



Enhanced Further Learning

Summer 1

Year 9

Enhanced Further Learning: **Art**

<p style="text-align: center;">Easier Tasks</p> <p>Formal elements (Line, shape, form, tone, texture, pattern and colour)</p> <ol style="list-style-type: none"> 1. Use two media combinations to copy one piece of fruit. 2. Use only lines and at least two media to enlarge one piece of fruit or vegetable. Add as much detail as you can. <p>Hint: string, tissue paper, cardboard.</p>	<p style="text-align: center;">Harder Tasks</p> <p>Choose an Art Movement (Renaissance, Cubist, Fauvism, Arts and Crafts)</p> <p><u>Analysis</u></p> <ol style="list-style-type: none"> 1. Choose an art movement and analyse one painting. Make clear critical judgements and research any political, social or economic links. 2. Copy the image you have chosen using at least two different media. <p><u>Development of Ideas</u></p> <ol style="list-style-type: none"> 3. Choose at least five secondary images, cut out and create your own composition. 4. Copy this composition in the style of the artist you have researched. 5. Enlarge one section of your composition and work in another media. 6. Annotate your work, making critical judgements. Discuss, how you can develop your work, change your choice of media...
<p style="text-align: center;">Literacy</p> <p>List five adjectives to describe work by Matisse.</p>	
<p style="text-align: center;">Skills/Numeracy</p> <p><u>SCALE</u> Embedded: Can work in different scales competently keeping proportions.</p> <p>Observational work.</p> <ol style="list-style-type: none"> 1) Copy a primary composition, enlarging the scale to create a close-up, highlighting detail, tone and form. Challenge: 2) Find the perimeter of one shape in your composition. 	

<p><u>Starter PQES hit:</u></p> <ul style="list-style-type: none"> - Each PQE in AO3. <p><u>Mains PQES (1 and 2) hit:</u></p> <ul style="list-style-type: none"> - Each PQE in AO5 and AO6. <p><u>Mains PQES (3) hit:</u></p> <ul style="list-style-type: none"> - Each PQE in AO1 and AO2. <p><u>Mains PQES (3) hit:</u></p> <ul style="list-style-type: none"> - Each PQE in AO4. 	<p style="text-align: center;">Harder Tasks</p> <ol style="list-style-type: none"> 1) <u>Using the success criteria, can you write a persuasive job application to a business of your choice.</u> <ul style="list-style-type: none"> - <i>Formal tone</i> - <i>AAFORREST Techniques</i> - <i>Varied sentence types</i> - <i>Varied punctuation (; : , !)</i> 2) <u>Using the success criteria, can you write a descriptive narrative, describing a time something took you tried really hard?</u> <ul style="list-style-type: none"> - <i>Descriptive language techniques (metaphor/simile/ personification/ alliteration)</i> - <i>Varied sentence types</i> - <i>Effective paragraphing</i> - <i>Varied punctuation (; : , !)</i>
<p style="text-align: center;">Easier Tasks</p> <p><u>Can you define these poetry terms?</u></p> <ul style="list-style-type: none"> - <i>Enjambment</i> - <i>Caesura</i> - <i>Theme</i> - <i>Stanza</i> - <i>Meter</i> - <i>Metaphor</i> - <i>Simile</i> - <i>Assonance</i> - <i>Alliteration</i> - <i>Juxtaposition</i> - <i>Cacophony</i> 	<ol style="list-style-type: none"> 3) Read the poem and answer the GCSE style questions (using PETER). <ol style="list-style-type: none"> i) <u>How does the author use language to present the theme of memories?</u> ii) <u>How does the author use structure to present the theme of identity?</u> <p>Look out for:</p> <ul style="list-style-type: none"> - <i>Metaphor</i> - <i>Verbs</i> - <i>Descriptive adjectives/adverbs</i> - <i>Alliteration</i> - <i>Listing</i> - <i>Repetition</i> - <i>Assonance</i> - <i>Sibilance</i> - <i>Enjambment</i> - <i>Juxtaposition</i> <p>Skills/Numeracy</p> <ol style="list-style-type: none"> 1) Do you think the narrator admires or looks down on his family's past? Why? 2) If you were to write a poem about your ancestors' traditions, what would it be about? Would it be different to this poem? How?

