| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Craig Park | Number - fast recognition of up to 2 objects; Shape, Space Measures - compare weight (mass) heavy/light |  |  |  |  |  | Number -begin to link numerals and amounts to 3; Number patterns - reciting numbers in sequence (to 3); Shape, Space Measures - notice patterns and arrange things in patterns |  |  |  |  |  | Consolidation |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Nursery | Number - number bonds up to 5 ; reciting no. up to 10 ; subitising up to 5 ; $1: 1$ correspondence; real life problem solving; Number patterns - identify, extend, create; Shape, Space Measures - position, routes, locations |  |  |  |  |  | Number - composition up to 5 ; reciting no. up to 10 ; subitising up to $5 ; 1: 1$ correspondence; real life problem solving; Number patterns - identify, extend, create; Shape, Space Measures - exploring 3D shapes |  |  |  |  |  | Consolidation |

Summer term Reception to Y6 adapted from White Rose Maths Hub planning (EYFS Statutory Framework 2021 and NC Programme for Mathematics 2013)

| Plan in conjunction with active learning strategies and NRich/NCETM |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Reception | To 20 and beyond <br> Build numbers beyond 10;;Count patterns beyond 10, <br> Spatial reasoning 1 <br> Make, rotate, manipulate |  |  | First, then, now Adding more: Taking away Spatia reasoning 2Compose and decompose |  |  | Find my pattern Doubling: Sharing \& grouping Spatial reasoning 3 |  |  | On the move <br> Deepening understanding; Patterns \& relationships Spatial mapping (4) Mapping |  |  | Consolidation |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| $\text { Year } 1$ | $\begin{gathered} \text { Recap } \\ \times \text { and } \div \end{gathered}$ | Fractions |  | Position and direction |  | lace value to 100 |  | Money | Shape | Time |  | Revision, closing the gaps, enrichment and problem solving activities |  |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| $\text { Year } 2$ | Position and direction | Revision and SATs |  |  |  |  | Revision, closing the gaps, enrichment and problem solving activities |  |  |  |  |  |  |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| $\text { Year } 3$ | $\begin{gathered} \text { Recap } \\ 4 \text { operations } \end{gathered}$ | Money (use opportunities using 4 operations) |  | Time |  |  | Shape |  |  |  | Revision, closing the gaps, enrichment and problem solving activities |  |  |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| $\text { Year } 4$ | Consolidate decimals | Money |  | Time Incl. Roman numerals |  | Shape |  | Position and direction |  | Statistics | Revision, closing the gaps, enrichment and problem solving activities |  |  |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Year | Shape |  |  | Position and direction |  | Negative numbers | Converting units |  | Volume |  | Revision, closing the gaps, enrichment and problem solving activities |  |  |
| week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| $\text { Year } 6$ | Position and direction | Revision (incl. time ) and SATs |  |  |  |  | Revision, closing the gaps, enrichment and problem solving activities |  |  |  |  |  |  |


|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Craig Park Summer | Number - fast recognition of up to 2 objects; Shape, Space Measures - compare weight (mass) heavy/light <br> Daily routine, sorting objects and some counting words randomly <br> Some understanding that things exist even when out of sight |  |  |  |  |  | Number -begin to link numerals and amounts to 3; Number patterns - reciting numbers in sequence (to 3); Shape, Space Measures - notice patterns and arrange things in patterns <br> Daily routine, size, time language, recites some numbers in sequence |  |  |  |  |  | Closing the gaps |
|  | Beginning to say numbers when counting though might be random. Began to sort objects into groups and previously counting though might have been in random order. Beginning to have awareness of heavy/light. |  |  |  |  |  | Began to sort objects into groups and previously counting though might have been in random order. Began to be aware that something is big or small, heavy, light, awareness of morning, day, evening. |  |  |  |  |  | Building on the learning throughout the year |
|  |  <br>  monitoring how they grow, counting birds/leaves/sticks, collecting sticks, leaves, stones and counting ordering by size. |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  <br>  ideas ; Outdoor ideas Also see for ideas Additional resources and ideas |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Resources/Stimulus Ideas <br> Number stories and rhymes/songs Rhymes and songs 1 Rhymes and songs 2 ; Counting stories Rhymes songs counting stories 3 <br>  <br>  song https://www.youtube.com/watch?u=ho0jqU6L88U https://www.youtube.com/watch?u=h 7wV10zTX8 https://www.youtube.com/watch?u=P7-UNYMOP2w |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Development Matters - non-statutory guidance for EYFS - MATHS PP 55-59 Development Matters - non-statuatory cirriculum quidance for EYFS.pdf EYFS profile exemplification numbers ELG11 Numbers.pdf <br> EYFS profile exemplification shape, space, measures ELG12 Shape space and measures.pdf Draw ideas also using Reception White Rose Hub https://whiterosemaths.com/reception-sol/ |  |  |  |  |  |  |  |  |  |  |  |  |

