
Maths

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content - WHAT will be learned? What previous learning can be linked? Why this order/ sequence ?	 Fractions Algebraic Fractions Sequences 	 Coordinates Linear Graphs Other Graphs Ratio 	 Real Life Graphs Rates of Change Constructing triangles Loci Transforming 2-D shapes 	 Direct and Inverse Proportion Solving Linear Equations 	 Angles Angles in Parallel lines Angles in Polygons Bearings 	 Area Volume Circumference and Area of Circles Surface area
Skills- What will be developed?	Learners develop their mathematical fluency in a range of areas through a concrete, pictorial and abstract (CPA) approach. Learners apply their understanding to be able to solve problems in a range of different contexts. Learners explain their reasoning when identifying solutions to problems and when responding to mathematical statements. Knowledge of the number system, and four operations including times tables are vital skills and need to be honed. Pupils need to be fluent in these skills to master the content above	Learners develop their mathematical fluency in a range of areas through a concrete, pictorial and abstract (CPA) approach. Learners apply their understanding to be able to solve problems in a range of different contexts. Learners explain their reasoning when identifying solutions to problems and when responding to mathematical statements. Knowledge of sequences must be secure before fluency in linear graphs can be achieved. Good knowledge of fractions is required for ratio and will be developed here	Learners develop their mathematical fluency in a range of areas through a concrete, pictorial and abstract (CPA) approach. Learners apply their understanding to be able to solve problems in a range of different contexts. Learners explain their reasoning when identifying solutions to problems and when responding to mathematical statements. Understanding linear and other graphs are used in real life graphs and rates of change. Measurements and accuracy skills will be developed during the final three topics.	Learners develop their mathematical fluency in a range of areas through a concrete, pictorial and abstract (CPA) approach. Learners apply their understanding to be able to solve problems in a range of different contexts. Learners explain their reasoning when identifying solutions to problems and when responding to mathematical statements. Number systems, Fractions and Ratio skills will be developed during the teaching of proportion. Four operations and times tables honed during solving equations	Learners develop their mathematical fluency in a range of areas through a concrete, pictorial and abstract (CPA) approach. Learners apply their understanding to be able to solve problems in a range of different contexts. Learners explain their reasoning when identifying solutions to problems and when responding to mathematical statements. Accuracy in drawing angles is developed here. Solving linear equations will be honed when calculating missing angles	Learners develop their mathematical fluency in a range of areas through a concrete, pictorial and abstract (CPA) approach. Learners apply their understanding to be able to solve problems in a range of different contexts. Learners explain their reasoning when identifying solutions to problems and when responding to mathematical statements. Substitution methods honed here from all work on graphs
Key 'How'/'Why' Questions- What powerful knowledge will be gained? What areas/themes/concepts will be explored?	How to apply the content listed above in the real-world address why the skills are learned in school. Contextual questions related to the learning designed to embed the ideas to allow the concepts to be used later in the curriculum where they are built upon in other topics that rely of the fluency of these skills. Knowledge of the number system, and four operations including times tables are vital skills and need to be honed. Pupils need to be fluent in these skills to master the content above Times tables are	How to apply the content listed above in the real- world address why the skills are learned in school. Contextual questions related to the learning designed to embed the ideas to allow the concepts to be used later in the curriculum where they are built upon in other topics that rely of the fluency of these skills. Knowledge of sequences must be secure before fluency in linear graphs can be achieved. Good knowledge of fractions is required for ratio and will be developed here.	How to apply the content listed above in the real- world address why the skills are learned in school. Contextual questions related to the learning designed to embed the ideas to allow the concepts to be used later in the curriculum where they are built upon in other topics that rely of the fluency of these skills. Understanding linear and other graphs are used in real life graphs and rates of change. Measurements and accuracy skills will be developed during the final three topics.	How to apply the content listed above in the real- world address why the skills are learned in school. Contextual questions related to the learning designed to embed the ideas to allow the concepts to be used later in the curriculum where they are built upon in other topics that rely of the fluency of these skills. Number systems, Fractions and Ratio skills will be developed during the teaching of proportion. Four operations and times tables honed during solving equations.	How to apply the content listed above in the real- world address why the skills are learned in school. Contextual questions related to the learning designed to embed the ideas to allow the concepts to be used later in the curriculum where they are built upon in other topics that rely of the fluency of these skills. Accuracy in drawing angles is developed here. Solving linear equations will be honed when calculating missing angles.	How to apply the content listed above in the real- world address why the skills are learned in school. Contextual questions related to the learning designed to embed the ideas to allow the concepts to be used later in the curriculum where they are built upon in other topics that rely of the fluency of these skills. Substitution methods honed here from all work on algebra and graphs.