Digging

Between my finger and my thumb
The squat pen rests; snug as a gun.

Under my window, a clean rasping sound
When the spade sinks into gravelly ground:
My father, digging. I look down

Till his straining rump among the flowerbeds
Bends low, comes up twenty years away
Stooping in rhythm through potato drills
Where he was digging.

The coarse boot nestled on the lug, the shaft
Against the inside knee was levered firmly.
He rooted out tall tops, buried the bright edge deep
To scatter new potatoes that we picked,
Loving their cool hardness in our hands.

By God, the old man could handle a spade.
Just like his old man.

My grandfather cut more turf in a day
Than any other man on Toner's bog.
Once I carried him milk in a bottle
Corked sloppily with paper. He straightened up
To drink it, then fell to right away
Nicking and slicing neatly, heaving sods
Over his shoulder, going down and down
For the good turf. Digging.

The cold smell of potato mould, the squelch and slap
Of soggy peat, the curt cuts of an edge
Through living roots awaken in my head.
But I've no spade to follow men like them.

Between my finger and my thumb
The squat pen rests.
I'll dig with it.

By Seamus Heaney

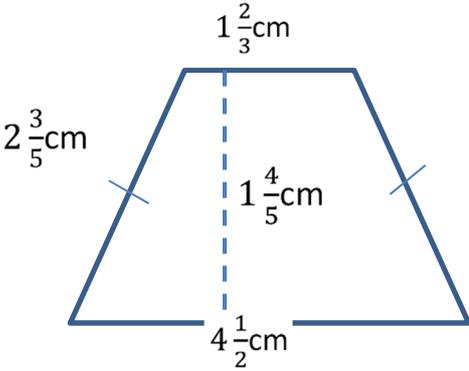
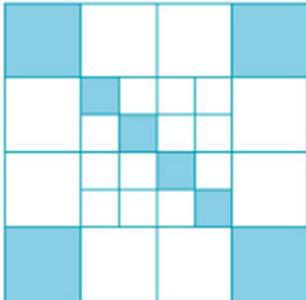
Enhanced Further Learning: **Geography**

Easier Tasks	Harder Tasks
<p>PQE = Describe the inter-relationships between ecosystems around the World. Task 1 = On a world map locate the major biomes. What are the key differences in each? Task 2 = What is a food chain and food web? Draw a food chain and food web for a UK ecosystem.</p>	<p>PQE = Explain the physical processes that produce distinctive coastal and glacial landforms. Task 1 = Explain the formation of drumlins and erratics. Use diagrams to make things clearer. Task 2 = Explain how ribbon lakes can be produced by both erosion and deposition.</p>
<p style="text-align: center;">Literacy</p> <p style="text-align: center;">Write a definition for the following:</p> <p>Ecosystem = Biome = Food chain = Food web = Lianas = Drip tips = Buttress roots = Deforestation = Afforestation =</p>	<p>PQE = Describe how management strategies affect coastal and glaciated areas. Task 1 = Describe the benefits and issues tourists can bring to Alpine areas. Task 2 = Explain how Alpine resorts are dealing with unreliable snowfall. How can they continue to attract tourists?</p>
<p style="text-align: center;">Skills/Numeracy</p> <p>PQE = Draw and annotate geographical sketches. Task 1 = Find a photograph of a glacial landscape. Draw an annotated sketch including at least 3 key words. Task 2 = Find a photograph of a desert and rainforest. Annotate the key characteristics of each.</p>	<p>PQE = Describe the characteristics of tropical rainforest and desert biomes. Task 1 = Explain how the climate of rainforests and deserts differs. Task 2 = Describe the ways plants and animals have adapted to be able to survive in tropical rainforests. Task 3 = How has man adapted to live in tropical rainforests.</p>