Rose Hab htos./whiterosemaths.com/reception-sol

| Vocabulary and Questions |  |  |  |
| :---: | :---: | :---: | :---: |
| Compare sizes, weights etc. using gesture One, two, thre, four, five, six, seven, eight Time - morning, day, evening | language - 'big, small, heavy, light' e, ten, numbers | Big, small, , compare sizes, weights etc. using gesture and language - 'light / heauy', pattern One, two, thre, four, five, six, seven, eight, nine, ten, numbers Time - morning, day, evening | Based on children's needs |
| Key Questions to develop and assess reasoning and problem solving - How can you work it out? Explain...; What strategies have you used? Explain...; How can you prove your answer? Show me. Mastery/Depths of Understanding - incorporate activities Spot the mistake True or False? What comes next? Concept cartoons/Which is the odd one out? What is the same/different? |  |  |  |
|  |  |  |  |
| Numbers Practice | Tools, Strategies and Resources |  | Assessments |
| Daily Practice incl. Concrete <br> Daily counting opportunities indoor and outdoor <br> Use of objects and puzzles, available for children to explore number and to begin develop early foundation stages of fluency | Concrete tools, Variety of objects, Creative and Active Learning, Songs www.https://numberock.com/; For ideas to adapt for nursery also see Reception White Rose Hub https://whiterosemaths.com/reception-sol/ Mastery/Challenges - NCETM, Range of NRich ideas for EYFS https://nrich.maths.org/13371 http://www.mathematicshed.com/ Shared Drives/Resources/Maths and Shared Drives/Old Server/Maths Folder; 30 Fun Indoor Games and Activities https://www.pre-kpages.com/indoor-recess-games-and-activities-for-preschoolers/ ; Circle Time Games <br> https://earluimpactlearning.com/21-circle-time-games-for-preschool-that-actuallu-work/ ; EYFS Online Games https://www.education.com/games/preschool/ <br> Gardening cross curricular links https://www.gardeningwithchildren.co.uk/school-zone/national-curriculum/ ; https://freetimewiththekids.com/maths-games-for-your-garden/; https://www.google.co.uk/amp/s/freetimewiththekids.com/maths-qames-for-your-garden/\%3famp; <br> https://www.countrysideclassroom.org.uk/storage/resource/downloads/00f2ba6f-9924-4e4a-8fa9-a2845002ada5/original/maths-in-the-garden-publication.pdf |  | Ongoing observations via Evidence Me or Learning Journey |

