Orton Wistow Primary School – Curriculum Plan

Subject : Maths | **Year : 2** | **Unit : Addition and Subtraction**

Vocabulary	Knowledge			Understanding			Skills		
Define the word and include etymology if useful.	What children will know			What children will understand			What children will be able to do		
	Learning (Remembering)	Teaching (Telling)	Assessment (Testing)	Learning (Practising)	Teaching (Coaching)	Assessment (Observing)	Learning (Reflecting)	Teaching (Facilitating)	Assessment (Evaluating)

Vocabulary

Addition
Add, more, and, make, sum, total, altogether
Double
Near double
Half, halve
One more, two more… ten more

Subtraction
Take away, minus, fewer, less, difference between
One less, two less… ten less

Equals
Is equal to, is the same as

Number bonds
Number pair
Number facts
Part, part, whole
Partition
Recombine

Missing number
Tens boundary
Commutative

Knowledge — What children will know

- Pupils know number bonds to 100.
- Pupils will know that addition of two-digit numbers can be done in any order and subtraction of one number from another cannot.
- Pupils will know when it is appropriate to add/subtract when solving word problems
- Children know various ways to check their answers, including using the inverse operation
- Children know that when adding 10, the tens digit changes while the ones digit remains the same
- Children know to always start from the ones column when using the column method for addition and subtraction

Stem Sentences
I know that _____ plus _____ is equal to _____ (single digit fact) so_____ plus _____ is equal to _____

I know that _____ minus _____ is equal to _____ (single digit fact) so_____ minus _____ is equal to _____

When we find ten more, the tens digit changes and the ones digit stays the same.

Understanding — What children will understand

- Pupils will understand the inverse relationship between addition and subtraction
- To understand regrouping or renaming of ones
- Pupils will understand calculations with similar digits, e.g. 2+7=9 so 20+70=90
- Pupils understand the link between single digit bonds and tens bonds
- Children understand what happens to a number whan adding 10 using a 100 square
- Pupils understand the principles of commutativity to efficiently add 3 one-digit numbers

Skills — What children will be able to do

- Can use place value and number facts to solve problems
- Recall and use addition and subtraction facts to 20
- Can derive and use related facts up to 100
- Add and subtract numbers using concrete objects and pictorial representations
- Can mentally add TO+O, TO+T, TO+TO and O+O+O
- Subtract TO-O, TO-TO, TO-10,
- To add and subtract 2-digit numbers with renaming
- Pupils can use bar modelling to represent problems
- Solve muti-step problems using bar modelling
- Pupils can line up 2-digit numbers and 1-digit numbers using Place Value columns accurately
- Pupils can exchange 10 ones for 1 ten

Vocabulary	Knowledge			Understanding			Skills		
Define the word and include etymology if useful.	What children will know			What children will understand			What children will be able to do		
	Learning	Teaching	Assessment	Learning	Teaching	Assessment	Learning	Teaching	Assessment
	Remembering	Telling	Testing	Practising	Coaching	Observing	Reflecting	Facilitating	Evaluating
	When we find ten less, the tens digit changes and the ones digit stays the same. We had ____ tens and ____ ones. Ten more gives us ___ tens and ___ ones. We had ____ tens and ____ ones. Ten less gives us ___ tens and ___ ones. When we add three numbers, the total will be the same whichever pair we add first. If you change the order of the addends, the sum remains the same. We can look for pairs to make 10 first then add the remaining number.								

Orton Wistow Primary School – Curriculum Plan

Subject :	Maths	Year :	2	Unit : Number and Place Value

Vocabulary	Knowledge What children will know			Understanding What children will understand			Skills What children will be able to do		
Define the word and include etymology if useful.	Learning Remembering	Teaching Telling	Assessment Testing	Learning Practising	Teaching Coaching	Assessment Observing	Learning Reflecting	Teaching Facilitating	Assessment Evaluating
One hundred **Equivalent to –** is equal in value to/ has the same value **Most** **Least** **Multiple** - a number that may be divided by another a certain number of times without a remainder. **Sequence -** a particular order in which related things follow each other. **> Greater than** **<Less than** **Tens, hundreds,** **One -, two -, three - digit number** **Partition –** break apart a numbers into smaller units **Recombine –** to reassemble smaller units back into the original number **Place value –** the value of where a digit is in a number **Exchange –** regrouping ten ones for one ten or one ten for ten ones	• Pupils know the place value of each digit in a two-digit number • Pupils know how a number is made up, e.g. 42 is 4 tens and 2 ones or 42 ones • Pupils know that there are different ways to partition numbers • Pupils know where numbers lie on a number line to 100 • Pupils know that when looking at a hundred square, the numbers increase by 1 as you read from left to right and increase by 10 as you read down the square • Pupils know that numbers that can be made out of groups of two are even numbers; numbers that cannot are odd • Pupils know that even numbers can be partitioned into two odd parts or two even parts • Pupils know that odd numbers can be partitioned into one odd part and one even part			• Pupils understand that numbers can be partitioned in different ways, e.g. 58 is made up of 5 tens and 8 ones, 4 tens and 18 ones or 2 tens and 38 ones • Pupils understand the place value of 2-digit numbers • Pupils understand which digit to look at when comparing numbers			• Count in steps of 2, 3 and 5 from 0 • Count in steps of 10 from any number forwards and backwards • Compare and order numbers from 0 to 100 • Use the <, > and = symbols • Read numbers to 100 in words and figures • Write numbers to 100 in words and figures • Use concrete materials and pictorial representations to show numbers up to 100 • Can use part - whole models to show how numbers can be partitioned and recombined • Recognise odd and even numbers		

Vocabulary	Knowledge			Understanding			Skills		
	What children will know			What children will understand			What children will be able to do		
Define the word and include etymology if useful.	Learning	Teaching	Assessment	Learning	Teaching	Assessment	Learning	Teaching	Assessment
	Remembering	Telling	Testing	Practising	Coaching	Observing	Reflecting	Facilitating	Evaluating
	Stem Sentences There are _____ tens and _____ ones. The number is _____. _____ is greater than _____. _____ is less than _____. Ten ones make one ten. Ten tens make one hundred.								

The NCETM have designed materials to support teachers to develop their subject knowledge and understand the learning steps required in order to successfully teach for mastery. The curriculum has been split into a number of areas called 'spines'.

Each spine has a series of Teacher Guidance documents and a PowerPoint containing the relevant representations which should be used to teach that area of maths. Please refer to these documents alongside this Curriculum Plan.

These Spines can be found on Google Drive:

https://drive.google.com/drive/u/0/folders/1Atxv73hPmXLKFm1tKtm3EHOq5h1UW9kX

White Rose Maths Resources can be found on Google Drive:
https://drive.google.com/drive/u/0/folders/1-SLs60Nea84ECjPB5P1vDqzR9tQ57FCh