).
12. Fairtrade	When producers in LICs are given a better price for the goods they produce. Often this is from farm products like cocoa, coffee or cotton. The better price improves income and reduces exploitation.
13. Globalisation	The process which has created a more connected world, with increases in the movements of goods (trade) and people (migration and tourism) worldwide.
14. International aid	Money, goods and services given by the government of one country or a multilateral institution such as the World Bank or International Monetary Fund to help the quality of life and economy of another country.

15. Microfinance loans	Very small loans which are given to people in the LICs to help them start a small business.
16. Commonwealth	The Commonwealth is a voluntary association of 53 independent and equal sovereign states, which were mostly territories of the former British Empire. It is home to 2.2 billion citizens. Member states have no legal obligation to one another. Instead, they are united by language, history, culture, and their shared values of democracy, human rights, and the rule of law.
17. European union	An international organisation of 28 European countries, including the UK, formed to reduce trade barriers and increase cooperation among its members. Seventeen of these countries also share the same type of money: the euro. A person who is a citizen of a European Union country can live and work in any of the other 27 member countries without needing a work permit or visa.
18. north-south divide	Economic and cultural differences between Southern England (the South-East, Greater London, the South-West and parts of the East) and Northern England (the North-East, West and Yorkshire and the Humber). There are clear differences in health conditions, house prices, earnings, and political influence.
19. Science and business parks	Business Parks are purpose built areas of offices and warehouses, often at the edge of a city and on a main road. Science parks are often located near university sites, and high-tech industries are established. Scientific research and commercial development may be carried out in co-operation with the university.
20. Secondary industries	industry that converts the raw materials provided by primary industry into commodities and products for the consumer; manufacturing industry.

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Subject: Geography	Topic: Changing economic world	Year Group: 11

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1. Death rate	The number of deaths in a year per 1000 of the total population.
2. Gross national income	
3. Infant mortality	
4. Literacy rate	
5. Demographic transition model	
6. Trade	
7. Intermediate technology	

8. Birth rate	The number of births in a year per 1000 of the total population.
9. Human development index	
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11. Development gap	
12. Fairtrade	
13. Globalisation	
14. International aid	

15. Microfinance loans	Very small loans which are given to people in the LICs to help them start a small business.
16. Commonwealth	
17. European union	
18. north-south divide	
19. Science and business parks	
20. Secondary industries	

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Subject: History | Topic: Elizabethan England - Troubles at home and abroad | Year Group: 11

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1. Why was religion important?

1. How did Tudor monarchs deal with religion?	1. England was made Protestant after Henry VIII's Reformation. 2. Edward VI (1547-53) made extra rules and introduced the Book of Common Prayer. 3. Mary (1553-58) reversed this and made the country Catholic. She burned 300 Protestants at the stake in 5 years. 4. When Elizabeth took the throne religion was a difficult issue causing huge divisions.
2. What did Catholics and Protestants believe?	1. **Catholic beliefs**: Pope as head of Church, Bible and services in Latin, unmarried priests, decorated churches, people talk to God through priests, transubstantiation (bread and wine are literally body and blood of Jesus). 2. **Protestant beliefs**: Monarch as head of church, Bible and services in English, priests can marry, plain churches, people talk to God through prayer, consubstantiation (bread and wine represent the body and blood of Jesus). 3. **Shared beliefs:** Priests have important role, God created the world and everything in it, Jesus was son of God, each religion is the true faith and should challenge unbelievers.
3. What was Elizabeth's religious settlement?	1. Elizabeth wanted a practical solution to the religious problems. 2. She was a Protestant but tried to compromise with Catholics. 3. She allowed priests to marry, brought back the Book of Common Prayer, and ensured services would be held in English. 4. She made herself 'governor' of the Church, and allowed Catholics to worship in private. 5. She appointed the moderate Protestant Matthew Parker as head of the Church.
4. Who were the Puritans?	1. Puritans were extreme Protestants who would not compromise. 2. Elizabeth appointed some bishops with Puritan views but ensured that they kept to the rules in order to keep their jobs. 3. By 1668 most Puritans conformed though the Presbyterians continued to oppose her. Some Puritans set up separatist churches. 4. There were some powerful Puritans including Walsingham who stopped Elizabeth cracking down on Puritans too harshly. 5. In 1583 Archbishop Whitgift introduced new rules as part of a harsher approach to Puritans. Although there was some resistance Whitgift was able to stop Puritans becoming an organized threat.

