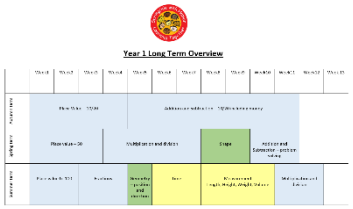
Year 2 Long Term Overview

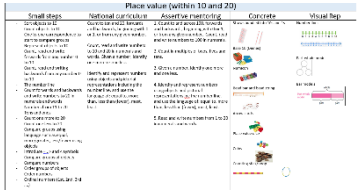
	Week1	Week2	Week3	Week4	Week5	Week6	Week7	Week8	Week9	Week10	Week11	Week12	Week 13
Autumn term	**Place Value** - Diennes - Part, Part whole model - HTO counters - PV arrow cards				**Addition and subtraction** - VCP (+ A3 A3a A4a A5a) (- S6 S7) - Part, part whole model - Number lines - Coins RAPACODANUMBO					**Shape** 2D shapes 3D shapes Sorting circles real life objects			
Spring term	**Place value** - Diennes - Part, Part whole model - HTO counters - PV arrow cards		**Multiplication and division** - VCP (M1 M2 M3) - Arrays - Repeated addition			**Money** Coins notes		**Fractions** - Paper shapes - Pizza fractions				**Statistics**	
Summer term	**Place Value** - Diennes - Part, Part whole model - HTO counters - PV arrow cards		**Addition and subtraction** - VCP (+ A3 A3a A4a A5a) (- S6 S7) - Part, part whole model - Number lines - Coins RAPACODANUMBO		**Multiplication and division** - VCP (M1 M2 M3) - Arrays Repeated addition		**Time** - clocks		**Measurement Length, Height, Weight, Volume**		**Geometry Position and direction**		

Daily Maths lessons at Hamer

Structure of a lesson

- Counting forwards and backwards (2 minutes)
- 6 a day arithmetic and revision question alternate days (5mins answer – recorded in books) 6 a day – give them the answers/ go over one question, revision question discuss with the children – during the revision question any misconceptions from children on the 6 a day can be targeted
- Vocabulary – including the my turn your turn approach or synonyms for other words eg add. This may be a retrieval based on the previous day.
- Main body of the lesson
- Independent work



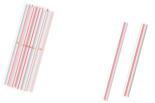
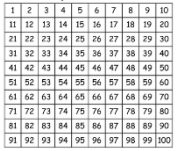
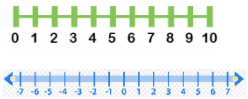
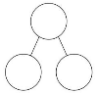
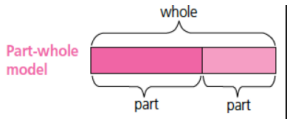


When planning for learning:

- Start with the new long term overview
- Use the same document that breaks this down into a medium term plan
- Use the small steps on the medium term plan to support planning
- Go to the White Rose documents on the O drive under – Updated Maths – 00 Maths – Deeping Materials – White Rose Hub – New White Rose – find your year group
- When designing the lesson, consider the following: What is the start point? What existing skills and knowledge may they have or need to revisit? What Concrete resources may you need? What Visual representations may you want use? What is the key learning in the lesson? What language do you need to model? Are there any sentence stems? Are there any key words the children need to know the definitions of? What is the end point?
- For support with designing questions for appropriate activities for independent learning please use the following
    - White Rose (On the O Drive follow above)
    - I See reasoning and problem solving (On the O Drive follow above)
    - Maths Hub – teaching for mastery (On the O Drive follow above)
    - NCTEM (On the O Drive follow above)
    - Classroom secrets
    - Nrich
- Remember the three key elements of Maths – Fluency, Reasoning and Problem Solving (There needs to be a balance between all three of them for children to develop a deep secure understanding and mastery of the curriculum)

