CAPTAIN WEBB PRIMARY SCHOOL
Maths Curriculum – Key Knowledge and Skills
(Bold-Statutory Statements from NC;
Italics-Non-statutory, but fundamental to ensure knowledge is secure)

	Daycare 2/Rising 3	Nursery Pre-School (3s)	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				CALCULATION x/÷					
				Multiplication & Division facts/Mental Calculations					
DECLARATIVE KNOWLEDGE: *Facts and formulae(Fluency) Relationships between facts*			Explores evens and odds and how quantities can be distributed equally	*Knows that doubles are two groups of the same number and begin to relate to multiplication.* . **Knows that an array represents equal groups of.** *Knows that groups of 2 are even, groups of 5 end in 5 or 0, groups of 10 end in 0.*	**Knows the operations of multiplication (repeated addition) and division (equal groups of).** **Knows that multiplication is commutative.** **Knows that division is not commutative.** **Knows the 2s, 5s and 10s times tables and can find related facts.** **Knows the odds and**	**Knows the 3, 4- and 8- times tables** *Knows how doubling patterns, odds, and evens connect the 2,4 and 8 times table.* . *Know the commutative and associative laws for multiplication.* *Know the test of divisibility for 2, 5 and 10.* *3 -digit sum of 3, 6 or 9.*	**Knows the multiplication and division facts for multiplication tables up to 12 × 12.** **Knows that the use of place value, known and derived facts can help to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers** *Knows efficient mental methods and extend this to 3 digit numbers to derive facts.*	**Knows efficient mental methods for multiplication and division drawing on known facts.** *Know the test of divisibility for 2, 5 and 10.* *3- digit sum of 3, 6 or 9.* *4 multiple of 4 in tens and ones.* *6 – even and digit sum of 3,6 or 9.*	**Knows efficient mental methods applying knowledge of properties of number and mixed operations** **Knows the efficient written algorithms for long/short multiplication and long/short division.** **Knows the formal written method of long multiplication and division** **Knows the rules of BIDMAS.**

| | | | | | | evens in the times tables for 2,5 and 10.

Knows that arrays are used to represent multiplication and division facts. | | Knows the distributive law along with commutative and associative laws.

Know the test of divisibility for 2, 5 and 10.
3- digit sum of 3, 6 or 9.
4 multiple of 4 in tens and ones. | | |
|---|---|---|---|---|---|---|---|---|---|---|

		Written Calculation

| PROCEDUAL KNOWLEDGE: Methods (In conjunction with Calculation Policy). Relationships between facts, procedures and missing facts. | | | Knows how to count in twos knows how to subitise to five.

Know how to conceptually subitise large numbers by subitising smaller groups within the number | knows how an array represents equal groups | knows how to calculate mathematical statements for multiplication division within multiplication tables.

Knows how to write mathematical statements using the multiplication | Knows how to multiply using partitioning.

Knows how to rearrange dividends into multiples of the divisor.

Knows how to divide using known multiplication | Knows how to multiply two-digit and three-digit numbers by a one digit number using formal written layout

Knows how to complete the formal written method for short division with exact answers. | Knows how to multiply and divide whole and decimal numbers by 10, 100 and 1000.

Knows how to multiply numbers up to 4 digits by a one- or two-digit number using a formal written | Knows how to multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.

Knows how to divide numbers up to 4-digits by a two-digit |

| | | | | | (x) division (÷)and equals(=) sign | tables, including for two-digit numbers divided by one-digit numbers, using mental methods, progressing to efficient written methods.

Knows how divide and record remainders | Knows how to estimate and use inverse operations to check answers to a calculation (copied from Addition and Subtraction) | method, including long multiplication for two-digit numbers

Knows how to divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.

Knows how to solve problems involving multiplication & division including knowledge of factors multiples squares and cubes.

Knows how to | whole number using the formal written method of short division where appropriate for the context.

Knows how to interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context.

Knows how to solve multi-step problems involving all four operations which operations to use and why.

Knows how to use estimation to check answers to |

CAPTAIN WEBB PRIMARY SCHOOL
Maths Curriculum – Key Knowledge and Skills
(Bold-Statutory Statements from NC;
Italics-Non-statutory, but fundamental to ensure knowledge is secure)

									solve problems including all four operations understanding the meaning of the = sign.	calculations and determine in context an appropriate degree of accuracy
Properties of Numbers: Multiples, Factors, Prime, Square & Cube Numbers.										
DECLARATIVE KNOWLEDGE: *Facts and formulae(Fluency)* *Relationships between facts*									Knows and can use factor pairs and commutativity in mental calculations (repeated)	Knows what a common factor/multiple is. Knows the definition of prime and composite numbers. Knows and can use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. Knows prime numbers up to 19.	Knows and can identify common factors, common multiples and prime numbers

CAPTAIN WEBB PRIMARY SCHOOL
Maths Curriculum – Key Knowledge and Skills
(Bold-Statutory Statements from NC;
Italics-Non-statutory, but fundamental to ensure knowledge is secure)

PROCEDUAL KNOWLEDGE: Methods (In conjunction with Calculation Policy). Relationships between facts, procedures and missing facts.								**Knows how to find multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.** **Knows how to establish whether a number up to 100 is a prime or composite number.** **Knows how to recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)**	**Knows how to use common factors to simplify fractions; use common multiples to express fractions in the same denomination (copied from Fractions)**

CAPTAIN WEBB PRIMARY SCHOOL
Maths Curriculum – Key Knowledge and Skills
(Bold-Statutory Statements from NC;
Italics-Non-statutory, but fundamental to ensure knowledge is secure)

	Daycare 2/Rising 3	Nursery Pre-School (3s)	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Vocabulary			Even Odd Double Equal Equally Groups share	Double Equal groups **Array** **Lots of**	Odd Even **Commutative Repeated addition Inverse** Groups of **Multiply Multiplied Multiple of** Row Column Twice Pairs **Divide Divided by** Left over	Tables, **factor, related fact, scale, product** remainder dividend divisor	factor pair known fact derived fact	**common factor prime number prime factor composite number square number cube number** divided into **remainder** factor **quotient**	**common multiple remainders as fractions remainders as decimals**

CAPTAIN WEBB PRIMARY SCHOOL
Maths Curriculum – Key Knowledge and Skills
(Bold-Statutory Statements from NC;
Italics-Non-statutory, but fundamental to ensure knowledge is secure)