2. How did people react to Elizabeth's religious changes?

1. How did English Catholics react to the changes?	1. Many Catholics feared revenge after Mary's reign, but Elizabeth generally tried to compromise with them. 2. Recusancy fines for not attending church were low. 3. In 1570 the Pope excommunicated Elizabeth and called for rebellion against Elizabeth in a papal 'bull' (order). 4. Elizabeth's policy became harsher after this. Fines rose and attending mass or sheltering Catholic priests became treason. Limits were also placed on Catholics being allowed to travel. 5. There were four major Catholic plots against Elizabeth: Northern Rebellion 1569, Ridolfi Plot 1571, Throckmorton Plot 1583, Babington Plot 1586.
2. How did foreign Catholics react to the changes?	1. A seminary was established in the Netherlands to train Catholic priests. It sent its first missionaries to England in 1574. 2. The Jesuits arrived in England in 1580 aiming to boost Catholic conversion in England. The 1585 Act Against Jesuits and Seminary Priests aimed to drive them out of England and they could be executed. 3. Both France and Spain began to support rebellion against Elizabeth by encouraging missionaries and paying for priests to be trained, though stopped short of declaring war. 4. After the death of MQOS in 1586 and the defeat of the Armada in 1588, Catholics lost hope of getting rid of Elizabeth.
3. Why and how did Elizabeth's policy change during her reign?	1. In the 1580s tolerance of Catholics declined. 2. Elizabeth faced a threat from Catholics in the North of England and in Europe, so felt vulnerable. 3. The Jesuit Edmund Campion arrived in England in 1580 and began to preach to ordinary people. 4. He was caught and tortured, before being executed in December 1581. 5. Elizabeth introduced new laws including: **1571:** Created recusancy fines and banned ownership of Catholic items such as rosary beads. **1581:** Increased recusancy fines to £20. **1585:** Catholic priests were declared traitors and faced execution, along with anyone protecting them. **1593:** Statute of confinement: Catholics could not travel more than 5 miles from their home.

Key Word	Definition
Book of Common Prayer	A Protestant text that was the basis of all services
Excomm-unication	Being expelled from the Catholic church and declared a traitor
Jesuit	A member of the Society of Jesus, a group of priests who sought to convert people to Catholicism
Mass	A Catholic service
Missionaries	Priests who visit a country to preach and seek converts
Puritan	An extreme Protestant who refuses to compromise over issues of faith
Seminary	A place where Catholic priests are trained
Transub-stantiation	The Catholic belief that communion bread and wine is literally the body and blood of Jesus rather than just a representation

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Subject: History | Topic: Elizabethan England - Troubles at home and abroad | Year Group: 11

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1. Why was religion important?

1. How did Tudor monarchs deal with religion?	
2. What did Catholics and Protestants believe?	
3. What was Elizabeth's religious settlement?	
4. Who were the Puritans?	

2. How did people react to Elizabeth's religious changes?

1. How did English Catholics react to the changes?	
2. How did foreign Catholics react to the changes?	
3. Why and how did Elizabeth's policy change during her reign?	

Key Word	Definition
Book of Common Prayer	
Excomm-unication	
Jesuit	
Mass	
Missionaries	
Puritan	
Seminary	
Transub-stantiation	

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3. Mary, Queen of Scots

1 Who was Mary, Queen of Scots?	1. Mary (1542-1587) was Elizabeth's cousin who became Queen of Scotland at 8 days old. 2. She married the heir to the French throne in 1558. He became King in 1559 making Mary Queen of Scotland and of France, but died in 1560. 3. The Catholic Mary returned to Scotland but Protestant beliefs had become more common and she was widely unpopular. 4. She fled to England in 1567 after the death of her second husband. 5. Many Protestants feared Mary's influence and called for her execution, but Elizabeth let her live as a prisoner for 19 years. 6. Mary believed she was the rightful Queen of England and became an inspiration to Catholic plotters seeking to replace Elizabeth. 7. Eventually she became involved in the Babington Plot of 1586 and Elizabeth was forced to support Parliament's call for her execution.
2. Why was Mary's execution important?	1. Mary went on trial in October 1586 in front of 36 nobles including Walsingham, who had discovered the plot, and William Cecil. 2. She said the trial was unfair and that she had not seen the evidence, and as a foreigner could not be guilty of reason. 3. Elizabeth was not keen to have her executed as it might lead France or Spain to seek revenge, but agreed reluctantly on 1 February 1587. 4. Mary was executed in private a week later.
3. Did executing Mary solve Elizabeth's problems?	**1. Yes:** It removed an important Catholic rival and made Catholic plots less likely. **2. Yes:** Although France and Spain expressed outrage they did nothing about it. **3. No:** It outraged Catholics and convinced many that Elizabeth was an evil monarch, just as the Pope said. **4. No:** It made Mary a martyr and Catholic heroine.