	Counting (Forwards and Backwards)	Times tables (Forwards and Backwards)	Resources to support
Nursery	Number rhymes Movement counting Environmental counting Touch counting Counting up to 10		Counting sticks Counting hoops Number lines Hundred squares Multiplication squares Numicon Meter ruler Bead strings Straws Competitions/races/games around tables etc Count me in Clap and count Sensory equipment (eg, use of a bouncing ball, dropping marbles in a jar) Killer 15 21 Fizz Buzz Around the world Clapping and chanting BBC super movers (Goes forwards and backwards) Number fun songs
Reception	Counting to 10 and 20 Counting in 1's from different starting points up to 20 Counting in 2's from different starting points up to 20 Counting in 10s from different starting points up to 100 How many? Subitising – looking at patterns and pictures up to 10 Counting rhymes eg, five little speckled frogs	Counting in 2s, 5s and 10s	
Year 1	Counting to 10 and 20 Counting in 1's from different starting points crossing over 50 Counting in 2's from different starting points crossing over 50 Counting in odd and even numbers Counting in coins (1p, 2p, 5p, 10p, £1, £2, £5, £10) Counting in units of measures (cm)	2, 5 and 10	
Year 2	Revision from Year 1 Counting in 10s from different starting points up to 100 Counting in 2's from different starting points up to 100 Counting in odd and even numbers Counting in coins (1p, 2p, 5p, 10p, 20p, £1, £2, £5, £10) Counting in fractions (halves, quarters and thirds from any number to 10) – using pictures/resources to support Counting in different unit of measures (mm, cm, m) Counting in different times intervals	2, 3, 4, 5 and 10	
Year 3	Revision from Year 2 Counting in 50s/100s from different starting points Counting in 1000s from different starting points Counting in fractions (halves, thirds, quarters, fifths, eighths and tens) – using pictures/resources to support Counting in coins (1p, 2p, 5p, 10p, 20p. 50p, £1, £2, £5, £10) Counting in different unit of measures (mm, cm, m) Counting in different time intervals	2, 3, 4, 5, 6, 8 and 10	
Year 4	Revision from Year 3 Counting in 10's, 25s, 50's, 100s, 1000s from different starting points to 10,000 Counting in 10,000's from any start point Counting in square numbers Counting in coins in any amount (eg, 20p, 30p, 50p) Counting in unit fractions simplifying along the way (Eg ¼. ½. 3/4 , 1) Counting in decimals (tenths and hundredths) Counting in degrees (90, 180, 270 etc) Counting in different unit of measures (mm, cm, m, km) Counting in different time intervals	2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12	
Year 5	Revision from Year 4 Count in 10s, 25s, 50s, 100s, 1000s, 10000s, 100000s from different starting points to a million Counting in different units of measures Counting in prime numbers and cube numbers Counting below zero Counting in non-unit fractions (eg, 3/4)	2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12	
Year 6	Revision from Year 5 Counting in 10s, 25s, 50s, 100s, 1000s, 10000s, 100000s, 1000000s, from different starting points to ten million Counting in squared numbers to 20 Counting in decimals to 2 decimal places (including going below zero)	Times tables up to 15	

Place value

Small steps	National curriculum	Assertive mentoring	Concrete	Visual Rep
- Count objects to 100 - Read and write numbers in numerals and words - Represent numbers to 100 - Tens and ones with a part whole model - Tens and ones using addition - Use a place value chart - Compare objects - Compare numbers - Order objects - Order numbers - Count in 2s, 5s and 10s (Link to money) - Count in 3s	Read and write numbers to at least 100 in numerals and in words. Recognise the place value of each digit in a two digit number (tens, ones) Identify, represent and estimate numbers using different representations including the number line. Compare and order numbers from 0 up to 100; use <, > and = signs. Use place value and number facts to solve problems. Count in steps of 2, 3 and 5 from 0, and in tens from any number, forward and backward.	1.Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward. 2. Recognise the place value of each digit in a two-digit number (tens, ones). 3. Identify, represent and estimate numbers using different representations, inc. the number line. 4. Compare and order numbers from 0 up to 100; use <, > and = signs. 5. Read and write numbers to at least 100 in numerals and in words.	Straws bundled into 10s and 1s  Base 10 (Dienes)  Numicon  Bead bar and bead string   Arrow cards  Place value dice  Coins  Counting stick/hoop 	Place value charts 100s | 10s | 1s 100 square  Number lines  Part whole model  Bar models 

