## RECOVERY CURRICULUM

Subject: Mathematics<br>Author: LEG

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Updated:


| Subject: | Mathematics | Teacher: | LEG |
| :---: | :---: | :---: | :---: |
| Year: | 8 | Class: | 8 Foundation |
| Unit title: | Factors, Multiples, Primes, Squares, Cubes. |  |  |
| 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? |  |  |  |
| - Understand the meaning of factors, multiples, and prime numbers <br> - Identify factors, multiples, and primes numbers, <br> - Find the highest common factor and lowest common multiple <br> - Identify squared and cube 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 <br> - Brave - encourage students to persevere and show resilience through problem solving tasks <br> 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 and Year 8 scheme of learning 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? |  |  |  |

## 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? |
| Prime numbers, Multiples, Factors, Squares and cubes. | Bridges gaps between Y 7 and Y 8 scheme of learning, 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 | 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?

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

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 in groups/pairs during deliberate practice

## Delivery

1
(classroom or blended for remote homework

※ (previous learning/ new material)

| (previous lea |
| :---: |
| Identifying factors |

    7) Deliberate Practice
        (guided/ independent)
        Factor Spider
    https://www.goteachmaths.co.uk/wp-
    content/uploads/2019/03/Factors-Worksheet-B-A4.pdf
    | X | 2) DNA <br> (Do Now Activity/Reading) |
| :---: | :---: |
| $\square$ | 5) Check for Understanding (Times tables) <br> (questioning/checking) |
|  | Can you list the factors of a given number <br> on your MWB |
| 4.pdf | Cold call to share answers. Self-assess and <br> correct work. <br> (light/deep) |

1) Lesson Type
(classroom or blended for remote homework

| Classroom <br> (whole sequence completed) | X |
| :--- | :--- |

## Blended

(live and remote as independent study)

Z $=$
$\supset \quad \begin{aligned} & \text { 4) New Material } \\ & \text { (previous learning/ new material) }\end{aligned}$
$\supset$ (previous learning/ new material)

2
2) DNA
(Do Now Activity/Reading)

Targeted DNA for class (Mathsbot)
5) Check for Understanding (questioning/checking)
3) Learning Intentions
(what, why \& how)
What $\quad$ Highest common factor
Why $\quad$ Fill in the blanks, develop fluency and understanding.
To be able to identify the HCF between two numbers.
6) Prepare for Practice (model/ scaffold)



|  |  | 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) | Targeted DNA | What | Square numbers |  |
|  |  | Why |  | Fill in the gaps and develop fluency and understanding |  |
|  |  | Blended (live and remote as independent study) |  |  |  |  |
| 6 |  |  | 4) New Material (previous learning/ new material) | 5) Check for Understanding (questioning/checking) |  | 6) Prepare for Practice (model/ scaffold) |  |
|  |  | What are squared numbers? Identify squared numbers. | Pepper - Quick fire squared number questions | Demonstrate how the 'game' will work. Demonstrate how to play with a student. Can they identity a squared number? |  |  |
|  |  | 7) Deliberate Practice (guided/ independent) | 8) Feedback (light/deep) | 9) Review (daily/monthly) |  |  |  |
|  |  | Squared number paired dice game instructions included | Share answers, self-assess and respond to verbal feedback. | Quick-fire recall of squared numbers. |  |  |  |
|  |  |  |  |  |  |  |  |
| 7 |  | 1) Lesson Type (classroom or blended for remote homework) | 2) DNA <br> (Do Now Activity/Reading) | 3) Learning Intentions (what, why \& how) |  |  |  |
|  |  | Classroom <br> (whole sequence completed) | Targeted DNA | What <br> Why | Cubed numbers |  |  |
|  |  |  |  |  | Fill in the gaps and develop fluency and understanding |  |  |
|  |  | Blended (live and remote as independent study) |  | How |  |  |  |  |
|  |  | 4) New Material (previous learning/ new material) | 5) Check for Understanding (questioning/checking) |  | 6) Prepare for Practice (model/ scaffold) | $\begin{aligned} & \text { n } \\ & 0 \\ & \vdots \\ & 0 \\ & 0 \\ & \vdots \\ & \vdots \\ & \vdots \\ & \vdots \end{aligned}$ |  |
|  |  | What are cubed numbers? Identify cubed numbers. | Pepper - Quick fire squared number questions | Demonstrate how cubes relate to cubed numbers. |  |  |  |
|  |  | 7) Deliberate Practice (guided/ independent) | 8) Feedback (light/deep) |  | 9) Review (daily/monthly) |  |  |
|  |  | Cube Creator activity (on worksheet) <br> Fortune teller cubed numbers https://content.twinkl.co.uk/resource/94/d8/t-n-5544-cubed-numbers-fortune-teller-activity-sheet- | Share answers, self-assess and respond to verbal feedback. | Square and cube puzzle review https://www.mathspad.co.uk/teach/worksheets/surds/sq uareCubeNumbersPuzzle.pdf |  |  |  |