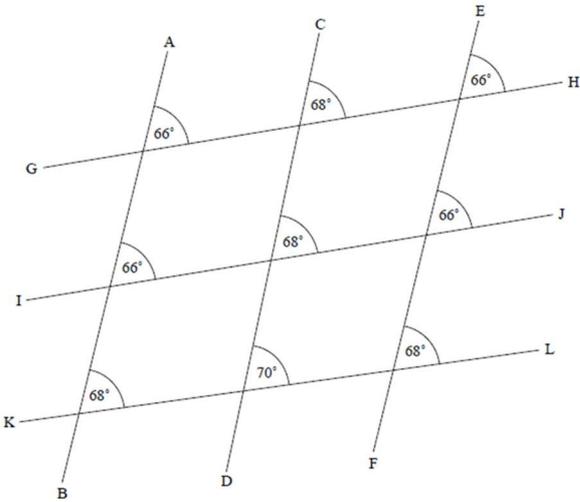
Enhanced Further Learning: **History**

Easier Tasks	Harder Tasks
<p>Exam grades 1-4</p> <p>Explain Domino Theory</p> <p>Research the Gulf of Tonkin Incident</p> <p>Describe the tactics of the Vietcong</p> <p>Compose a timeline of events in the Vietnam War</p>	<p>Exam grades 1-9</p> <p>'The events of Gulf of Tonkin contributed the most to US involvement in Vietnam.'</p> <p>How far do you agree with this statement? Explain your answer</p> <p>16 Marks</p>
<p style="text-align: center;">Literacy</p> <p>Define the following key words;</p> <p>Capitalism</p> <p>Communism</p> <p>Vietminh</p> <p>Rolling Thunder</p> <p>Search and Destroy</p> <p>Napalm</p> <p>Vietcong</p> <p>Agent Orange</p> <p>Guerrilla Warfare</p>	<p>'Vietcong tactics were the main reason why the Vietnam war lasted so long.' How far do you agree with this statement? Explain your answer</p> <p>16 marks</p> <p>' The Ho Chi Minh trial was the main reason why the US army lost in Vietnam.'</p> <p>How far do you agree with this statement? Explain your answer</p> <p>16 marks</p>
<p style="text-align: center;">Skills/Numeracy</p> <p>Create a graph showing American troop involvement from 1960-1973</p> <p>Make a list of reasons why America got involved in Vietnam</p> <p>Create a pie chart of the casualties in Vietnam – which country suffered the most</p>	<p>' America lost the war in Vietnam in the front rooms at home and not the battlefields in Vietnam.'</p> <p>How far do you agree with this statement? Explain your answer</p> <p>16 marks</p>

Enhanced Further Learning: **Maths (Foundation)**

<p>Easier Tasks Grade 1</p>	<p>Harder Tasks Grade 3- 4</p>
<p>Find the mean, median, mode and range for this set of numbers.</p> <p>1) 24, 26, 12, 35, 18, 46, 26, 31</p> <p>Calculate</p> <p>5×-3 -15×-6 -8×-20</p> <p>$24 \div -8$ $-100 \div -10$ $-4 \div 20$</p> <p>$12 - -6$ $7 + -9$ $-18 - 10$</p> <p>$-24 + 30$ $-16 + -3$ $-2 - -8$</p>	<p>Find the area and perimeter of this trapezium</p>  <p>5 apples have a mean weight of 154g. The weight of 4 of the apples are 130g, 190g, 150g and 135g. What is the weight of the fifth apple?</p>
<p>Literacy</p> <p>Explain what the following terms mean: reciprocal; improper fraction, mixed number.</p>	<p>What fraction of this shape is shaded?</p> 
<p>Skills/Numeracy Grade 2</p> <p>Write instructions for how to convert an improper fraction into a mixed number.</p> <p>Write instructions for how to find the 4 averages.</p>	<p>The age range of a school quiz team is 15, and the mean age is 34. Who do you think is on this quiz team? Why?</p> <p>The age range of another team is 1, with a mean age of 15.5. Who do you think is on this team? Why?</p>