4. Foreign conflict and warfare

1. Why was Spain a threat and rival?	1. Philip II had been Mary I's husband and proposed to Elizabeth, but she refused. 2. Spain was an incredibly rich and powerful trade and military nation, but English raiders such as Drake had been stealing their wealth for years. 3. Spain was a Catholic nation with the support of the Pope, who had called for rebellion against Elizabeth in 1570.
2. How did England and Spain come into conflict?	1. Spain ruled the Netherlands, which had a large, rebellious Protestant population. 2. Elizabeth agreed to support the Protestant Dutch rebels against Spanish rule, offering them money and the use of English ports up until 1572. 3. In 1585, she sent troops commanded by Dudley to help – an act of war.

5. The Spanish Armada, 1588

1. The English navy	1. Henry VIII had made building a strong navy a priority due to England's position. 2. He changed ships from a mode of transport to a fighting force in themselves, with strong defences and impressive weaponry. They raided other ships and ports. 3. Drake became a brilliant naval commander, even attacking the Spanish navy in port in 1587, which was known as "singeing the King of Spain's beard". 4. Elizabeth gave Drake and others licences to carry out piracy against Spanish ships using English ships and supplies. These people were known as privateers.
2. What advances were made in tactics and technology?	1. Fireships were commonly used, where an old or damaged ship would be filled with flammable goods, set on fire and aimed at enemy ships or formations. 2. The line of battle was used where all ships would form a single line and fire their cannons at the enemy to try and sink their ships. 3. Faster ships, more powerful weapons and better navigation also contributed.
3. What was the Spanish Armada?	1. Philip wanted to send a huge fleet to England, pick up an army from the Netherlands, and invade England. He hoped English Catholics would swear loyalty and support the invasion. 2. The invasion force consisted of 151 ships, 7,000 sailors, 34,000 soldiers and 180 priests and monks. It had enough supplies for 4 weeks and was commanded by the Duke of Medina-Sidonia, who was a loyal commander but had no naval background. 3. Once the fleet reached the English Channel on 6 August 1588, Drake waited for night to fall and then sent fireships in, causing the fleet to break up. 4. The next day, the English ships attacked at the Battle of Gravelines and defeated the Spanish fleet, which fled. 5. Bad weather then struck and drove the Spanish ships up England's east coast. Many ships were wrecked and only 65 ships ever made it back to Spain. 6. The victory proved England could be a major naval power and Elizabeth made improving the navy a priority. 7. Philip tried to plan a second Armada but never succeeded and Spain lost credibility as a rival to England. Most English Catholics accepted Elizabeth instead.

Key Word	Definition
Duke of Medina-Sidonia	Commander of the Armada, an inexperienced nobleman
Fireships	Old or damaged ships filled with flammable goods, set on fire and aimed at enemies
Line of battle	A naval tactic where ships formed into a single line to fire on enemy ships
Martyr	A person who dies for their faith and is seen as a hero
Mary Queen of Scots	Elizabeth's cousin who saw herself as rightful Queen of England
Privateers	Licenced pirates given support and funding by Elizabeth
Spanish Armada	The invasion force that attempted to invade England in August 1588

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Subject: History | Topic: Elizabethan England - Troubles at home and abroad | Year Group: 11

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3. Mary, Queen of Scots

1 Who was Mary, Queen of Scots?	
2. Why was Mary's execution important?	
3. Did executing Mary solve Elizabeth's problems?	

4. Foreign conflict and warfare

1. Why was Spain a threat and rival?	
2. How did England and Spain come into conflict?	

5. The Spanish Armada, 1588

1. The English navy	
2. What advances were made in tactics and technology?	
3. What was the Spanish Armada?	

Key Word	Definition
Duke of Medina-Sidonia	
Fireships	
Line of battle	
Martyr	
Mary Queen of Scots	
Privateers	
Spanish Armada	

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Subject: History | Topic: Life in Elizabethan England | Year Group: 11

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1. How was Tudor society structured?