Addition and subtraction including money

Small steps

- Fact families – Addition and subtraction bonds to 20
- Check calculations
- Compare number sentences
- Related facts
- Bonds within 100 (tens)
- Add and subtract 1s
- 10 more and 10 less
- Add and subtract 10s
- Add a 2-digit and 1-digit number – not crossing 10
- -crossing ten
- Subtract a 1-digit number from a 2-digit number
- Not crossing ten
- – crossing ten
- Add two 2-digit numbers – not crossing ten – add ones and add tens
- Add two 2-digit numbers – crossing ten – add ones and add tens
- Subtract a 2-digit number from a 2-digit number – not crossing ten
- Subtract a 2-digit number from a 2-digit number – crossing ten – subtract ones and tens
- Bonds to 100 (tens and ones
- Add three 1-digit numbers
- Count money – pence
- Count money – pounds (notes and coins)
- Count money – notes and coins
- Select money
- Make the same amount
- Compare money
- Find the total
- Find the difference
- Find change
- Two-step problems

National curriculum

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; adding three one-digit numbers.

Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.

Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures; applying their increasing knowledge of mental and written methods.

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.

Find different combinations of coins that equal the same amounts of money.

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

Assertive mentoring

6. Solve problems with addition and subtraction: using concrete objects and pictorial representations; applying their increasing knowledge of mental and written methods.

7. Recall and use add and subtract facts to 20 fluently, and derive and use related facts up to 100.

8. Add and sub nos using concrete objects, pictorial representations, and mentally, including: a 2-digit no and 1s or 10s; two 2-digit numbers; adding three 1-digit numbers.

9. Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.

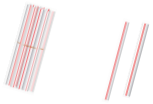
10. Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.

19. Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. Find different combinations of coins that equal the same amounts of money.

20. Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

Concrete

Straws bundled into 10s and 1s



Base 10 (Dienes)



Numicon



Place value counters

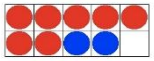


Bead bar and bead string





Tens frames



Discreet sets of objects e.g. counters, multilink





Money



Cuisenaire number rods



Visual Rep

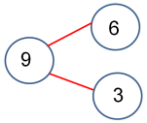
Calculation mat

100s	10s	1s

100 square



Part whole models



Number lines



Bar models

16	25
41	

16 + 25 = 41

28	
10	18

28 – 10 = 18

Multiplication and Division

Small steps

- Recognise equal groups
- Make equal groups
- Add equal groups
- Multiplication sentences using the × symbol
- Multiplication sentences from pictures
- Use arrays
- 2 times-table
- 5 times-table
- 10 times-table
- 3 times-table
- Make equal groups – sharing
- Make equal groups – grouping
- Divide by 2
- Divide by 5
- Divide by 10
- Divide by 3
- Odd & even numbers

National curriculum

Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) sign.

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.

Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Assertive mentoring

11. Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.

12. Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.

13. Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

14. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

Concrete

Numicon



Bead bar and bead string





Discreet sets of objects e.g. counters, multilink to group and share





Money



Arrays







Visual Rep

Number lines



Bar models

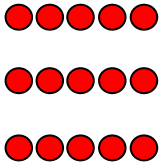
7	7	7
21		

7 x 3 = 21

24		
8	8	8

24 ÷ 3 = 8

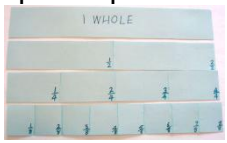
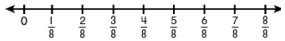
Arrays



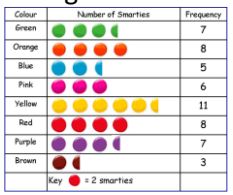
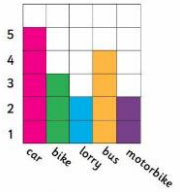
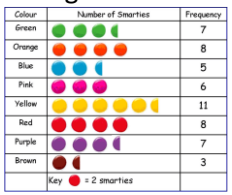
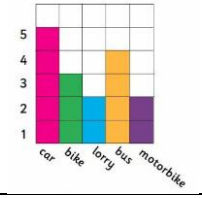
5 x 3 = 15
15 ÷ 5 = 3

