TERM 2 OVERVIEW YEAR 2 – Maths

Term 2 Book(s) – Man on the Moon	
Topic(s) – Addition/Subtraction, Money, Multiplication/Division.	**Guide Time = 6weeks**

Assessment:	White Rose end of unit assessments Teacher judgements Fortnightly arithmetic tests	**Very Important Points (VIPs):** **Addition/Subtraction** - Addition facts for the number 10 can be used to help calculate addition facts to 100. - A number can be partitioned into 2 or more parts. - Number bonds show how numbers can be partitioned or combined. - When adding, the mathermatical symbols used are + and =. - Addition can be done in any order, subtraction cannot. - When you add two numbers, they equal a bigger number. - Always start with the bigger amount/number when subtracting. - Whe subtracting, the mathermatical symbols used are – and =. - When you add or subtract zero, the total stays the same. - When you subtract a number from a total, it gets smaller.
Links to prior learning (sequencing) and canon book	**Addition/Subtraction** The children will have also learnt to represent and use number bonds and related subtraction facts within 20. Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs. Add and subtract one-digit and two-digit numbers to 20, including zero. Solve one step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ − 9. **Money** The children be able to recognise different coins and will have learnt the value of different coins. The children will have some knowledge of place value to match coins with equivalent values e.g. 10 1p coins is the same as 1 10p coin. **Multiplication/Division** The children will have learnt to count in steps of 2, 5 and 10 in Year 1. The children will have some basic knowledge of multiplication and division.	**Money** - Money is what people use to buy things and services. - Money is what many people take for selling their own things or services. - Different currecny is used all over the world but in England we use pounds and pence. - 100 pence makes a pound - There are 8 different coins that are used in the British currecny and are four different notes used. - Fifty pound notes are not very common.
Links to other learning (cross fertilisation)	Links to PE will be made through Active Maths (AM) activities and/or using counting 0-100 within warm ups (counting in 2,3,5 and 10s while doing star jumps, lunges, addition/subtraction Hero's in AM) and games (keeping track/score).	**Multiplication/Division** - Multiplication can be done in any order, division cannot. - When you multiply the number gets bigger. - Multiplication is the same as repeated addition. - The symbols used for multiplication are x and =.

	Links to science and geography will be made through counting in 1s, 2s, 3s, 5s and 10s in tally charts, block/ bar graphs to collect and input data clearly.	- When you divide the biggest number always goes first. - When you divide the number gets smaller. - Division is the inverse (opposite) of multiplication. - The symbols used for division are ÷ and =. - Even numbers can be shared into 2 equal groups, odd numbers cannot.
Links to future learning	The skills taught this half term will be applied to other units throughout the year. Children will be counting in 2s, 5s and 10s and will be introduced to counting in 3s – these basic skills will be needed when multiplying/dividing, problem solving and fraction work.	

Fat Questions:

Addition/Subtraction
- Can you have two different values on either side of an equals sign? Explain your answer...
- Why do we need to learn to add?
- Can a smaller number be added to a bigger number successfully?
- Can a bigger number be taken away from a smaller number successfully? Do you know what that might look like?

Money
- Why do different countries have different currencies?
- Which is the richest country in the world? Explain your answer.
- If you could create a new coin what would it look like and what amount would it be for? Explain your answer.
- Why do we need money?
- What is money used for?

Multiplication/Division
- Why do we need to learn to multiply and divide?
- When might you use your times tables facts in everyday life?
- Can you share an odd number? Explain your answer.

Character/Wider Development ('50 things', cultural capital, skills)

Thematic Questions:

The World Beyond Us:
Do you think it's possible to know how many people there are in the world? How do you think people could find this out?

The World Around Us:
How do you use your maths skills when you go into Pontefract? There are numbers everywhere. Can you think of some examples of where you might see numbers when out and about?

Modern Britain:
Can you think of how addition/subtraction/ multiplication/division helps people in their jobs and daily lives? What do we have to help us with maths now that people did not have 100 years ago?

Healthy Bodies & Healthy Minds:
How can we use maths when keeping fit? What can we do if we are finding maths hard or it is making us feel sad/angry?

Culture:
Does everyone from around the world count in the same language and use the same numbers? Do you think it would be better if we did? Why?

Technology in Action:
How is knowledge of maths used in computer games? Can

OVERVIEW OF TEACHING SEQUENCE

Key Facts/Learning	Learning Focus or Key Question	Learning Outcomes (NC)	Key Words/ Vocabulary	Greater Depth/SEND	Misconceptions	Activities and Resources
Addition / Subtraction (Weeks 1-2)	Subtract a 2-digit number – not crossing ten. Subtract a 2-digit number – crossing ten – subtract ones and tens. Bonds to 100 (tens and ones). Add three 1-digit numbers.	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 addition of two numbers can be done in any order	Add Addition Subtract Subtraction Equals How many Left Altogether Plus Minus Digit Number	GD: Children are introduced to larger numbers when applicable. But it is important that the GD focus is on mastery of the skills rather than moving onto the next stage of learning quicker. Children are introduced to problem solving and reasoning questions which require sentence responses. Children are taught how to 'prove it' and use the word 'because'.	Children may not 'careful count'. Children may not recognise some 2 digit numbers. Children may get confused between the 'tens' and 'ones'. Children may get confused between addition and subtraction. Children may forget to start with the largest number when subtracting. Children may get confused when subtracting and crossing ten.	See Y2 folder for slides and resources for 8 lessons. Links to resources and folders White Rose Maths https://wrm-13b48.kxcdn.com/wp-content/uploads/2019/SoLs/Primary/Autumn2019-20/Year-2-Autumn-Block-2-Number-Addition-and-Subtraction.pdf Trust Shared folder – Year 2 Classroom Secrets folder Third space folder White Rose Maths folder