Enhanced Further Learning: **Maths (Higher)**

<p>Easier Tasks Grade 4/5</p>	<p>Harder Tasks Grade 4/5</p>
<p>Find the volume of a sphere with radius 4cm.</p> <p>Find the volume and surface area of a cylinder with radius 12cm and height 20cm.</p> <p>Find the size of the interior and exterior angles of a regular dodecagon.</p> <p>On a set of parallel lines with an intersecting line, mark on all the pairs of corresponding and alternate angles.</p>	<p>Explain why there is no regular polygon with an exterior angle of 25°.</p> <p>Explain why there is no polygon with angles that add up to 4000°.</p> <p>Which of the lines below are parallel? Why?</p> 
<p>Literacy</p> <p>Explain the following terms: exterior angle, interior angle, regular polygon and parallel.</p>	
<p>Skills/Numeracy Grade 4</p> <p>Explain how to find the size of one interior angle of a regular polygon.</p> <p>Explain how to find the surface area of a cylinder.</p>	<p>A metal sphere with radius 12cm is melted down and recast into a cone with height 20cm. Find the radius of the base of the cone.</p> <p>Convert 65kg/m^3 into g/cm^3.</p>

Enhanced Further Learning: **French**

<p style="text-align: center;">Easier Tasks</p> <p>PQE - Identify basic vocabulary: Take your vocab book home and learn 15 words by heart this week.</p> <p>PQE - Identify basic vocabulary: Make a revision mindmap of the words we have learned this half term.</p> <p>PQE - Identify basic vocabulary: Create a set of flashcards to help you learn the words we have learned this half term.</p>	<p style="text-align: center;">Harder Tasks</p> <p>PQE - Writing : Produce an answer (you can make it up!) to the questions in French:</p> <ul style="list-style-type: none"> - Oú vas-tu en vacances normalment? (Where do you normally go on holiday?) - Décris tes vacances prochaines. (Describe your next holiday) - Décris tes vacances idéals. (Describe your ideal holiday) <p>PQE – Translation : translate passage 1 into English (you can collect this from your classroom).</p>
<p style="text-align: center;">Literacy</p> <p>PQE – Identify basic vocabulary</p> <p>Je vais – I go Nous allons – We go Les vacances – holidays Les pays- countries</p>	<p>PQE – Translation : translate passage 2 into English (you can collect this from your classroom).</p> <p>PQE – Translation : translate passage 3 into French (you can collect this from your classroom).</p>
<p style="text-align: center;">Skills/Numeracy</p> <p>PQE - Writing : Find a picture of a French – speaking holiday destination. Write 4 sentences in French about what you can do there.</p> <p>PQE - Writing : Interview a family member about their ideal holiday and translate the interview into French.</p>	<p>PQE – Translation : translate passage 4 into French (you can collect this from your classroom).</p>

Enhanced Further Learning: Spanish

Easier Tasks	Harder Tasks
<p>PQE - Identify basic vocabulary: Take your vocab book home and learn 15 words by heart this week.</p> <p>PQE - Identify basic vocabulary: Make a revision mindmap of the words we have learned this half term.</p> <p>PQE - Identify basic vocabulary: Create a set of flashcards to help you learn the words we have learned this half term.</p>	<p>PQE - Writing : Write an answer to the questions in Spanish:</p> <ul style="list-style-type: none"> - ¿Qué haces para estar en forma? (What do you do to stay fit?) - ¿Qué comes y bebes normalmente? (What do you eat and drink normally?) - ¿Te interesan los deportes? (Are you interested in sports?) <p>PQE – Translation: translate passage 1 into English (you can collect this from your classroom).</p> <p>PQE - Translation: translate passage 2 into English (you can collect this from your classroom).</p> <p>PQE - Translation: translate passage 3 into Spanish (you can collect this from your classroom).</p> <p>PQE - Translation: translate passage 4 into Spanish (you can collect this from your classroom).</p>
Literacy	
<p>Key words:</p> <p>La comida – food Hacer ejercicio – to do exercise Seguir una dieta – to follow a diet Beber – to drink Sano – healthy Malsano - unhealthy</p>	<p>PQE - Identify basic vocabulary: Find an advert for a type of food or drink in Spanish and translate it.</p>
Skills/Numeracy	
<p>PQE - Identify basic vocabulary: Create your own set of vocabulary games on Quizlet.</p> <p>PQE - Identify basic vocabulary: Create your own spelling test for people in your class on the vocabulary you have studied.</p>	

Enhanced Further Learning: **PE**

Each time you attend Flexible Learning, this can also count as one piece of Enhanced Further Learning!

