Newington Green and Rotherfield Maths MTP - Year 1

Blue font in Spring/Summer indicates previously untaught objective

Green font indicates cross-curricular links

	Autumn **Superheroes** **Our Local Area**	**Spring** **Wonderful Women** **London**	**Summer** **How It's Made** **It's Alive**
Number and Place Value	**Weeks 1-3 and Weeks 13-14**	**Weeks 1-2**	**Week 1**
	•count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number e.g. 19, 18, 17, 16, …	• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number *e.g. 19, 18, 17, 16, …*	• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number *e.g. 103, 102, 101, 100, 99, 98, …*
	•count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens *e.g. 2, 4, 6, 8, 10, 12, …*	• count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens *e.g. 22, 24, 26, 28, 30, … or 90, 80, 70, 60, …*	• count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens *e.g. 5, 10, 15, 20, 25, …*
	•given a number, identify one more and one less	• given a number, identify one more and one less	• given a number, identify one more and one less
	•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*	• 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*	• 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*
	•read and write numbers from 1 to 20 in numerals and words	• read and write numbers from 1 to 20 in numerals and words	• read and write numbers from 1 to 20 in numerals and words
	•use language of ordering *e.g. first, second, third*	• use language of ordering *e.g. first, second, third*	• use language of ordering *e.g. first, second, third*
			Week 6

			• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number *e.g. 103, 102, 101, 100, 99, 98, …* • count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens *e.g. 5, 10, 15, 20, 25, …* • given a number, identify one more and one less • 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* • read and write numbers from 1 to 20 in numerals and words • use language of ordering e.g. first, second, third • begin to recognise place value in numbers beyond 20 by reading, writing, counting and comparing numbers up to 100 supported by objects and pictorial representations • begin to order numbers to 100 (different tens)
Addition and Subtraction	**Weeks 1-3 and Weeks 13-14**	**Weeks 1-2 and Weeks 8-9**	**Weeks 2-3 & Weeks 7-9 (according to need)**

	• read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • represent and use number bonds and related subtraction facts within 20, in several forms *e.g. 3 + 4 = 7; 4 = 7 – 3* • add and subtract one-digit and two-digit numbers to 20, including zero *e.g. 9 + 9, 18 - 9* • solve one-step problems *(in familiar practical contexts, including using quantities)*that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems *e.g. 7 =*  *- 9. Problems should include vocabulary such as: put together, add, altogether, total, take away, more than, less than…*	• read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • represent, memorise and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including zero *e.g. 9 + 9, 18 - 9* • solve one-step problems *(in familiar practical contexts, including using quantities)* that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems *e.g. 7 =*  *- 9 Problems should include vocabulary such as: put together, add, altogether, total, take away, distance between, more than, less than…*	• represent and use number bonds and related subtraction facts within 20 *e.g. 9 + 7 = 16; 16 – 7 = 9; 7 = 16 – 9* PSHE LINK: To make choices about spending money. • solve one-step problems *(in familiar practical contexts, including using quantities)* that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems *e.g. 7 =*  *- 9. Problems should include vocabulary such as: put together, add, altogether, total, take away, distance between, more than, less than…*
	Week 4-5	**Week 3-4**	**Weeks 4-5**

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<tr>
<td rowspan="2">Measurement and Statistics</td>
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compare, describe and solve practical problems for: lengths and heights e.g. long/short, longer/shorter, tall/short, double/half
use non-standard measures to measure and begin to record the following: lengths and heights e.g. the chair is …. hands high, I am …. rulers tall
recognise and know the value of different denominations of coins and notes

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compare, describe and solve practical problems for: capacity and volume (full/empty, more than, less than) and time (quicker, slower, earlier, later)
use non-standard measures to measure and begin to record the following: measure and begin to record the following: capacity and volume e.g. the jug holds …. cups of water
tell the time to the hour and half past the hour and draw the hands on a clock face to show these times
recognise and know the value of different denominations of coins and notes

Week 7
Statistics (non-statutory)
SCIENCE LINK: To be able to make tables and charts about the weather.
GEOGRAPHY LINK: To be able to conduct a piece of field work about weather.
COMPUTING LINK: To use data to create a pictogram

provide practical activities for sorting and children to answer

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compare, describe and solve practical problems for: mass or weight e.g. heavy/light, heavier than, lighter than
begin to use standard measures to measure and begin to record mass and weight
sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening

HISTORY LINK: To be able to sequence toys from different periods of time

Recognise and use language relating to dates, including days of the week, weeks, months and years
tell the time to the hour and half past the hour and draw the hands on a clock face to show these times

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<td>
Week 9-12

compare, describe and solve practical problems for: mass or weight e.g. heavy/light, heavier than, lighter than
use non-standard measures to measure and begin to record

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Weeks 7-9 (according to need)

compare, describe and solve practical problems for:

lengths and heights e.g. long/short, longer/shorter, tall/short, double/half/quarter

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	the following: measure and begin to record the following: mass/weight *e.g. the book weighs … cubes* HISTORY LINK: To be able to show my understanding of how school life has changed and sequence events in my own school life. • sequence events in chronological order using language such as: *before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening* • recognise and use language relating to dates, including days of the week, weeks, months and years • tell the time to the hour and half past the hour and draw the hands on a clock face to show these times **Statistics** (non-statutory) SCIENCE LINK: To be able to explore and discover some common animals living in my local area. • provide practical activities for sorting and children to answer questions and talk about what they have done.	questions and talk about what they have done. • children make simple observations of patterns	○ mass or weight *e.g. heavy/light, heavier than/lighter than* ○ capacity/volume *e.g. full/empty, more than/lighter than* ○ time *e.g. quicker, slower, earlier, later* • begin to use standard measures *(m, cm, grams, kg, litres)* to measure and begin to record the following: ○ lengths and heights ○ mass/weight ○ capacity and volume ○ time (*hours, minutes, seconds*) • sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening

	• children make simple observations of patterns		
Geometry and Position & Direction	**Weeks 4-5** • recognise and name common 2-D and 3-D shapes, including: ○ 2-D shapes *e.g. rectangles (including squares), circles and triangles* ○ 3-D shapes *e.g. cuboids (including cubes), pyramids and spheres*	**Week 3-4** ART & DESIGN LINK: To draw cartoon animals from dot to dot pictures/2D instructions/3D toys • recognise and name common 2-D and 3-D shapes, in different orientations including: ○ 2-D shapes *e.g. rectangles (including squares), circles and triangles* ○ 3-D shapes *e.g. cuboids (including cubes), pyramids and spheres* **Position & Direction** • describe position, directions and movements, including half, quarter and three-quarter turns *left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside…*	
Multiplication and Division	**Weeks 6-8** • double and halve numbers to 20 *e.g. double 6 is 12, half of 10 is 5*	**Weeks 5-6 and Weeks 10-11** • double and halve numbers to 20 *e.g. double 6 is 12, half of 10 is 5*	**Weeks 7-9 (according yo need)** • double and halve numbers to 20 *e.g. double 6 is 12, half of 10 is 5*

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<tr><td></td><td>• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</td><td>• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</td><td>• solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher e.g. share 8 sweets between 2 children</td></tr>
<tr><td rowspan="2">Fractions</td><td>Weeks 6-8</td><td>Weeks 5-6 and Week 12</td><td rowspan="2"></td></tr>
<tr><td>• recognise, find and name a half as one of two equal parts of an object, shape or quantity e.g. find half of a length of string by folding
• recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</td><td>• recognise, find and name a half as one of two equal parts of an object, shape or quantity e.g. What is half of 12 counters?
• recognise, find and name a quarter as one of four equal parts of an object, shape or quantity e.g. find a quarter of a shape, by folding in half and half again</td></tr>
<tr><td>Transition</td><td colspan="3">Summer Term Weeks 10 – 12</td></tr>
<tr><td></td><td colspan="3">Working towards expectations for Y2

Number and place value

Pupils should be taught to:

• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward
• 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
• read and write numbers to at least 100 in numerals and in words</td></tr>
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	• use place value and number facts to solve problems.
	
	Addition and subtraction
	
	Pupils should be taught to:
	
	• solve problems with addition and subtraction:
	  o using concrete objects and pictorial representations, including those involving numbers, quantities and measures
	  o applying their increasing knowledge of mental and written methods
	• 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:
	  o a two-digit number and ones
	  o a two-digit number and tens
	  o two two-digit numbers
	  o adding three one-digit numbers
	• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
	• recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.