Year Group: 8

Γ	required for all these tenies	1	1			
	Using these skills will help to					
	develop fluency in numerical					
	fractions and their uses in					
	real world situations.					
SEND- how will support be seen? Seating	 Seating plans for all 	 Seating plans for all 	Seating plans for all	 Seating plans for all 	Seating plans for all	 Seating plans for all
plans? Simplified questions?	classes. SEND and	classes. SEND and	classes. SEND and	classes. SEND and	classes. SEND and	classes. SEND and
	identified pupils	identified pupils	identified pupils	identified pupils	identified pupils	identified pupils
	placed strategically	placed strategically	placed strategically	placed strategically	placed strategically	placed strategically
	nossible support	nossible support	nossible support	nossible support	nossible support	nossible support
	Colour copies for all	Colour copies for all	Colour copies for all	Colour copies for all	Colour copies for all	Colour copies for all
	Irlen's students	Irlen's students	Irlen's students	Irlen's students	Irlen's students	Irlen's students
	All SEND notes taken	All SEND notes taken	All SEND notes taken	All SEND notes	All SEND notes taken	All SEND notes taken
	into consideration	into consideration	into consideration	taken into	into consideration	into consideration
	for the pupils that	for the pupils that	for the pupils that	consideration for	for the pupils that	for the pupils that
	this affects.	this affects.	this affects.	the pupils that this	this affects.	this affects.
	Support given to	Support given to	Support given to	affects.	Support given to	Support given to
	pupils who struggle	pupils who struggle	pupils who struggle	Support given to	pupils who struggle	pupils who struggle
	or nave been	or nave been	or nave been	pupils who struggie	or nave been	or nave been
	in the groups	in the groups	in the groups	identified as weaker	in the groups	in the groups
	Classrooms and	Classrooms and	Classrooms and	in the groups.	Classrooms and	Classrooms and
	boards uncluttered	boards uncluttered	boards uncluttered	Classrooms and	boards uncluttered	boards uncluttered
	to ensure an optimal	to ensure an optimal	to ensure an optimal	boards uncluttered	to ensure an optimal	to ensure an optimal
	learning	learning	learning	to ensure an optimal	learning	learning
	environment (only	environment (only	environment (only	learning	environment (only	environment (only
	relevant information	relevant information	relevant information	environment (only	relevant information	relevant information
	given)	given)	given)	relevant information	given)	given)
				given)		
Assessment- What? Why?	Informal assessment via low	Informal assessment via low	Informal assessment via low	Informal assessment via low	Informal assessment via low	Informal assessment via low
	stakes quizzes and cold	stakes quizzes and cold	stakes quizzes and cold	stakes quizzes and cold	stakes quizzes and cold	stakes quizzes and cold
	calling to check the	calling to check the	calling to check the	calling to check the	calling to check the	calling to check the
	understanding of all pupils	understanding of all pupils	understanding of all pupils	understanding of all pupils	understanding of all pupils	understanding of all pupils
	regularly.	regularly.	regularly.	regularly.	regularly.	regularly.
		Formal Maths assessments				Sets meetings are had to
	GL Assessments for accurate	to determine progress		Formal Maths assessments	Formal Maths assessments	ensure pupils are in the
	target grades	towards target grade.		to determine progress	to determine progress	correct learning
		QLA to inform future		towards target grade.	towards target grade.	environment to allow
		planning of retrieval practice		QLA to inform future	QLA to inform future	optimal progress.
		and interleaved learning.		planning of retrieval practice	planning of retrieval practice	
				and interleaved learning.	and interleaved learning	
		Sets meetings are had to		Coto montingo ava bardas		
		correct learning		sets meetings are had to		
		environment to allow		correct learning		
		optimal progress.		environment to allow		
				optimal progress.		