1. What was the Great Chain of Being?	1. Tudor people imagined society as the Great Chain of Being. 2. God was at the top, followed by angels and others in heaven. 3. Humans were beneath, followed by animals and plants. 4. Humans were subdivided with the monarch at the top, followed by the nobility, the gentry, and the peasants. This hierarchy was fixed and moving between the groups was almost impossible.
2. Who were the nobility?	1. The nobility were the richest, most respected members of society. 2. The highest title was duke, followed by earl and baron. These titles were passed on and only rarely awarded by the monarch. 3. Nobles were protected from torture and public humiliation, and even if found guilty of treason would be beheaded rather than hanged. 4. Most nobles were landowners and passed land and money from father to son. They made up 1% of the population but had about 14% of its income. 5. However, nobles were dependent on the monarch for influence.
3. Who were the gentry?	1. The gentry were landlords of the countryside. They lived by the labour of their tenants rather than working themselves. 2. They had incomes between £10 and £2000 a year and some were richer than the poorer nobles. 3. They had power in the form of important posts, so were often JPs or members of parliament. 4. The gentry grew as people made money in trade.
4. Who were the peasants?	1. Peasants were the poorest in society and worked on the land. 2. They often struggled for regular work and poverty was common. 3. Luckier peasants with reliable lords could support families. 4. Other peasants who fell out with their lords faced difficulties. 5. Some were dependent on charity and were known as paupers. They begged or went to the local church for help.

2. How did the wealthy live?

1. How did people show their wealth?	1. While the country was secure and stable, the rich were able to show off their wealth and status. 2. They built impressive country houses and many hosted huge banquets featuring dishes of meat and expensive wines. 3. Fashion was important and women wore fine clothes with white, lead-based make-up, to show they did not need to work outside. 4. Men and women wore elaborate ruffs around their necks.
2. What were country houses like?	1. These were private residences not communal buildings. 2. They were designed to show wealth rather than for security. 3. Renaissance designs were often based on Greek or Roman architecture with a symmetrical appearance, oak panels, colourful tapestries, expensive glass windows, and stacked chimneys. 4. The centre of the house was the **great chamber** surrounded by as many rooms as possible. Servants had their own 'quarters'.

3. What was the role of the theatre in society?

1. What was Tudor theatre like?	1. Public theatres were popular with rich and poor. 2. Playwrights and acting companies became successful. 3. All actors were male with boys playing the female roles. 4. Theatre developed during Elizabeth's reign from plays put on at an inn to a fully developed, purpose-built attraction. 5. Performances were chaotic with audiences pushing and heckling. 6. The nobility had expensive seats and often chose to be patrons of a theatre company to show how cultured they were. 7. The poor stood nearer the stage to watch the performance.
2. What opposition to theatre existed?	1. Some people felt theatre was sinful and wanted it banned. 2. Theatres were associated with drunkenness, crime and disease. 3. People feared large gatherings would spread disease. 4. Puritans believed people should spend their free time praying and studying the Bible rather than watching plays. 5. The theatre remained popular, and Elizabeth herself enjoyed plays.
3. Who was involved in theatre?	1. William Shakespeare (1564-1616) was the head writer for the Lord Chamberlain's Men. 2. He wrote 38 plays – tragedies, comedies and history plays. 3. Richard Burbage (1568-1619) was a leading actor in the Lord Chamberlain's Men and played many famous roles. He also owned a theatre.

Key Word	Definition
Duke	The highest rank of the nobility
Great Chain of Being	The hierarchy that Tudor society was based on
Landlord	A landowner who rented his land to tenants
Pauper	The poorest peasants who were dependent on charity
Peasant	The lowest members of society who were mostly farm labourers
Playwright	A professional writer of plays
Ruff	A type of frilly garment worn round the neck
Tenant	A person who rented land either for cash or providing labour
Treason	The act of betraying the monarch, punishable by death

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Subject: History | Topic: Life in Elizabethan England | Year Group: 11

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1. How was Tudor society structured?

1. What was the Great Chain of Being?	
2. Who were the nobility?	
3. Who were the gentry?	
4. Who were the peasants?	

2. How did the wealthy live?

1. How did people show their wealth?	
2. What were country houses like?	

3. What was the role of the theatre in society?

1. What was Tudor theatre like?	
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Key Word	Definition
Duke	
Great Chain of Being	
Landlord	
Pauper	
Peasant	
Playwright	
Ruff	
Tenant	
Treason	

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Subject: History | **Topic: Life in Elizabethan England** | **Year Group: 11**

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4. How did the poor live?