Easier Tasks	Harder Tasks
<p>ARE: Know the skills, qualities and responsibilities of sports leaders. Write a detailed list of the skills, qualities and responsibilities of a leader</p> <p>Devise a 3 phased warm up to use in lesson (include the stretches).</p> <p>Describe in detail why a warm up is beneficial. Explaining the physiological and psychological benefits.</p> <p>Tweet a picture @ Carr_Manor_PE of you taking part in an extracurricular / flexible learning activity.</p>	<p>ARE: Works with motivation and makes informed choices to lead a healthy and active lifestyle. Attend an extracurricular/ flexible learning in the activities undertaken in lesson</p> <p>Produce a lesson plan on your chosen sport for you to lead.</p> <p>ARE: Know the skills, qualities and responsibilities of sports leaders. Describe the different skills, qualities and responsibilities of a leader.</p> <p>Produce and detailed poster explaining the qualities your leader possesses.</p>
<p style="text-align: center;">Literacy</p> <p>ARE: Know the skills, qualities and responsibilities of sports leaders. Describe and explain the skills, qualities, responsibilities, communication, appearance, knowledge, health and safety, confidence, motivation Humour, personality needed to be a good sports leader.</p>	<p>Define each of the literacy key words.</p>
<p style="text-align: center;">Skills/Numeracy</p> <p>ARE: Know the skills, qualities and responsibilities of sports leaders. Pick a leader to analyse and comment on what you like about them as a leader. You might like to do this as a PowerPoint, presentation, a video or poster.</p>	

Enhanced Further Learning:
Performing Arts Study School

Each time you attend Flexible Learning, this can also count as one piece of Enhanced Further Learning!

<p style="text-align: center;">Easier Tasks</p>	<p style="text-align: center;">Harder Tasks</p>
<p style="text-align: center;">Literacy</p> <p>Music</p> <p>Riff, Compose, Harmony, Chords, unison, Sequencer.</p> <p>Dance:</p> <p>Genre, stylistic qualities, musical theatre, contemporary, ballet,</p> <p>Drama:</p> <p>Naturalism, physical theatre, verbatim, Stanislavsky, Brecht</p>	<p>Music - Appraising ARE</p> <p>What is the role of the roadie - research and find out what the this job role requires and the benefits of it.</p> <p>Music - Appraising ARE</p> <p>Research a Major record company. What artist are signed to the record label? Who else works for this company?</p> <p>Music Composing ARE</p> <p>Write a new set of lyrics for the a verse of Seven Nation army.</p> <p>Dance - appraising PQE</p> <p>Compare and contrast the style of contemporary with the style of ballet. Make sure you write a paragraph about:</p> <p>Elements/movements that make up each style.</p> <p>History of each dance style.</p> <p>A few famous choreographers/dancers in each style.</p> <p>Drama - Use of Body ARE</p> <p>Choose an interesting and emotive piece of music. It could communicate joy, fear or rage. Create a chair duet with a partner inspired by the music.</p>
<p style="text-align: center;">Skills/Numeracy</p> <p>Dance - choreography/timing/movement memory PQE:Using a piece of music of your choice, create 3 short phrases/sequences of movements that help to show the idea of conflict, as a solo dance. Use a range of jumps, turns, gestures, balances, floorwork and transference of weight. Video and show Miss.</p>	<p>Drama - Creation ARE</p> <p>Think about the movements you created in your chair duet. Who could you character be? Why are they feeling joy, fear or rage? How do they feel about their partner? Write a monologue for your character, explaining their thoughts and feelings to the audience.</p>

