REMOTE LEARNING MODULE

Subject: Mathematics Author: Annie Plumpton

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Updated:



| Subject: | Mathematics | | Teacher (if applicable): | | | | |
|--|---------------------------------|------------------------|--|---|--------------------------|--|--|
| Year: | 11 | | Ability/Class (if applicable): Lower | | | | |
| Module title: | Number Properties | | | | | | |
| Duration: | 2 weeks 🔀 | 4 weeks | 6 weeks | 8 weeks | Other: | | |
| Intent | 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. | | | | | | | |
| Aims - what d | o you want pupils to be | able to know and do by | the time they finish this | module? | | | |
| Understand and use a range of facts about number properties to solve problems Find factors, multiples, HCF and LCM of numbers Round numbers accurately Order lists of numbers (integers, decimals, negatives) | | | | | | | |
| 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 | | | | | | | |
| | | uring breadth & depth? | National Curriculum/E to the NC or Exam Sp | • • • • • • • • • • • • • • • • • • • | ow does the content link | | |
| Covers a range of skills and content overlapping the Year 10 and Year 11 SOLs to "recover" lost learning and further develop student learning | | | | | | | |
| 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? | | | | | | | |
| Place va | lue (appreciation for size of r | iumbers) | Appreciation fOrdering / sort | for negative numbers in co ring skills | ntext | | |
| | | | | | | | |

Implementation

KEY CONCEPTS

| Key Concepts – what are the key concepts being taught? | | Progression – how will studying these key concepts support progression to the next academic year, or key stage? | | | |
|---|---|--|--|--|--|
| Place value, multiplying/dividing by powers of 10, ordering numbers, finding factors, listing multiples, identifying prime numbers. | Bridges gaps between Yr10 and Yr11 SOLs, builds using spiral curriculum already planned | | | | |
| LE | ARNING | | | | |
| Synchronous – what are the synchronous aspects of the module, including new material taught? | Asynchronous – what are the asynchronous aspects of the module, including deliberate practice? | | | | |
| 2 live lessons, 2 Q&A clinics and DIRT lesson after cycle 1. Place value (revisit / new material) – with follow up Q&A clinic 2. Factors, multiples & primes (revisit / new material) – with follow up Q&A clinic | 6 hours of deliberate practice (booklet) Exit ticket for end of topic assessment | | | | |
| ENGAGEMENT | | | | | |
| Accessibility – how are you going to ensure students without ICT can engage with this module? Work pack will be printed and posted to students | Disengagement – how are you going to ensure students who are not engaging with this module are identified and supported? MS Teams used to track and log submission of work, student, parental and tutor contact when not completed. CL informed of repeated disengagement. | | | | |
| FE | EDBACK | Trilor completed. CE informed or repeated disengagement. | | | |
| End of Module – what is the end of module assessment, which will be used to evaluate the knowledge and skills gained? Exit ticket to check key success criteria | Review Points – what takes place at the review points, to monitor the progress of learners and provide feedback, or support? 2 Weeks | | | | |
| Read & write numbersMultiplying/dividing by 10, 100, 1000 | 4 Weeks | x | | | |
| Ordering lists of numbersRounding numbers accurately | 6 Weeks | X | | | |
| Listing factors (finding HCF of a pair of numbers) | 8 Weeks | x | | | |
| Listing Multiples (finding LCM of a pair of numbers)Identifying prime numbers | Other | "Clinic" to take place once a week via MS Teams | | | |

| Del | iver | y (please note - a two week remote | lear | ning 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) | |
| | 4 | Remote (live on MS Teams and remote as study) | | Recall practice (MathsBot displayed on arrival) | What | Place value and ordering numbers |
| | · . | Blended | | Last lesson, last week, last month grids for | Why | Fill in gaps, develop fluency and understanding |
| 1 | | (live in classroom and remote as study) | | each asynchronous lesson | How | Read and write numbers using a place value table |
| | _ | 4) New Material (previous learning/ new material) | | 5) Check for Understanding (questioning/checking) | 6) Prepare for Practice (model/ scaffold) | |
| | Number of lessons in | Read & write numbers; multiply/divide by 10, 100, 1000; ordering lists of numbers; rounding numbers accurately | | Diagnostic questions used – answers in chat or held up on camera | 6) Prepare for Practice (model/ scaffold) Questions clearly modelled and scaffolded using a place value table, students asked to copy down for reference | |
| | er of le | (guidea/ independent) | 8) Feedback (light/deep) | 9) Review (daily/monthly) | | |
| | Numbe | Section 1 – read & write numbers Section 2 – multiply/divide by 10, 100, 1000 Section 3 – ordering a list of numbers Section 4 – rounding to the nearest 10, 100, 1000, or 2d.p. | | 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 | (daily/monthly) Quiz at the end of the cycle (MS Forms) Quiz at the end of the cycle (MS Forms) | |
| | T | 1) 7 | | 0) 5) (4) | | 0) 1 1 1 |
| | | 1) Lesson Type (remote or blended) | | 2) DNA (Do Now Activity/Reading) | 3) Learning Intentions (what, why & how) | |
| | 4 | Remote (live on MS Teams and remote as study) | | Recall practice (MathsBot displayed on | What | Factors, multiples and Prime numbers |
| | | Blended | | arrival) | Why | Fill in gaps, develop fluency and understanding |
| | | (live in classroom and remote as study) | | Last lesson, last week, last month grids for each asynchronous lesson | How | Find factors and multiples of a given number, know the definition of and identify prime numbers |
| 2 | <u>::</u> | 4) New Material (previous learning/ new material) | | 5) Check for Understanding (questioning/checking) | 6) Prepare for Practice (model/ scaffold) | |
| 2 | lessons in cycle: | Definition of factors, multiples an primes; identify prime numbers; list factors/multiples; find HCF/LCM of a pair of numbers | | Diagnostic questions used – answers in chat or held up on camera | 6) Prepare for Practice (model/ scaffold) Questions clearly modelled and scaffolded, students asked to copy down for reference | |
| | | 7) Deliberate Practice (guided/ independent) | | 8) Feedback (light/deep) | | 9) Review (daily/monthly) |
| | Number of le | Section 5 – Prime number investigation Section 6 – Factors Section 7 – Multiples | | 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 | (daily/monthly) 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) | |
|--|-----------------|---|---|--|--|
| | 1 | Remote (live on MS Teams and remote as study) | | What Why | |
| | | Blended (live in classroom and remote as study) | | How | |
| | ons in cycle: | 4) New Material (previous learning/ new material) DIRT – whole class feedback from exit ticket, address misconceptions and provide feedforward information | 5) Check for Understanding (questioning/checking) Students to respond to common errors in chat feature | 6) Prepare for Practice (model/ scaffold) Model examples of any concepts that have significant errors | |
| | Number of lesso | 7) Deliberate Practice (guided/ independent) Guided – rectify mistakes on exit ticket Independent – feed forward tasks to build on error identified in exit ticket | 8) Feedback (light/deep) (Based on feedback) | y Review (daily/monthly) n/a 9) Review (doily/monthly) | |