# Summer term Raynham Primary linked to EYFS Statutory Framework 2021 and Development Matters 2020 

Plan in conjunction with active learning strategies and NRich/NCETM

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nursery | Number - number bonds up to 5 ; reciting no. up to 10 ; subitising up to $5 ; 1: 1$ correspondence; real life problem solving; Number patterns - identify, extend, create; Shape, Space Measures - position, routes, locations |  |  |  |  |  | Number - composition up to 5 ; reciting no. up to 10 ; subitising up to $5 ; 1: 1$ correspondence; real life problem solving; Number patterns - identify, extend, create; Shape, Space Measures - exploring 3D shapes |  |  |  |  |  | Closing the gaps |
| Prior Learning | Began to develop understanding that abstract numbers carry meaning and counting though might have been in random order. Began to count objects and previously counting though might have been in random order. Mark making with the aim to represent numbers. <br> Awareness of morning, day, evening and daily routines, used objects for counting though might have been in random order though developing greater fluency. Beginning to develop awareness of patterns and sequence. |  |  |  |  |  | Began to count objects and previously counting though might have been in random order. Mark making with the aim to represent numbers. Awareness of montning, day, evening and daily routines. Began to be aware that something is big/small, long/short; awareness of different shapes through matching concrete puzzles. Beginning to develop awareness of patterns and sequence. |  |  |  |  |  | Building on the learning throughout the year |
| Each concept needs to incorporate CPA approach, where applicable. | Outdoor learning - trikes and bikes and number bays, counting steps, objects if at home, e.g. spoons, forks, etc.; Visiting animals - counting animals; Counting sounds made with instruments; Building towers with large construction blocks, Drawing numbers using large mark making tools in the outdoors and making the number with items outdoor, Tracing numbers.; Body percussion - counting claps, counting stomps, etc.; Number puzzles ; Numbers in the environment. Comparing items outdoors by size, e.g. trees, plants, flowers, planting seeds and comparing sizes of seeds, growing own plants, monitoring how they grow, counting birds/leaves/sticks, collecting sticks, leaves, stones and counting ordering by size. |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Cross-curricular Links - Use the language of size and weight in everyday contexts. Provide objects with marked differences in size to play freely with. Suggestions: dolls' and adult chairs, tiny and big bears, shoes, cups and bowls, blocks and containers; Size activities ideas 10 big and small activities preschool ; Sorting-between-big-and-small; Music/PP.E. - number formation song with Jack Hartman Lack Hartman Youtube; ; Patterns and numbers hunt, numbers match, using natural materials, incl. Leaves, also see lots of ideas on the following links and adapt for nursery.EyFS Outdoor maths ideas ; Outdoor ideas Also see for ideas Additional resources and ideas |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Resources/Stimulus Ideas <br> Number stories and rhymes/songs Rhymes and songs 1 Rhymes and songs 2 ; Counting stories Rhymes songs counting stories 3 <br>  <br>  song https://www.youtube.com/watch?u=ho0jqU6L88U; https://www.youtube.com/watch?u=h 7wV10zTX8 https://www.youtube.com/watch?u=P7-UNYm0P2w |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Development Matters - non-statutory guidance for EYFS - MATHS PP 55-59 Development Matters - non-statuatory cirriculum quidance for EYFS.pdf EYFS profile exemplification numbers ELG11 Numbers.pdf <br> EYFS profile exemplification shape, space, measures ELG12 Shape space and measures.pdf Draw ideas also using Reception White Rose Hub https://whiterosemaths.com/reception-sol/ |  |  |  |  |  |  |  |  |  |  |  |  |


| Vocabulary and Questions |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| One, two up to 10; numbers, count, patterns, number bond, position, location |  | One, two up to 10; numbers, count, morning, day afternoon, evening, first, then Long, short, longer, shorter, simple 2D and 3D shapes (square, circle, triangle, rectangle, cylinder, cube, cuboid), curved, pointy, flat |  | cuboid), children's needs |
| Key Questions to develop and assess reasoning and problem solving - How can you work it out? Explain...; What strategies have you used? Explain...; How can you prove your answer? Show me. Mastery/Depths of Understanding - incorporate activities Spot the mistake True or False? What comes next? Concept cartoons/Which is the odd one out? What is the same/different? |  |  |  |  |
| Numbers Practice | Blended Learning |  | Tools, Strategies and Resources | Assessments |
| Daily Practice incl. elements of CPA approach <br> Daily counting opportunities indoor and outdoor <br> Use of objects and puzzles, available for children to explore number | Using tablets and interactive whiteboard <br> Online Games Websites for Maths different topics (also see above links in cross-curricular links and Resources/Stimulus Ideas <br> https://mathsframe.co.uk/en/resources/category/22/most-popular <br> https://www.topmarks.co.uk/maths-games/5-7-years/counting <br> https://home.oxfordowl.co.uk/kids-activities/fun-maths-games-and-activities/ <br> https://www.mathsisfun.com/games/ <br> https://www.mathplayground.com/math-games.html |  | CPA (concrete, pictorial, abstract), Manipulatives and objects , Creative and Active Learning, Songs www.https://numberock.com/; Can adapt ideas from Reception White Rose Hub https://whiterosemaths.com/reception-sol/ <br> Mastery/Challenges - NCETM, NRich $h$ $\qquad$ http://www.mathematicshed.com/ Shared Drives/Resources/Maths and Shared Drives/Old Server/Maths Folder; <br> Gardening cross curricular links (see sustainability section in curriculum o | Ongoing observations via Evidence Me or Learning Journey <br> WI 10 Final Assessments |