Easier Tasks	Harder Tasks
<p>Create a job description for a prophet. Include skills, qualities, and skills.</p> <p>Write down at least three things Muslims learn from the lives of the prophets.</p> <p>List 3 important quotes from the Qur'an.</p>	<p>PQE: Assess religious teachings and explain their significance on the lives of followers</p> <p>A) Outline three beliefs about Allah (3 marks).</p> <p>B) Describe two ways a Muslim can show commitment to their faith (4 marks).</p>
<p style="text-align: center;">Literacy</p> <p>PQE: Pupils can define ten key words for each topic</p> <p>Define the following words and write a paragraph with all of them in to show understanding.</p> <p>Ahl al-bayt Allah Hadith Khalifah Kitab al-iman Qur'an Shi'a Sunni Tahwid Immanence Transcendence Omnipotence</p>	<p>B) Explain Islamic beliefs about human freedom and al-Qadr (4 marks).</p> <p>D) 'There are more similarities than differences between Sunni and Shia Muslims' Evaluate this statement considering arguments for and against. In your response, you should: Refer to Islamic teachings Reach a justified conclusion (12 marks)</p> <p>D) ' If there is no akhirah, religious teachings are meaningless'' Evaluate this statement considering arguments for and against, you should: Refer to Islamic teachings Refer to different Islamic teachings Reach a justified conclusion (12 marks)</p>
<p style="text-align: center;">Skills/Numeracy</p> <p>Produce a spider diagram on beliefs about angels (Malaikah). Highlight the most important teaching.</p> <p>Create a leaflet that guides people through Muslim beliefs about life after death: what happens after death and what people should do to prepare for judgment day.</p>	<p>D) ' All Muslim holy books are equally important' Evaluate this statement considering arguments for and against, you should: Refer to Islamic teachings Refer to different Islamic teachings Reach a justified conclusion (12 marks)</p>

Enhanced Further Learning: **Biology**

Easier Tasks Grade 3-4	Harder Tasks																																						
<p>Write the word equation for photosynthesis</p> <p>Why is diffusion important?</p> <p>Why do organisms need active transport?</p>	<ol style="list-style-type: none"> 1) Collect an exam question from your teacher about the topic you are currently covering (Grade 1-9) 2) Draw a diagram to show the process of mitosis in growth, including the cell cycle (Grade 4-6) 3) Explain the importance of cell differentiation (Grade 4-6) 4) Describe the difference between embryonic and adult stem cells in animals (Grade 4-6) 5) Explain the effect of temperature on the rate of photosynthesis. Sketch a graph to support this. (Grade 4-6) 6) Draw three annotated diagrams to show how substances are transported in animals and plants by; <ul style="list-style-type: none"> • Diffusion (Grade 3-4) • Osmosis (Grade 4-5) • Active transport (Grade 5-6) 7) Compare the three graphs to show the limiting factors of photosynthesis and explain how they interact (Grade 5-8) 																																						
Literacy Grade 3-4																																							
<p>Write definitions for the following key terms. (Extra challenge: Make a sentence using each one)</p> <p>Algae Biomass Diffusion Osmosis Active transport Concentration gradient Surface area: volume ratio Transpiration Translocation</p>																																							
Skills/Numeracy Grade 4-5																																							
<p>Calculate the mean values in this experiment where a light intensity was the IV and the rate of photosynthesis (number of bubbles from pond weed) was the DV.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="4" style="text-align: center;">Number of bubbles per minute</th> </tr> <tr> <th style="text-align: center;">Test 1</th> <th style="text-align: center;">Test 2</th> <th style="text-align: center;">Test 3</th> <th style="text-align: center;">Mean</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Distance of lamp (cm)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">10</td> <td style="text-align: center;">105</td> <td style="text-align: center;">121</td> <td style="text-align: center;">124</td> <td></td> </tr> <tr> <td style="text-align: center;">15</td> <td style="text-align: center;">58</td> <td style="text-align: center;">50</td> <td style="text-align: center;">54</td> <td></td> </tr> <tr> <td style="text-align: center;">20</td> <td style="text-align: center;">26</td> <td style="text-align: center;">30</td> <td style="text-align: center;">32</td> <td></td> </tr> <tr> <td style="text-align: center;">25</td> <td style="text-align: center;">15</td> <td style="text-align: center;">17</td> <td style="text-align: center;">16</td> <td></td> </tr> <tr> <td style="text-align: center;">30</td> <td style="text-align: center;">12</td> <td style="text-align: center;">13</td> <td style="text-align: center;">14</td> <td></td> </tr> </tbody> </table>		Number of bubbles per minute				Test 1	Test 2	Test 3	Mean	Distance of lamp (cm)					10	105	121	124		15	58	50	54		20	26	30	32		25	15	17	16		30	12	13	14	
		Number of bubbles per minute																																					
	Test 1	Test 2	Test 3	Mean																																			
Distance of lamp (cm)																																							
10	105	121	124																																				
15	58	50	54																																				
20	26	30	32																																				
25	15	17	16																																				
30	12	13	14																																				
<p>Plot a graph using this mean data and use it to draw a line of best fit.</p> <p>Describe and explain the trend in your graph</p>																																							

