

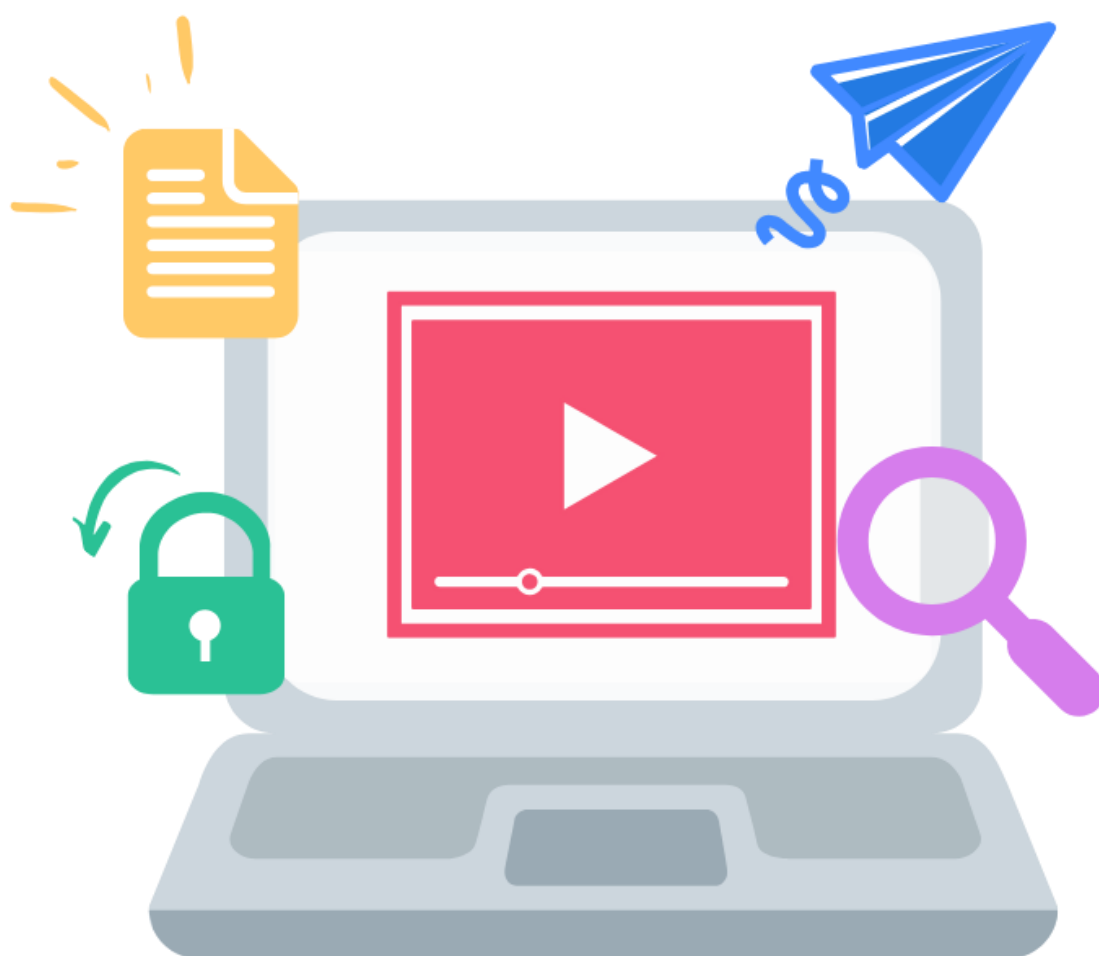
# REMOTE LEARNING MODULE

Subject: Mathematics

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Updated:



Subject:	Mathematics	Teacher (if applicable):	
Year:	9	Ability/Class (if applicable):	Higher
Module title:	Ratio & Proportion		
Duration:	2 weeks <input checked="" type="checkbox"/>	4 weeks <input type="checkbox"/>	6 weeks <input type="checkbox"/> 8 weeks <input type="checkbox"/> Other:

## Intent

Intent Statement - at Landau Forte Amington, we believe learning powerful knowledge helps students achieve and creates a fairer society. How are you trying to accomplish this, with this module?

This module is designed to be delivered remotely to allow students to continue to access a well-constructed and relevant curriculum to enable them to have appropriate maths skills to succeed in life. In particular, this module focuses on ratio and proportion which have significant links to real life, especially the arts, cooking and the use of money

Aims - what do you want pupils to be able to know and do by the time they finish this module?

- Work with ratio notation
- Simplify ratios
- Share into ratios
- Solve a range of problems involving ratios
- Understand the concept of proportion
- Use proportion to solve problems involving scaling
- Compare costs to decide value for money

Academy values – at Landau Forte Amington, we want students to be ambitious, brave and kind. How are these values promoted in this module?

- Ambitious – aims to quickly and effectively fill gaps then progress to existing SOL
- Brave – encourage students to persevere and show resilience through problem solving tasks
- Kind – Culture of error fostered, classroom rules clearly established to support learning without ridicule

Content – what is being covered, ensuring breadth & depth?

National Curriculum/Exam Specification - how does the content link to the NC or Exam Spec?

Covers a range of skills and content overlapping the Year 8 and Year 9 SOLs to "recover" lost learning and further develop student learning

R2, R24, R4, R6

Powerful Knowledge - what powerful knowledge is included in this module? Consider what knowledge is it important for our students to know, so that when they leave school they can engage in and lead discussions, with people from the most advantaged backgrounds?

- Value for money
- Scaling recipes
- Conversions
- Money problems

# Implementation

## KEY CONCEPTS

<b>Key Concepts</b> – what are the key concepts being taught?	<b>Progression</b> – how will studying these key concepts support progression to the next academic year, or key stage?
Ratio notation, using ratios, proportionality	Bridges gaps between Yr8 and Yr9 SOLs, builds using spiral curriculum already planned

## LEARNING

<b>Synchronous</b> – what are the synchronous aspects of the module, including new material taught?	<b>Asynchronous</b> – what are the asynchronous aspects of the module, including deliberate practice?
2 live lessons, 2 Q&A clinics and DIRT lesson after cycle <ol style="list-style-type: none"> <li>1. Ratio skills (revisit / new material) – with follow up Q&amp;A clinic</li> <li>2. Proportion skills (revisit / new material) – with follow up Q&amp;A clinic</li> </ol>	6 hours of deliberate practice (booklet) Exit ticket for end of topic assessment

## ENGAGEMENT

<b>Accessibility</b> – how are you going to ensure students without ICT can engage with this module?	<b>Disengagement</b> – how are you going to ensure students who are not engaging with this module are identified and supported?
Work pack will be printed and posted to students	MS Teams used to track and log submission of work, student, parental and tutor contact when not completed. CL informed of repeated disengagement.

## FEEDBACK

<b>End of Module</b> – what is the end of module assessment, which will be used to evaluate the knowledge and skills gained?	<b>Review Points</b> – what takes place at the review points, to monitor the progress of learners and provide feedback, or support?	
Exit ticket to check key success criteria <ul style="list-style-type: none"> <li>• Using ratio notation</li> <li>• Simplifying ratio</li> <li>• Sharing in a ratio</li> <li>• Ratio difference</li> <li>• Reverse ratio</li> <li>• Proportion (recipe)</li> <li>• Inverse proportion</li> </ul>	<b>2 Weeks</b>	Exit ticket at end of 2-week module
	<b>4 Weeks</b>	X
	<b>6 Weeks</b>	X
	<b>8 Weeks</b>	X
	<b>Other</b>	"Clinic" to take place once a week via MS Teams

**Delivery** (please note - a two week remote learning module may only take one lesson cycle)

		1) Lesson Type (remote or blended)	2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)		
1	4	Remote (live on MS Teams and remote as study)	<input checked="" type="checkbox"/>	Recall practice (MathsBot displayed on arrival)	What   How to use ratio, solving a range of problems using ratio	
		Blended (live in classroom and remote as study)	<input type="checkbox"/>		Why   Understand how ratio works and how it is applicable in real life, develop fluency and understanding	
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		Ratio notation; simplifying ratio; ratio given 1 value; ratio with difference given		Diagnostic questions used – answers in chat or held up on camera	Questions clearly modelled and scaffolded using a bar method, students asked to copy down for reference	
Number of lessons in cycle:	7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)	
	Section 1 – notation & simplifying Section 2 – sharing in a ratio Section 3 – ratio given 1 value Section 4 – ratio given difference		Q&A clinic used to answer questions Solutions shared for students to self-assess, teacher will collate common errors through viewing submitted work and address in Q&A clinics	Quiz at the end of the cycle (MS Forms)		
		1) Lesson Type (remote or blended)	2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)		
2	4	Remote (live on MS Teams and remote as study)	<input checked="" type="checkbox"/>	Recall practice (MathsBot displayed on arrival)	What   What is proportion, how to apply proportion in context	
		Blended (live in classroom and remote as study)	<input type="checkbox"/>		Why   Understand how proportional relationships are important in real life (such as cooking), develop fluency and understanding	
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)	Synchronous (live)
		Scale recipes up, scale recipes down, unitary method, inverse proportion problems, best buy problems		Diagnostic questions used – answers in chat or held up on camera	Questions clearly modelled and scaffolded, students asked to copy down for reference	
Number of lessons in cycle:	7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)	
	Section 5 – scaling recipes Section 6 – inverse proportion Section 7 – value for money problems		Q&A clinic used to answer questions Solutions shared for students to self-assess, teacher will collate common errors through viewing submitted work and address in Q&A clinics	Quiz at the end of the cycle (MS Forms) Exit ticket for deep feedback submitted in session 8		

		1) Lesson Type (remote or blended)	2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)			
3	1	Remote (live on MS Teams and remote as study)	<input checked="" type="checkbox"/>		What		
		Blended (live in classroom and remote as study)	<input type="checkbox"/>		Why		
			How				
	Number of lessons in cycle:	4) New Material (previous learning/ new material)		5) Check for Understanding (questioning/checking)		6) Prepare for Practice (model/ scaffold)	
		DIRT – whole class feedback from exit ticket, address misconceptions and provide feedforward information		Students to respond to common errors in chat feature		Model examples of any concepts that have significant errors	
7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)		9) Review (daily/monthly)			
Guided – rectify mistakes on exit ticket Independent – feed forward tasks to build on errors identified in exit ticket		(Based on feedback)		n/a		Synchronous (live)	
						Asynchronous (remote)	