Summer term Raynham Primary whole school plan adapted from White Rose Maths Hub planning
RAYNHAM PRIMARY SCHO PRIMARY SCHOOL
\&CHILDRENS CENTRE
Plan in conjunction with active learning strategies and NRich/NCETM

| week | 1 2 3 | 5 6 | 7 8 | 10 11 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Reception | To 20 and beyond | First, now, then | Find my pattern from White Rose Maths Hub planni | On the move | Consolidation |
|  | Number <br> Build numbers beyond 10 Count patterns beyond 10 <br> Measure, Shape and Spatial <br> Thinking <br> Spatial reasoning Make, rotate, manipulate <br> ONGOING ASSESSMENTS AND OBSERVATIONS | Number <br> Adding more <br> Taking away <br> Measure, Shape and Spatial <br> Thinking <br> Spatial reasoning 2 <br> Compose and decompose | Number <br> Doubling <br> Sharing and grouping <br> Even \& odd <br> Measure, Shape and Spatial <br> Thinking <br> Spatial reasoning 3 | Number <br> Consolidating key skills Deepening understanding Patterns and relationships <br> Measure, Shape and Spatial Thinking Spatial reasoning 4 Mapping | Recap <br> through <br> games <br> and <br> active <br> learning |

Tools and Strategies

## STRATEGIES

Fluency, Reasoning, Problem Solving; CPA (concrete, pictorial, abstract); Focus Activities and Table Tops linked to learning; Manipulatives; Creative/Active Learning; Outdoor Learning and Activities

| LINKS |  |
| :---: | :---: |
| White Rose Hub Scheme Updated 2022 | White Rose Hub for Early Years |
| Early Years Maths New Curriculum Links | Early Years Curriculum |
| Links and Resources | (Useful Links and Resources) |
| NCETM/Mastery and NRich | NRichEYFS and <br> Progression Map <br> Maths at a Glance |
| NRich Links to Curriculum; NCETM/Mastery Depths of Understanding Mastery Resources |  |
| Progression Map and Key Vocabulary |  |
|  | Maths Policy at a Glance |

```
Arithmetics and Timestables
            Practice
    EY- Daily }10\mathrm{ minutes sessions following
        Mastering Number scheme
    ttps://drive.google.com/drive/folders
    1srU2LMOgRLOai9GLNNEwDzO6AsCGF
        wf5?usp=sharing
            Times Tables Dance
    https://www.bbc.co.uk/teach//supermovers/times-t
            able-collection/24vv6v4
            Blended Learning
```

    Online Learning Activities and parents
    submitting learning at home activities
        through Evidence Me
    
## Mastery/Depths of

 UnderstandingIncorporate activities Spot the mistake, Incorporate activities Spot the mist
True or False? What comes next? Concept cartoons/Which is the odd one out? What is the same/different?

Key Questions to develop reasoning and problem solving

How can you work it out? Explain...; What strategies have you used? Explain...; How can you prove your answer? Show me. Links to Cold Calling.
 EvidenceMe

Summer term Raynham Primary whole school plan adapted from White Rose Maths Hub planning
Plan in conjunction with active learning strategies and NRich/NCETM

| week | 1 | 23 | 4 | 6 | 8 | 9 | $10 \quad 11$ | $12 \quad 13$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Recap $x$ and $\div$ | Fractions | Position and direction | Place value to 100 | Money | Shape | Time | Revision, closing the gaps, enrichment and problem solving activities |
|  | Y1 <br> Multipli <br> cation <br> and <br> Division <br> Recap x <br> and : | WRH Fractions <br> Recognise, find and name a half as one of two equal parts of an object, shape or Quantity. <br> Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. <br> END OF UNIT QUIZ | WRH <br> Position <br> and <br> Direction <br> Describe <br> position, <br> direction <br> and <br> movement, including whole, half, quarter and threequarter turns. <br> END OF UNIT QUIZ | WRH Place Value <br> Count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number. <br> Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. <br> Given a number, identify one more and one less. <br> Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. <br> Read and write numbers from 1 to 20 in numerals and words. | WRH Money Recognise and know the value of different denomination $s$ of coins and notes. <br> Solve simple one step problems <br> END OF UNIT QUIZ |  | WRH Time <br> Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]. <br> Recognise and use language relating to dates, including days of the week, weeks,months and years. <br> Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. <br> Compare, describe and solve practical problems for time (e.g. quicker, slower, earlier, later). <br> Measure and begin to record time (hours, minutes, seconds). | Revision of topics and closing gaps based on assessment. <br> Provide a range of enrichment activities including games, active learning, NRich and NCETM. <br> Enrichment and <br> Depths of <br> Understanding Resources |