Enhanced Further Learning: **Chemistry**

Easier Tasks	Harder Tasks
<p>Q1. Give the formula of three ionic compounds? (Grade 2)</p> <p>Q2. What is an ion? Give an example (Grade 2-3)</p> <p>Q3. What is the charge on a bromide ion? (Grade 3)</p> <p>Q4. Balance the equation (Grade 3) $\text{Fe} + \text{Cl}_2 \longrightarrow \text{FeCl}_3$</p>	<p>Q1. What is the chemical formula of magnesium hydroxide. Show the different ions (Grade 4)</p> <p>Q2. Why do chemical equations need to be balanced? (Grade 5)</p> <p>Q3. Calculate the relative formula mass for Aluminium nitrate $\text{Al}(\text{NO}_3)_3$ (Grade 5)</p> <p>Q4. Describe the meaning of a closed system? (Grade 5)</p>
<p>Literacy Grade 9-1</p> <p>Define each key term:</p> <ul style="list-style-type: none"> -Conservation of mass -Ion -Ionic compound -Closed system -Aqueous 	<p>Q5. What is meant by the term 'Mole'? (Grade 6)</p> <p>Q6. How many moles are there in 66g of carbon dioxide? (Grade 6)</p>
<p>Skills/Numeracy</p> <p>Q1. Name the state symbols: (s) (l) (aq) (g) Grade 2-3</p> <p>Q2. What is the formula triangle for calculating moles? Grade 5</p> <p>Q3. Give the formula for the following ions:</p> <ul style="list-style-type: none"> (a) Hydroxide (b) Carbonate (c) Oxide (d) Sulfate (e) Sulfide 	<p>Q7. What is the mass of 2 moles of carbon dioxide? (Grade 7).</p> <p>Q8. Write the half equation when sodium becomes an ion? (Grade 7).</p> <p>Q9. Explain what Avogadro's constant shows (Grade 7-8)</p> <p>Extension task- Ask your teacher for an exam question on rates of reaction.</p>

Enhanced Further Learning: **Physics**
Easier Tasks

(Grade 1-3)

- 1) What is the speed of a car that travels 3.4 km in 30 minutes?
- 2) What is the difference between distance and displacement?
- 3) What are the units of speed and velocity?
- 4) Draw a distance / time graph of your journey to school.

Harder Tasks

Find out about the different features that cars have to protect us from high speed collisions. (Grade 5)

Watch some clips of the winter Olympics. Use the information given to work out the average speed of people in different events. (Grade 6)

Literacy (Grade 3)

Write a definition for the following words:

scalar
vector
Speed
Velocity

Describe a method that you could use to measure someone's reaction time. What data would you collect? How would you present your results? (Grade 7)

Make an information sheet to show the difference between distance and displacement, with some examples. (Grade 4)

Skills/Numeracy

(Grade 3)

- 1) Explain the things that could affect the stopping distance of a car.
- 2) Plot a graph using this data:

Speed (mph)	Stopping distance (m)
20	12
30	23
40	36
50	53