Shape				
Small steps	National curriculum	Assertive mentoring	Concrete	Visual Rep
- Recognise 2D shapes - Count sides on 2D shapes - Count vertices on 2D shapes - Draw 2D shapes - Lines of symmetry - Sort 2D shapes - Make patterns with 2D shapes - Recognise 3D shapes - Count faces on 3D shapes - Count edges on 3D shapes - Count vertices on 3D shapes - Sort 3D shapes - Make patterns with 3D shapes	Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid.] Compare and sort common 2-D and 3-D shapes and everyday objects.	23. Identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line. 24. Identify and describe the properties of 3D shapes, inc the no. of edges, vertices and faces. 25. Identify 2D shapes on the surface of 3D shapes, e.g. circle on a cylinder; a triangle on a pyramid 26. Compare and sort common 2D and 3D shapes and everyday objects. 27. Order and arrange combinations of mathematical objects in patterns and sequences.	Links to real life objects Eg, Pringles tin, Balls, Cereal packets 2d shapes – including quadrilaterals and polygons  3d shapes – cuboids, prisms and cones 	2d representations of 3d shapes 

Fractions

Small steps	National curriculum	Assertive mentoring	Concrete	Visual Rep
- Make equal parts - Recognise a half - Find a half - Recognise a quarter - Find a quarter - Recognise a third - Find a third - Unit fractions - Non-unit fractions - Find three quarters - Equivalence of half and 2 quarters - Count in fractions Fractions of numbers taught through mental maths	Recognise, find, name and write fractions half, one third, one quarter, two quarters and three quarters of a length, shape, set of objects or quantity. Write simple fractions for example one half of 6 – 3 and recognise the equivalence of one half and two quarters.	15. Recognise/find/name/write fractions ⅓, ¼, 2/4, ¾ of a length, shape, set of objects or quantity. 16. Write simple fractions e.g. ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.	Discreet sets of objects e.g. counters, multilink   Paper strips  Fraction tiles  Counting stick/hoop 	Fraction number lines 

Statistics

Small steps	National curriculum	Assertive mentoring	Concrete	Visual Rep
- Make tally charts - Draw pictograms (1-1) - Interpret pictograms (1-1) - Draw pictograms (2, 5 and 10) - Interpret pictograms (2, 5 and 10) - Block diagrams	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.	29. Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. 30. Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity; ask and answer questions about totalling and comparing categorical data.	Pictograms  Block graphs  	Tally Charts  Pictograms  Block graphs 

Time				
Small steps	National curriculum	Assertive mentoring	Concrete	Visual Rep
- O'clock and half past - Quarter past and quarter to - Telling time to 5 minutes - Minutes in an hour, hours in a day - Find durations of time - Compare durations of time	Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. Know the number of minutes in an hour and the number of hours in a day. Compare and sequence intervals of time.	21. Compare and sequence intervals of time. Know the number of minutes in an hour and the number of hours in a day. 22. Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.	Clocks  	2d representations of clock faces with clocks hands on

Measurement (Length, Height, Weight, Volume)

Small steps	National curriculum	Assertive mentoring	Concrete	Visual Rep
- Measure length (cm) - Measure length (m) - Compare lengths - Order lengths - Four operations with lengths - Measure mass in grams - Measure mass in kilograms - Compare mass - Millilitres - Litres - Compare capacity - Temperature	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using >, < and =	17. Choose/use appropriate stand units to estimate/measure length/height (m/cm); mass (kg/g); temp (°C); cap (litres/ml) to nearest unit, using rulers, scales, thermometers and measuring vessels. 18. Compare and order lengths, mass, volume/capacity and record the results using >, < and = .	Range of real objects to compare eg, pencils, children, adults, play-doh Multilink cubes  Ruler  Pan balance  Range of containers  Scales  Thermometer 	Range of real objects Use of a ruler  Range of containers 

Position and Direction

Small steps	National curriculum	Assertive mentoring	Concrete	Visual Rep
- Describe movement - Describe turns - Describe movement and turns - Make patterns with shapes	Use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). Order and arrange combinations of mathematical objects in patterns and sequences	28. Use math vocab to describe position, direction & movement inc movement in a straight line and distinguishing rotation as a turn & in terms of right angles for ¼, ½, & ¾ turns (clock/anti-clockwise).	2d shapes  Numicon  Make connections to PE and computing	Numicon  2d grids 