What memory for learning skills will be	Interleaved starters used to	Interleaved starters used to	Interleaved starters used to	Interleaved starters used to	Interleaved starters used to	Interleaved starters used to
required- modelling? Concrete answers?	retrieval practise.	retrieval practise.	retrieval practise.	retrieval practise.	retrieval practise.	retrieval practise.
Retrieval?	Cold calling in lessons.	Cold calling in lessons.	Cold calling in lessons.	Cold calling in lessons.	Cold calling in lessons.	Cold calling in lessons.
	Questioning techniques to	Questioning techniques to	Questioning techniques to	Questioning techniques to	Questioning techniques to	Questioning techniques to
	draw out knowledge of	draw out knowledge of	draw out knowledge of	draw out knowledge of	draw out knowledge of	draw out knowledge of
	pupils and re-enforce their	pupils and re-enforce their	pupils and re-enforce their	pupils and re-enforce their	pupils and re-enforce their	pupils and re-enforce their
	understanding. Model	understanding. Model	understanding. Model	understanding. Model	understanding. Model	understanding. Model
	answers using	answers using	answers using	answers using	answers using	answers using
	visualisers/surface pro	visualisers/surface pro	visualisers/surface pro	visualisers/surface pro	visualisers/surface pro	visualisers/surface pro
	machines. Scaffolding in	machines. Scaffolding in	machines. Scaffolding in	machines. Scaffolding in	machines. Scaffolding in	machines. Scaffolding in
	lessons appropriate to each	lessons appropriate to each	lessons appropriate to each	lessons appropriate to each	lessons appropriate to each	lessons appropriate to each
	group.	group.	group.	group.	group.	group.
Literacy- reading, extended accurate	Key words/terms	Key words/terms	Key words/terms	Key words/terms	Key words/terms	Key words/terms
writing and oracy opportunities	emphasised and highlighted	emphasised and highlighted	emphasised and highlighted	emphasised and highlighted	emphasised and highlighted	emphasised and highlighted
	in lessons.	in lessons.	in lessons.	in lessons.	in lessons.	in lessons.
	Reading and breaking down	Reading and breaking down	Reading and breaking down	Reading and breaking down	Reading and breaking down	Reading and breaking down
	questions to allow all	questions to allow all	questions to allow all	questions to allow all	questions to allow all	questions to allow all
	learners to access the skills	learners to access the skills	learners to access the skills	learners to access the skills	learners to access the skills	learners to access the skills
	needed.	needed.	needed.	needed.	needed.	needed.
Numeracy/computing skills	All topics require good	All topics require good	All topics require good	All topics require good	All topics require good	All topics require good
	numeracy skills	numeracy skills	numeracy skills	numeracy skills	numeracy skills	numeracy skills
		numeracy skins	numeracy skins	numeracy skins		numeracy skins
Character development	Cold calling ensures that all	Cold calling ensures that all	Cold calling ensures that all	Cold calling ensures that all	Cold calling ensures that all	Cold calling ensures that all
	pupils are required to answer	pupils are required to				
	questions as there is a no opt	answer questions as there is				
	out culture. Pupils with	a no opt out culture. Pupils				
	Anxiety around this are	with Anxiety around this are	with Anxiety around this are	with Anxiety around this are	with Anxiety around this are	with Anxiety around this are
	managed well and the	managed well and the	managed well and the	managed well and the	managed well and the	managed well and the
	teachers ensure that they	teachers ensure that they	teachers ensure that they	teachers ensure that they	teachers ensure that they	teachers ensure that they
	are included but feel	are included but feel	are included but feel	are included but feel	are included but feel	are included but feel
	supported. Real life examples	supported. Real life				
	and experiences are called	examples and experiences				
	upon regularly.	are called upon regularly.	are called upon regularly.	are called upon regularly.	are called upon regularly.	are called upon regularly.
Equality/Diversity opportunities	Real world e.g's used	Real world e.g's used	Real world e.g's used	Real world e.g's used	Real world e.g's used	Real world e.g's used
	Super curriculum available	Super curriculum available	Super curriculum available	Super curriculum available	Super curriculum available	Super curriculum available
	for all learners.	for all learners.	for all learners.	for all learners.	for all learners.	for all learners.
	Where the curriculum lends	Where the curriculum lends	Where the curriculum lends	Where the curriculum lends	Where the curriculum lends	Where the curriculum lends
	itself, a range of diverse	itself, a range of diverse	itself, a range of diverse	itself, a range of diverse	itself, a range of diverse	itself, a range of diverse
	careers are incorporated into	careers are incorporated				
	the real-life applications of	into the real-life applications				
	the mathematics.	of the mathematics.	of the mathematics.	of the mathematics.	of the mathematics.	of the mathematics.
Homework/Independent learning	Regular homework on the	Regular homework on the	Regular homework on the	Regular homework on the	Regular homework on the	Regular homework on the
	topics listed above	topics listed above	topics listed above	topics listed above	topics listed above	topics listed above
	throughout the half term.	throughout the half term.	throughout the half term.	throughout the half term.	throughout the half term.	throughout the half term.
	Use of Hegarty (Sparx) and	Use of Hegarty (Sparx) and	Use of Hegarty (Sparx) and	Use of Hegarty (Sparx) and	Use of Hegarty (Sparx) and	Use of Hegarty (Sparx) and
	Mymaths to aid both	Mymaths to aid both	Mymaths to aid both	Mymaths to aid both	Mymaths to aid both	Mymaths to aid both
	homework and independent	homework and independent	homework and independent	homework and independent	homework and independent	homework and independent
	learning. Super curriculum	learning. Super curriculum	learning. Super curriculum	learning. Super curriculum	learning. Super curriculum	learning. Super curriculum
	activities in maths	activities in maths	activities in maths	activities in maths	activities in maths	activities in maths
CIAG coverage/links	Super curriculum activities in	Super curriculum activities in	Super curriculum activities in	Super curriculum activities	Super curriculum activities in	Super curriculum activities in
	maths.	maths.	maths.	in maths.	maths.	maths.

| Real life examples and uses |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| for the topics where |
| appropriate. | appropriate. | appropriate. | appropriate. | appropriate. | appropriate. |
| | | | | | |