Tools and Strategies

## STRATEGIES

Fluency, Reasoning, Problem Solving; Raynham Calculation Policy
CPA (concrete, pictorial, abstract); Manipulatives;
Creative/Active Learning
Online Manipulatives

## FAST FEEDBACK \&

## PLANNING

Fast Feedback and Pupil

## Conferencing Framework and

 ResourcesLesson Planning Template
Planning Template

LINKS

| LINKS |  |
| :---: | :---: |
| White Rose Hub Scheme Updated 2022 | White Rose Hub Scheme Updated 2022 |
| National Curriculum: Mathematics Programme of Study (2014) | National Curriculum: Mathematics Programme of Study 2013 |
| NC Mathematis Guidancee (2020) | National Curriculum Updated Guidance 2020 |
| NCETM/Mastery and NRich | NRich EYFS and KS1 NRich Links to Curriculum; NCETM/Mastery Depths of Understanding Mastery Resources |
| Progression Map | Progression Map and Key Vocabulary |
| Maths at a Glance | Maths Policy at a Glance |

Arithmetics and Timestables Practice
EY/KS1- Daily 10 to 15 minutes sessions following Mastering Number scheme

Mastering Number Resources
Times Tables Dance Son
School Calculation Policy

## Blended Learning

Maths Shed Homework weekly number bonds to 10 and 20 practice/Multiple choice quizzes (Wordwall, Kahoot and Google Forms); Rockstars Timestables for MABLE + , online games and songs (Numberock, Youtube), Mathsframe; Using Rockstars Timestables Modelling tool Rockstars Interactive Tools

## Mastery/Depths of

 UnderstandingIncorporate activities Spot the mistake, True or False? What comes next? True or False? What comes next?
Concept cartoons/Which is the odd one out? What is the same/different?

Key Questions to develop reasoning and problem solving How can you work it out? Explain... What strategies have you used? Explain...; How can you prove your answer? Show me. Links to Cold Calling.

## Cultural Capital - Significant Person

Ada Lovelace (1815-1852), British,
Ada Lovelace (1815-1852), British,
mathematical expertise in early computing
Assessments

Ongoing formative assessments
Multiple choice quizzes for topics WRH end of unit assessments.

Summer term Raynham Primary whole school plan adapted from White Rose Maths Hub planning
RAYNHAM
$\underset{\substack{\text { PRMMARYSCHOOL } \\ 8 \text { CCHIDRENS CRNTRE }}}{ }$
Plan in conjunction with active learning strategies and NRich/NCETM

Arithmetics and Timestables Practice
EY/KS1 - Daily 10 to 15 minutes sessions following Mastering Number scheme

Mastering Number Resources Times Tables Dance Sonss

Calculation Policy
School Calculation Policy

## Blended Learning

Maths Shed Homework weekly number bonds to 10 and 20 practice/Multiple choice quizzes (Wordwall, Kahoot and Google Forms); Rockstars Timestables for MABLE+, online games and songs (Numberock, , Moutube), Mathsframe; Using Rockstars Timestables Modelling tool Rockstars Interactive Tool

## Mastery/Depths of

 UnderstandingIncorporate activities Spot the mistake, True or False? What comes next?
Concept cartoons/Which is the odd one out? What is the same/different?

Key Questions to develop reasoning and problem solving How can you work it out? Explain...; What trategies have you used? Explain...; How ks to Cold Callin.

Cultural Capital - Significant Perso Muhamad Ibn Musa Al-Khwarizmi, 780-850. Hindu Arabic numbers and numerals

## Assessments

Ongoing formative assessments Multiple choice quizzes for topics WRH end of unit assessments.