		(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.		SEND: Activities are made more 'concrete' when appropriate and additional resources are used to support visual and kinaesthetic learning. Children focus on numbers 1-10 where appropriate and given support when using numbers to 20. Children complete a majority of fluency style questions and are introduced to problem solving as an oral group activity. Adults model how to verbally use the word 'because'.	

| **Money (Weeks 3-4)** | 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 | 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. | Money

Amount

Coins

Notes

Pounds

Pence

Total

Compare

Change

Difference | GD:
Children are introduced to larger values / amounts when applicable. But it is important that the GD focus is on mastery of the skills rather than moving onto the next stage of learning quicker.

Children are introduced to problem solving and reasoning questions which require sentence responses. Children are taught how to 'prove it' and use the word 'because'.

SEND:
Activities are made more 'concrete' when appropriate and additional resources are used to support visual and kinaesthetic learning. | Children may not 'careful count'.

Children may confuse the value of certain coins.

Children may think that some coins are bigger / smaller in value because they are bigger / smaller in size.

Children may not know how many pence and in £1 etc. | See Y2 folder for slides and resources for 8 lessons.

Links to resources and folders

White Rose Maths
https://wrm-13b48.kxcdn.com/wp-content/uploads/2019/SoLs/Primary/Autumn2019-20/Year-2-Autumn-Block-3-Measurement-Money.pdf

Trust Shared folder – Year 2
Classroom Secrets folder
Third space folder
White Rose Maths folder |

				Children focus on 1 pence and counting in 1's to make amounts. Children complete a majority of fluency style questions and are introduced to problem solving as an oral group activity. Adults model how to verbally use the word 'because'.		
Multiplication/ Division **(Weeks 5-6)**	Recognise equal groups Make equal groups Add equal groups Multiplication sentences using the x symbol Multiplication sentences	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.	Equal Same Groups Multiply Multiplication Lots of Divide Division Array Times	GD: Children are introduced to larger values / amounts when applicable. But it is important that the GD focus is on mastery of the skills rather than moving onto the next stage of learning quicker. Children are introduced to problem solving and reasoning questions which require sentence responses.	Children may get confused when counting in steps of 2, 5 and 10. Children may get confused between multiplication and division. Children may think they can do division in any order, like multiplication. Children may confuse multiplication for addition – x / +	See Y2 folder for slides and resources for 8 lessons. Links to resources and folders White Rose Maths https://wrm-13b48.kxcdn.com/wp-content/uploads/2019/SoLs/Primary/Autumn2019-20/Year-2-Autumn-Block-4-Number-Multiplication-and-Division.pdf Trust Shared folder – Year 2 Classroom Secrets folder Third space folder White Rose Maths folder

| | from pictures

Use arrays

2 times-table

5 times-table

10 times-table | Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. | | Children are taught how to 'prove it' and use the word 'because'.

SEND:
Activities are made more 'concrete' when appropriate and additional resources are used to support visual and kinaesthetic learning.

Children focus on 1 pence and counting in 1's to make amounts.

Children complete a majority of fluency style questions and are introduced to problem solving as an oral group activity. Adults model how to verbally use the word 'because'. | | |

Context (big picture learning)

Mathematics is an important, creative discipline that helps us to understand and change the world. We want all of our children within the Pontefract Academies Trust to experience all that mathematics has to offer and to develop a sense of curiosity about the subject with a clear understanding. When they leave us we want them to continue their love of maths and use it continuously and positively in their future lives.

We foster a positive 'growth mind-set' attitude and we promote the fact that we believe that all children can achieve in mathematics. We teach for secure and deep understanding of mathematical concepts through manageable, bespoke steps and cross fertilize at every opportunity. VIPs (Very Important Points) are implemented in every lesson to ensure knowledge and skills are revisited and retained over time.

We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated reasoning and problem solving activities. At our school, the majority of children will be taught the content from their year group only. They will spend time becoming true masters of content, applying and being creative with new knowledge in multiple ways.

Place Value teaches the children the meaning of numbers. Children consolidate their understanding that the position of a digit within a number, shows its value. They also work towards partitioning numbers, firstly within 100 and then beyond as the children progress through Key Stage Two. Children need to have a thorough understanding of comparing and sequencing numbers that they are confident with (within 100) so they are able to apply these skills as they learn to tackle bigger numbers. Children need to consolidate the basic concept of addition and subtraction (within as well as crossing 10s to move on to 100s (KS2)) and the related maths symbols. They will then apply these skills across future units and cross-fertilise these skills in other subjects. As they grow up they will use these skills in their everyday life. For example: when shopping and handling money and wages; when writing cheques; working out test scores; measuring and weighing within the workplace…

Resources

Trust shares > Primaries > Departments > KS1 > Planning Cycle B > Autumn 2 > Maths > Year 2

Links to resource folders:

White Rose

Classroom Secrets

Third Space

Year 2 Skeleton Slides

Complete resources: