RECOVERY CURRICULUM

Subject: Mathematics
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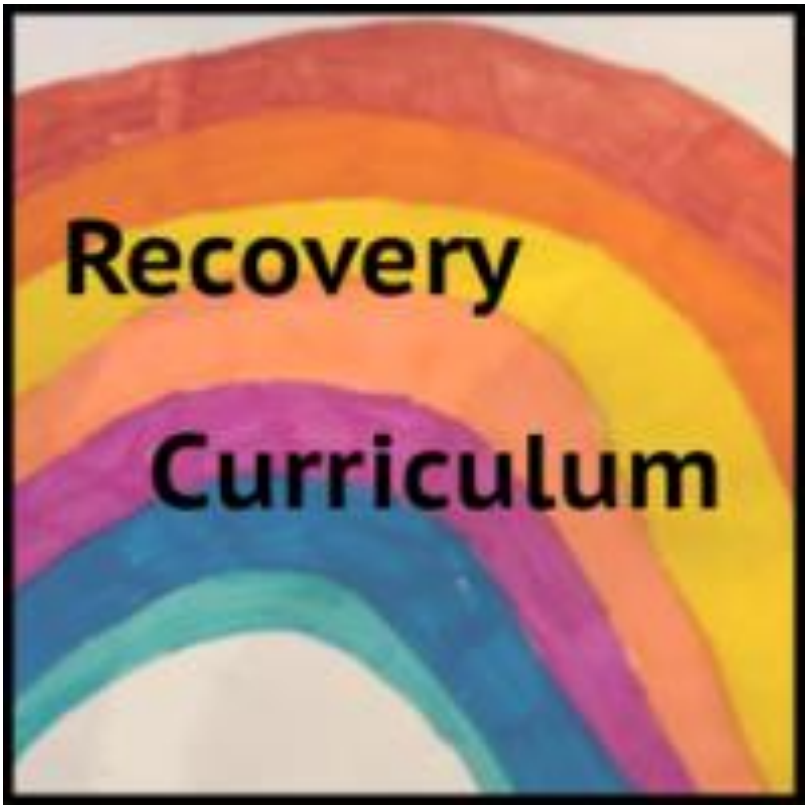

Subject:	Mathematics	Teacher:	
Year:	7	Class:	All – Mixed ability groups
Unit title:	Exploring Number		
Duration:	2 weeks (7 lessons)		

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 unit/topic?

This topic will focus on student recovery following the pandemic, which has resulted in students experiencing the following possible losses: routine, structure, friendship, opportunity and freedom. It will support students academically, socially and emotionally, in order to transition students back to Academy life and support with the issues resulting from loss.

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

- identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places
- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- use negative numbers in context, and calculate intervals across zero
- identify common factors, common multiples and prime numbers

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

- 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 7 SOL and previous content taught at KS2 to "recover" lost learning and further develop student learning	

Powerful Knowledge - what powerful knowledge is included in this SoW? 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?

- Understand and use negative numbers when working in context, such as temperature

Implementation

GAPS	
Identification – how are you going to identify the gaps in knowledge/skills?	**Triage** – how are you going to rank order these gaps in knowledge/skills and 'fill' them, in order of importance?
MWB activities to assess existing knowledge Use of DNA to probe existing understanding Cold call questioning in lessons to gain insight into knowledge	Rank in order of severity (numbers affected) in order of progression (indicated by the order of aims listed above)
KEY CONCEPTS	
Key Concepts – what are the key concepts being taught?	**Progression** – how will studying these key concepts support progression to the traditional curriculum that has been planned?
Place Value, ordering numbers, ordering decimal numbers, negative numbers, prime numbers, factors and multiples	Bridges gaps between Yr6 and Yr7 SOLs, builds using spiral curriculum already planned
WELLBEING	
Lockdown – how will students share their experiences of lockdown?	**Social and Emotional** – how will student social and emotional health be supported?
Encourage to look at how this might link to experiences in lockdown (weather temperature)	Positive classroom atmosphere, opportunities to work as a team / group, whole class discussions
RE-ESTABLISH	
Learning Skills – how are you going to re-establish the skills for learning?	**Relationships** – how are you going to re-establish classroom relationships?
Model how to solve problems, explicit direction on strategies and skills, "thinking out loud"	Standards lesson first lesson back, learn names of students quickly (seating plans)
OPPORTUNITIES	

Discussion – what are the discussion based opportunities?	**Group** – what are the group work based opportunities (while still ensuring social distancing)?
Maths team games or more complex problem/reasoning resources provided for each lesson to be discussed whole class in plenary / in groups during deliberate practice	Maths team games or more complex problem/reasoning resources provided for each lesson to be discussed in groups/pairs during deliberate practice

Delivery

1		1) Lesson Type (classroom or blended for remote homework)	2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed) ☑	Recall basic 4 operation questions (mathsbot)	What: Place value Why: Fill in gaps, develop fluency and understanding How: Use place value in a variety of contexts	
		Blended (live and remote as independent study) ☐			
	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)
		1. Use place value headings 2. Read and write numbers	MWBs https://www.mathspad.co.uk/i2/task.php?id=261 https://www.mathspad.co.uk/interactives/test/test.php?id=6	Modelled example	
		7) Deliberate Practice (guided/ independent)	8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)
		https://www.mathspad.co.uk/teach/worksheets/placeValue/readingWritingIntegers.php	Share answers, self-assess	MWBs – spot the mistake https://www.maths4everyone.com/skills/sats-questions-9308.html	
2		1) Lesson Type (classroom or blended for remote homework)	2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed) ☑	Recall place value questions	What: Ordering integers Why: Fill in gaps, develop fluency and understanding How: Order positive integers using a number line	
		Blended (live and remote as independent study) ☐			
	N ↄ	4) New Material (previous learning/ new material)	5) Check for Understanding (questioning/checking)	6) Prepare for Practice (model/ scaffold)	Sync hron

<table>
<tr><td></td><td></td><td>• Ordering positive integer
• Using a number line to explore positive and negative integers</td><td>MWBs</td><td>Modelled example
Interactive number line -
https://apps.mathlearningcenter.org/number-line/</td><td></td></tr>
<tr><td></td><td></td><td>7) Deliberate Practice
(guided/ independent)</td><td>8) Feedback
(light/deep)</td><td>9) Review
(daily/monthly)</td><td rowspan="2">Asynchronous
(remote)</td></tr>
<tr><td></td><td></td><td>Maths bot – adjust difficulty so as to not include decimals
https://www.maths4everyone.com/skills/numbers-up-to-100-1122.html</td><td>Share answers, self-assess</td><td>MWBs</td></tr>
<tr><td colspan="6"></td></tr>
<tr><td rowspan="4">3</td><td rowspan="4">Number of lessons in cycle:</td><td colspan="2">1) Lesson Type
(classroom or blended for remote homework)</td><td>2) DNA
(Do Now Activity/Reading)</td><td colspan="2">3) Learning Intentions
(what, why & how)</td></tr>
<tr><td>Classroom
(whole sequence completed)</td><td>☑</td><td rowspan="2">Recall ordering integers
(Mathsbot)</td><td colspan="2" rowspan="2">What: Negative numbers
Why: Fill in gaps, develop fluency and understanding
How: Using a number line</td></tr>
<tr><td>Blended
(live and remote as independent study)</td><td>☐</td></tr>
<tr><td>4) New Material
(previous learning/ new material)</td><td>5) Check for Understanding
(questioning/checking)</td><td colspan="2">6) Prepare for Practice
(model/ scaffold)</td><td>Synchronous
(live)</td></tr>
<tr><td>• Understand and use negative numbers when working in context, such as temperature
• Calculate intervals across zero</td><td>MWBs</td><td colspan="2">Modelled example</td><td></td></tr>
<tr><td>7) Deliberate Practice
(guided/ independent)</td><td>8) Feedback
(light/deep)</td><td colspan="2">9) Review
(daily/monthly)</td><td rowspan="2">Asynchronous
(remote)</td></tr>
<tr><td>Mathsbot (temperature worded questions)
https://www.mathspad.co.uk/teach/worksheets/negativeNumbers/numberLines.php
https://www.mathspad.co.uk/teach/worksheets/negativeNumbers/puzzlesAddSub.php
https://www.maths4everyone.com/skills/intervals-across-zero-1362.html</td><td>Share answers, self-assess</td><td colspan="2">http://justmaths.co.uk/Worksheets/Number/Directed%20number%20-%20EVER%20WONDERED%20WHY%20wsheet.pdf</td></tr>
<tr><td colspan="6"></td></tr>
<tr><td rowspan="2">4</td><td rowspan="2"></td><td colspan="2">1) Lesson Type
(classroom or blended for remote homework)</td><td>2) DNA
(Do Now Activity/Reading)</td><td colspan="2">3) Learning Intentions
(what, why & how)</td></tr>
<tr><td>Classroom
(whole sequence completed)</td><td>☑</td><td>MWBs</td><td colspan="2">What: Ordering decimals</td></tr>
</table>