1. What problems did Elizabeth inherit?	1. Henry VIII's policies made life for the poor harder. Closing the monasteries removed a source of support and 'debasing' the coinage damaged trade and jobs. 2. During Edward IV's reign, the cloth trade collapsed. 3. Peasants were dependent on lords for security and could be cast out, so their lives were very insecure.
2. What problems emerged in agriculture ?	1. Bad harvests between 1594 and 1598 caused food shortages and starvation in some areas. 2. The new system of land enclosure required fewer workers and left many people jobless and homeless. 3. Many headed to the towns and cities for work but although these grew, there were still not enough jobs to go around.
3. What problems were created by population growth?	1. During Elizabeth's reign the population grew from 2.8m to 4m people. 2. The birth rate increased and the death rate decreased. 3. As there were fewer available homes landlords increased rents (rack-renting)
Poverty case studies	1. **York:** 1515 introduced beggar licences, 1528 appointed a Master Beggar to keep control of beggars, 'House of Correction' set up to offer work in weaving and spinning. Those who refused were sent back to their villages. 2. **Ipswich:** 1569 introduced beggar licences, opened a hospital for the elderly and poor, trained young people to find a trade, had a House of Correction. 3. **Norwich:** Offered the 'idle poor' work and gave food and care to the 'unfortunate poor'. Taxed rich citizens to pay for 'poor relief'.

5. What was society's attitude to the poor?

1. Sympathetic attitude	1. The Great Chain of Being obliged higher people to look after those below them. This usually meant charitable donations rather than anything more significant. 2. Attitudes changed in Elizabeth's reign because of growing poverty. 3. More effort was made to help the 'deserving poor' find jobs or get charity. Almshouses were built to provide food and shelter.
2. Harsh attitude	1. The 'undeserving poor' were beggars who didn't want honest work. 2. In 1567 Thomas Harman produced a guide to beggars and the tricks they used to con honest people out of money. 3. Many wealthy people became hostile to beggars. They were seen as the 'idle poor': lazy and deserving of punishment.
3. What types of beggars were identified?	1. The Counterfeit Crank bit soap to pretend to froth at the mouth. 2. The Baretop Trickster was a woman who lured men in by removing clothes, who were then beaten and robbed by her accomplices. 3. The Clapper Dudgeon put on dirty bandages or wounded themselves to gain sympathy, claiming they had been wounded fighting for England. 4. Tom O'Bedlam would pretend to be mad and follow people, so they would give him money to go away

6. How did the government deal with poverty?

1. Punishment	1. Under Tudor kings beggars were generally punished harshly. 2. They could be put in the stocks, whipped or mutilated. 3. In 1576 an Act was passed so localities could find work for the poor.
2. How did towns and cities deal with poverty?	1. Poverty was especially bad in urban areas. 2. In London, Bridewell Palace was used as a shelter for the homeless. 3. Bedlam was established as a hospital for the mentally ill. 4. Hospitals were opened for orphans and the sick. 5. Conditions were still poor and poverty continued to grow, so crime grew as a result. Local authorities often struggled to cope with this.

Key Word	Definition
Almshouses	Institutions offering food and shelter to the poor. First set up by Archbishop Whitgift in London.
Beggar	A person who had no work and begged for money or charity
Deserving poor	Honest people who were poor through no fault of their own (unfortunate poor). Sometimes split into 'helpless poor' to be cared for and 'able-bodied poor' to be given work.
Undeserving poor	People who chose to beg rather than work (idle poor)
Inflation	A rise in the cost of a product e.g. food
Land enclosure	A new style of farming that limited the area needing to be worked upon
Poor relief	Charity given to the poor funded by tax payers
Rack renting	Deliberately putting rents up to exploit the level of need and make more money

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Subject: History | **Topic: Life in Elizabethan England** | **Year Group: 11**

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4. How did the poor live?

1. What problems did Elizabeth inherit?	
2. What problems emerged in agriculture ?	
3. What problems were created by population growth?	