Summer term Raynham Primary whole school plan adapted from White Rose Maths Hub planning
PRIMARY SCHOOL
Plan in conjunction with active learning strategies and NRich/NCETM
PRIMARY SCHOOL

Arithmetics and Timestable Practice
KS2- Daily 15 to 20 minutes sessions on Arithmetics and Timestables incl Rockstars Timestables session

See ideas for session
Times Tables Ideas for Sessions Calculation Policy
School Calculation Policy

## Blended Learning

Maths Shed Homework/Multiple choice quizzes (Wordwall, Kahoot and Google Forms); Rockstars Timestables for MABLE+. online games and songs (Numberock, Youtube), Mathsframe; Using Rockstars Timestables Modelling tool

## Mastery/Depths o

Understanding
Incorporate activities Spot the mistake, True or False? What comes next? Concept cartoons/Which is the odd one out? What is the same/different?

Key Questions to develop reasoning and problem solving How can you work it out? Explain. How can you work it out? Explain What strategies have you used? answer? Show me. Links to Cold Calling.

## Cultural Capital - Significant Person

 Dorothy Vaughan (1910-2008). African America Dorothy Vaughan (1940-2008, African mathematics, computer programmiaeronautics

Ongoing formative assessments Multiple choice quizzes for topics WRH end of unit assessments.

Summer term Raynham Primary whole school plan adapted from White Rose Maths Hub planning
Plan in conjunction with active learning strategies and NRich/NCETM


Tools and Strategies

## STRATEGIES

Fluency, Reasoning, Problem Solving; Raynham Calculation Policy CPA (concrete, pictorial, abstract); Manipulatives; Creative/Active Learning

Online Manipulatives

## FAST FEEDBACK \&

 PLANNINGFast Feedback and Pupil Conferencing Framework and Resources
Lesson Planning Template Planning Template

LINKS

| White Rose Hub Scheme Updated 2022 | White Rose Hub Scheme Updated 2022 |
| :---: | :---: |
| National Curriculum: Mathematics |  |
| Programme of Study (2014) | National Curriculum: Mathematics Programme of Studv 2013 |
| NC Mathematis Guidancee (2020) | National Curriculum Updated Guidance 2020 |
| NCETM/Mastery and NRich | NRich KS2 NRich Link; NCETM/Mastery Depths of Understanding Mastery Resources |
| Progression Map | Progression Map and Key Vocabulary |
| Maths at a Glance | Maths Policy at a Glance |

Arithmetics and Timestable Practice
KS2- Daily 15 to 20 minutes sessions on Arithmetics and Timestables incl. Rockstars Timestables session See ideas for sessions
Times Tables Ideas for Sessions Times Tables Dance Songs Calculation Policy
School Calculation Policy

## Blended Learning

Maths Shed Homework/Multiple choice quizzes (Wordwall, Kahoot and Google orms); Rockstars Timestables for MABLE + . online games and songs (Numberock, Youtube), Mathsframe; Using Rockstars Timestables Modelling tool Rockstars

## Mastery/Depths o

 UnderstandingIncorporate activities Spot the mistake, True or False? What comes next? Concept cartoons/Which is the odd one out? What is the same/different?

Key Questions to develop reasoning and problem solving How can you work it out? Explain.
What straesies have you used? ,

## Cultural Capital - Significant Perso

 Benjamin Banneker ( 1731-1806), Africa American, mathematics and astronomy
## Assessments

Ongoing formative assessments
Multiple choice quizzes for topics WRH end of unit assessments.

Summer term Raynham Primary whole school plan adapted from White Rose Maths Hub planning
Plan in conjunction with active learning strategies and NRich/NCETM

| week | 23 | 5 | 6 | 8 | 10 | 11 | 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 5 | Shape | Position and direction | Negative numbers | Converting units | Volume | Revision, closing the gaps, enrichment and problem solving activities |  |  |
|  | WRH Shape <br> - Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. <br> - Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. <br> - Draw given angles, and measure them in degrees ( ${ }^{\circ}$ ). <br> - Identify angles at a point and one whole turn (total $360^{\circ}$ ); angles at a point on a straight line and $1 / 2$ a turn (total $180^{\circ}$ ); other multiples of $90^{\circ}$. <br> - Use the properties of rectangles to deduce related facts and find missing lengths and angles. <br> - Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. <br> End of Unit Quiz | End of Unit Quiz | WRH <br> Negative <br> Numbers <br> - Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. <br> End of Unit Quiz | WRH Converting Units <br> - Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). <br> - Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. <br> - Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. <br> - Solve problems involving converting between units of time. <br> - Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres ( $\mathrm{cm}^{2}$ ) and square metres ( $\mathrm{m}^{2}$ ) and estimate the area of irregular shapes. End of Unit Quiz | WRH Volume <br> Estimate volume [for example, using $1 \mathrm{~cm}^{3}$ blocks to build cuboids (including cubes)] and capacity [for example, using water]. <br> Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. <br> End of Unit Quiz | Revisi based <br> Provid activit learni <br> Enrich Under | ics a sme <br> of ding and <br> de Res | g gaps <br> nt <br> active |

Tools and Strategies

## STRATEGIES

Fluency, Reasoning, Problem Solving; Raynham Calculation Policy CPA (concrete, pictorial, abstract); Manipulatives; Creative/Active Learning
Online Manipulatives

## FAST FEEDBACK \&

## PLANNING

Fast Feedback and Pupil

## Conferencing Framework and

 ResourcesLesson Planning Template
Planning Template

LINKS

| White Rose Hub Scheme Updated 2022 | White Rose Hub Scheme Updated 2022 |
| :---: | :---: |
| National Curriculum: Mathematics |  |
| Programme of Study (2014) | National Curriculum: Mathematics Programme of Studv 2013 |
| NC Mathematis Guidancee (2020) | National Curriculum Updated Guidance 2020 |
| NCETM/Mastery and NRich | NRich KS2 NRich Link; NCETM/Mastery Depths of Understanding Mastery Resources |
| Progression Map | Progression Map and Key Vocabulary |
| Maths at a Glance | $\underline{\text { Maths Policy at a Glance }}$ |

Arithmetics and Timestables Practice
KS2- Daily 15 to 20 minutes sessions on Arithmetics and Timestables incl. Rockstars Timestables session See ideas for sessions
Times Tables Ideas for Sessions Times Tables Dance Songs
Calculation Policy
School Calculation Policy

## Blended Learning

Maths Shed Homework/Multiple choice quizzes (Wordwall, Kahoot and Google Forms); Rockstars Timestables for MABLE+. online games and songs (Numberock, Youtube), Mathsframe; Using Rockstars
Timestables Modelling tool

## Mastery/Depths of

Understanding
Incorporate activities Spot the mistake, True or False? What comes next? Concept cartoons/Which is the odd one out? What is the same/different?

Key Questions to develop reasoning and problem solving How can you work it out? Explain..
What strategies have you used? Expla Shew Links Cold Call

## Cultural Capital - Significant Person

 Srinivasa Ramanjun (1887-1920). mathematical analysis, number theory, infinite series and and continued fractions
## Assessments

Ongoing formative assessments Multiple choice quizzes for topics WRH end of unit assessments.

Summer term Raynham Primary whole school plan adapted from White Rose Maths Hub planning
RAYNHAM PRIMARY SCHOOL
$R$
Plan in conjunction with active learning strategies and NRich/NCETM
PRIMARY SCHO
8 CHILDRENS CEN

Arithmetics and Timestables Practice
KS2- Daily 15 to 20 minutes sessions on Arithmetics and Timestables incl.
Rockstars Timestables session
See ideas for session
Times Tables Ideas for Sessions Calculation Policy
School Calculation Policy

## Blended Learning

Maths Shed Homework/Multiple choice quizzes (Wordwall, Kahoot and Google Forms); Rockstars Timestables for MABLE+. online games and songs (Numberock, Youtube), Mathsframe; Using Rockstars
Timestables Modelling tool

## Mastery/Depths of

 UnderstandingIncorporate activities Spot the mistake, True or False? What comes next?
Concept cartoons/Which is the odd one out? What is the same/different?

Key Questions to develop reasoning and problem solving How can you work it out? Explain What strategies have you used?
What strategies have you used? answer? Show me.Links to Cold Calling.

## Cultural Capital - Significant Person

 Leonardo di Pisa (Fibonacci), 1175-1250, Italia mathematics, aeronautics, orbital mechanicsAssessments
Ongoing formative assessments Multiple choice quizzes for topics WRH end of unit assessments.