		Blended (live and remote as independent study)	☐		Why: Fill in gaps, develop fluency and understanding How: Use place value table	
	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)
		Order and compare decimal numbers		MWBs (mathsbot) https://www.mathspad.co.uk/interactives/orderingDecimals2/orderingDecimals2.php	Modelled example using place value table/headings	
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)
		https://www.mathspad.co.uk/interactives/decimalsTool/decimalsTool.php		Share answers, self-assess	https://www.mathspad.co.uk/teach/linkedDocuments/orderDecimals/Ordering%20Decimals%20Worksheet.pdf	
5		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed)	☑	Recall questions on previous 3 lessons (mathsbot)	What: Multiply/divide by 10, 100, 1000… Why: Fill in gaps, develop fluency and understanding How: Using place value table/headings	
		Blended (live and remote as independent study)	☐			
	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)
		• Multiply numbers by 10 • Multiply numbers by 100 • Multiply numbers by 1000 • Divide numbers by 10 • Divide numbers by 100 Divide numbers by 1000		MWBs	Modelled example using place value table/headings https://www.mathspad.co.uk/interactives/placeValue/placeValue.php	
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)
		https://www.teachitmaths.co.uk/resources/ks3/number/multiply-divide-by-powers-of-10-maze/24599		Share answers, self-assess	http://www.greatmathsteachingideas.com/2012/02/26/multiplying-and-dividing-by-10-100-and-1000-who-wants-to-be-a-millionaire/	

6		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed)	☑	Recall questions – multiply/divide by 10, 100, 1000 (mathsbot)	What: Know the meaning of and recognise prime numbers Why: Fill in gaps, develop fluency and understanding How: Prime number investigation	
		Blended (live and remote as independent study)	☐			
	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)
		• Investigate prime numbers		https://www.mathspad.co.uk/interactives/primeNumbers/primeNumbers.php Round robin quick fire - https://www.maths4everyone.com/apps/chains/index.html	Modelled example	
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)	Asynchronous (remote)
		https://www.mathspad.co.uk/interactives/primeNumbersTool/primeNumbers.php https://nrich.maths.org/1153 ,		Share answers, self-assess	https://www.mathspad.co.uk/teach/worksheets/factorising/factorsMultiplesSpecialNumbers.php	
7		1) Lesson Type (classroom or blended for remote homework)		2) DNA (Do Now Activity/Reading)	3) Learning Intentions (what, why & how)	
		Classroom (whole sequence completed)	☑	Low stake prime number quiz - https://www.tes.com/teaching-resource/prime-number-quiz-11991818	What: Know the meaning of factor/multiples and find common factors/multiples Why: Fill in gaps, develop fluency and understanding How: Using venn diagrams	
		Blended (live and remote as independent study)	☐			
	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)
		• Know the meaning of factors and multiples • Find common multiples of two numbers • Find common factors of two numbers		MWBs https://www.mathspad.co.uk/interactives/multiplesGame/multiplesGame.php	https://www.mathspad.co.uk/interactives/factors/factors.php	
		7) Deliberate Practice (guided/ independent)		8) Feedback (light/deep)	9) Review (daily/monthly)	Asyn chro

		https://www.mathspad.co.uk/teach/linkedDocuments/factors/trueOrFalse.php https://www.mathspad.co.uk/teach/worksheets/primeNumbers/factorsMultiplesPrimesMysteryGrids.php https://www.mathspad.co.uk/resource.php?multiples “We can work it out” – activity 5a, activity 11, 15c	Share answers, self-assess	https://www.mathspad.co.uk/teach/linkedDocuments/factors/factorsWorksheet.php https://www.mathspad.co.uk/resource.php?factorsPrimes https://www.maths4everyone.com/skills/sats-questions-9358.html	