Poverty case studies	

5. What was society's attitude to the poor?

1. Sympathetic attitude	
2. Harsh attitude	
3. What types of beggars were identified?	

6. How did the government deal with poverty?

1. Punishment	
2. How did towns and cities deal with poverty?	

Key Word	Definition
Almshouses	
Beggar	
Deserving poor	
Undeserving poor	
Inflation	
Land enclosure	
Poor relief	
Rack renting	

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Subject: History | Topic: Life in Elizabethan England | Year Group: 11

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7. Elizabeth and the Poor Laws

1. What were the Poor Laws?	1. In 1601 Elizabeth introduced the Poor Laws after seeing successes in dealing with poverty in some towns and cities such as York. 2. In each area of the country, the wealthy would be taxed to provide relief for the poor, old and sick. 3. The idle poor would still be treated harshly. 4. These kinds of taxes had never existed on this scale.
2. Successes of the Poor Laws	1. Helped distinguish between authentic beggars and vagrants. 2. Helped those who were genuinely poor while punishing those who were lazy or dishonest. 3. The numbers of beggars decreased.
3. Failures of the Poor Laws	1. Inconsistently applied across the country 2. Decrease in begging may have been due to fears of House of Correction rather than helping them 3. Areas argued over which paupers they had to help

Key Question: Was Elizabethan England a Golden Age?

1. Arguments in favour	1. Growth of culture: art, theatre, literature, education (even for some girls!) 2. Incredible accomplishments in science, architecture, exploration 3. England became a hugely wealthy trading empire 4. Military power grew and territory expanded hugely 5. England was largely peaceful and national pride grew enormously with Elizabeth seen as 'Gloriana'
2. Arguments against	1. Cruel torture and punishments 2. Huge divisions of wealth and class 3. Low life expectancy and widespread disease 4. Some superstitious beliefs (eg alchemy, astrology) 5. Brutal culture eg blood sports, attitude to beggars

8. Francis Drake and the Age of Exploration

1. Who was Francis Drake?	1. A slave trader who took slaves from Africa to Mexico but was betrayed by the Spanish and attacked. He escaped and sought revenge, becoming a privateer and raiding Spanish ships for treasure 2. Circumnavigated the globe between 1577 and 1580 3. Knighted in 1581 and helped defeat the Spanish Armada in 1588 4. Seen as a hero by the English and a pirate by the Spanish
2. What changes helped to enable exploration?	1. Technology in shipbuilding enabled long voyages. 2. New 'lateen' sails made them faster and easier to steer. 3. Better defences and weapons improved fighting abilities. 4. The astrolabe and better compasses improved navigation. 5. Voyages were still dangerous – Drake's big voyage returned with only one ship of the five that left.
3. How did voyages help trade?	1. Most voyages were structured around buying and selling goods. 2. People began to look beyond Europe to the Far East to acquire new and exciting products such as spices. 3. Middlemen bought products directly and sold them on to English buyers, but this was expensive so the English wanted to extend their own trade. 4. Many attempts to reach the Far East failed but the Americas were discovered in the process. 5. Companies were founded to become experts in particular areas, for example the Muscovy Company (1555) traded in Russia. 6. The East India Company was founded in 1600 and obtained products like silks, spices and porcelain.
4. How did the slave trade develop?	1. Drake and his cousin John Hawkins (1532-95) led the first voyage to kidnap West Africans and sell them in Mexico in 1564. 2. Hawkins was a spy who became an important naval commander and trader, introducing tobacco to England after discovering it in America. 3. The slave trade grew as there was a huge demand for agricultural labour in the Americas, to enable products to be sent back to Britain.
5. How were colonies established in the New World?	1. In 1584 Elizabeth gave Walter Raleigh permission to conquer and rule any land not ruled by Christians. 2. In return he would give her 1/5th of the gold and silver he found. 3. Raleigh went on voyages and sent others to colonise North America. 4. A colony was eventually established at Roanoke in 1587 but the settlers mysteriously disappeared. England never fully set up a colony in North America until after Elizabeth had died.

Key Word	Definition
Alchemy	A type of science combined with magic that sought to e.g. turn lead into gold
Astrolabe	A navigational tool that calculated a position using the stars
Circumnavigate	To travel around the globe back to a starting point
Gloriana	A nickname for Elizabeth showing her as a glorious figure
Poor Laws	The laws introduced in 1601 to help deal with the poor
Slave trade	The growing trade in African slaves sold to work in North America
Spanish Armada	The Spanish invasion fleet of 1588
Trading companies	Firms that were responsible for trading in certain areas
Vagrants	Another term for travelling beggars, the idle or undeserving poor

Beckfoot

Subject: History | Topic: Life in Elizabethan England | Year Group: 11

enjoy learn succeed

7. Elizabeth and the Poor Laws

1. What were the Poor Laws?	
2. Successes of the Poor Laws	
3. Failures of the Poor Laws	

Key Question: Was Elizabethan England a Golden Age?

1. Arguments in favour	
2. Arguments against	

8. Francis Drake and the Age of Exploration

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Key Word	Definition
Alchemy	
Astrolabe	
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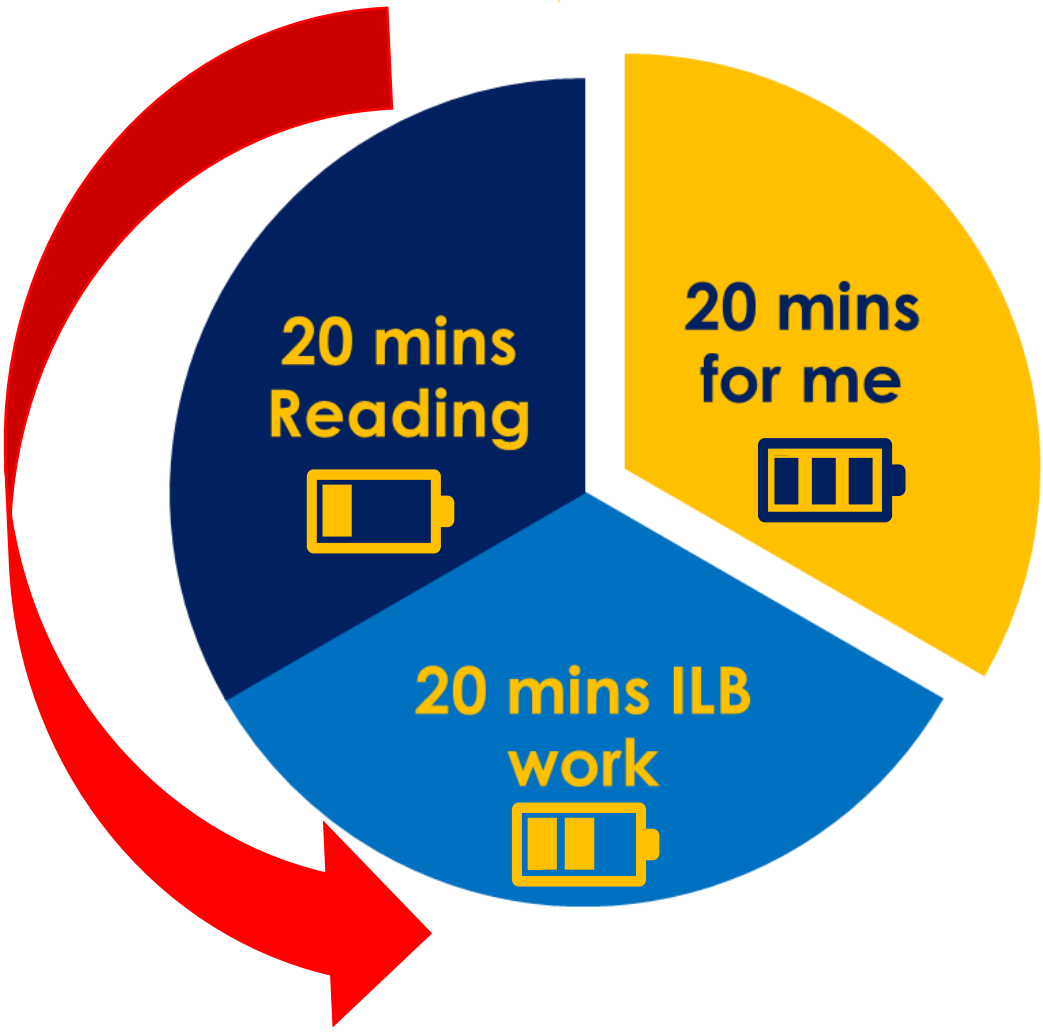
Vagrants	

The Beckfoot Power Hour



The Beckfoot Power Hour is a way to help you build positive routines around your independent learning. Little and often is the key!

Your Power Hour should include three chunks: 20 minutes of **reading**; 20 minutes of **Revise Like a Beckfooter** activities in your ILB; and at least 20 minutes of **something you really enjoy** as a reward at the end.

Building habits like this will boost your academic performance and help support your mental wellbeing at the same time.

Have a go at building a Power Hour into your day as often as you can. We would suggest **5 times a week** is the optimum amount.

Flash Cards

1 Identify knowledge

What are you creating flash cards on?

Do you have your knowledge organizer?

Use your book to look at previous misconceptions from whole class feedback.

2 Colour coding

Use different coloured flash cards for different topics. This helps with organization NOT recall

3 Designing

1 Question per flashcard.

Making them concise and clear.

Use a one word prompt, so that you can recall as much as you can.

No extended answer questions.

4 Using

Write your answers down, then check. Or say your answers out loud. This really clearly shows the gaps in your knowledge.

Do not just copy & re-read.

Shuffle the cards each time you use them.

Use the Leitner system to use flash cards everyday.

5 Feedback

How have you performed when you look back at your answers?

Is there anything you need to revisit in more detail?

Is your knowledge secure? If so, move onto applying knowledge in that area in specific extended exam questions.

Avoid answering the questions in your head: research shows that when you read a question and answer it in your head, you aren't actually testing your knowledge effectively. Say the answer out loud or write it down before checking it against the card, so you are truly testing if you can explain the answer properly

Use this table to help you keep track of the flash cards you have made and used this half term. There are some flash-card templates for you to use overleaf.

Week 1	Which Subject/Topic?	Week 2	Which Subject/Topic?
Day 1		Day 1	
Day 2		Day 2	
Day 3		Day 3	
Day 4		Day 4	
Day 5		Day 5	

Mind-Maps

1	2	3	4	5
Identify knowledge	**Identify sub topics**	**Branch off**	**Use images & colour**	**Put it somewhere visible**
Select a topic you wish to revise. Have your class notes/knowledge organisers ready.	Place the main topic in the centre of your page and identify sub topics that will branch off.	Branch of your sub topics with further detail. Try not to fill the page with too much writing.	Use images and colour to help topics stick into your memory.	Place completed mind maps in places where you can see them frequently.

Avoid using too much information: mind maps are designed to summarise key information and connect areas of a topic/subject. If you overcrowd the page, you lose the point of the mind map and will find it harder to visualise the information when trying to recall it

Use this table to help you keep track of the mind-maps you have completed and checked this half term. There are some mind-map templates for you to use overleaf.

Week 1	Which Subject/Topic?	Week 2	Which Subject/Topic?
Day 1		Day 1	
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Day 5		Day 5	

Mind-Maps

Mind-Maps

Mind-Maps

Mind-Maps

Brain-Dumps

1 Identify knowledge

Identify the knowledge/topic area you want to cover.

2 Write it down

Take a blank piece of paper/white board and write down everything you can remember about that topic. (with no prompts)

Give yourself a timed limit (e.g. 10 minutes)

3 Organise information

Once complete and you cannot remember any more use different colours to highlight/underline words in groups.

This categories/links information.

4 Check understanding

Compare your brain dump to your K/O or book and check understanding.

Add any key information you have missed (key words) in a different colour.

5 Store and compare

Keep your brain dump safe and revisit it.

Next time you attempt the same topic try and complete the same amount of information in a shorter period of time or add more information.

Brain dumps are a way of getting information out of your brain.

Use this table to help you keep track of the brain-dumps you have completed and checked this half term. There are some brain-dump templates for you to use overleaf.

Week 1	Which Subject/Topic?	Week 2	Which Subject/Topic?
Day 1		Day 1	
Day 2		Day 2	
Day 3		Day 3	
Day 4		Day 4	
Day 5		Day 5	

Revise Like a Beckfooter Rewards

Great independent learning and revision are vitally important for your academic success. We have high expectations for everyone because we whole-heartedly believe that you deserve to have the best chances in life.

Our **minimum** expectations of KS4 students for their independent learning are as follows:

- **5 revision tasks** per week using the specified revise like a Beckfooter strategy (on Class Charts)
- You choose the subjects – we set the tasks
- Bring your ILB to school every day

If you do not meet our minimum expectations, this will be logged on Class Charts in the same way as a missed homework.

We also recognise that often, students will want to do even more than this, and we want to support and celebrate that achievement with you. The more independent learning/revision you do, the more Class Charts points you will receive

The following rewards are available for those students who commit to their independent learning/revision and go above and beyond expectations:

1 – 2 additional tasks	3 – 4 additional tasks	5 additional tasks
10 points	20 points	50 points