TERM 5 OVERVIEW YEAR 1 – Maths

Term 5 Book – Lila and the Secret of Rain		
Topic(s) – Multiplication and Division, Fractions, Position and Direction		**Guide Time = 6 weeks**
Assessment:	White Rose end of unit assessments Teacher judgements Weekly arithmetic tests	**Very Important Points (VIPs):** **Number: Multiplication and Division** - Numbers in the 10 times table end in 0. - Equal means the same. - Arrays use equal groups in columns and rows. - Equal groups are groups which contain the same number or amount. - Double is two equal groups of a number or an amount. **Measurement: Fractions** - Half means 'one of two equal parts'. - Quarter means 'one of four equal parts'. - When finding a half or a quarter, the parts must be equal. **Geometry: Position and Direction** - Shapes and objects may look different if they are turned. - A full turn goes all the way around and ends where it began. - The hand that makes an 'L' shape is your left hand. **Fat Questions:** - If we counted for long enough, would we say the number 1,693,480 when counting in 10s? - Can all shapes, objects and quantities that can be split into halves also be split into quarters? - Do all shapes and objects look different when they are turned?
Links to prior learning (sequencing) and canon book	**Multiplication and Division** In EYFS the children will have learnt to count reliably with numbers from 1 – 20, place them in order and say which number is one more or one less than a given number. The children have been introduced to place value within 10 during half term 1 and numbers to 20 in term 2. Children have discussed the concept of doubling and sharing and grouping objects. **Fractions** In EYFS, children will have some experience of discussing half and sharing objects into two groups that are the same. **Position and Direction** In EYFS, the children will have gained some knowledge of spatial awareness and begun to consider where they are in relation to children or objects around them.	
Links to other learning (cross fertilisation)	Links to PE will be made through active maths activities and/or using counting within warm ups (20 star jumps, 10 lunges etc) and games (keeping track/score). Active maths lessons will be taught where appropriate. **The World Beyond Us:** Are there any other fractions that are smaller than a quarter? Are fractions used in the same way all around the world? **The World Around Us:** If we looked at our school on a map, in which direction would out house be? Where is the nearest shop? Where is the nearest park? **Modern Britain:**	

	How is multiplication and counting in groups used in people's daily lives? **Healthy Bodies & Healthy Minds:** How can we use fractions to think about how much food we eat? Can position and direction be used to create a workout or circuit course to keep ourselves active? **Culture:** Do all cultures use multiplication and division in the same way as we do? **Technology in Action:** How have navigation technologies affected our use of position and direction skills?	
Links to future learning	The skills taught this half term will be applied and built upon throughout the year. Children will be introduced to 'bigger' numbers as the year progresses until they are ready for Year 2 and able to use any number within 100.	
Character/Wider Development ('50 things', cultural capital, skills)	Relate and use this knowledge and understanding in real-life contexts in and outside of school and make these relevant and purposeful links when: sorting and grouping objects during learning and play; identifying numbers in the environment; counting during play or exercise; handling money in real life situations, for example shopping or buying tickets; and if weighing and measuring, for example when baking or growing plants. Thematic Questions: The World Beyond Us: Do you think it's possible to know how many people there are in the world? What are the smallest and largest fractions? The World Around Us: How is multiplication and division used every day? How are fractions used every day? Modern Britain:	

	How does maths help people in their jobs and daily lives? What do we have to help us 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? Does multiplication and division work in the same way around the world? Technology in Action: How can fractions help with the design and creation of buildings? Why would position and direction skills be important for a crane operator building a structure?	

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
Multiplication and Division (Week 1-3)	To count in 10s. To make equal groups. To add equal groups. To make arrays. To make doubles. To make equal groups by grouping. To make equal groups by sharing.	Count in multiples of twos, fives and tens. 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.	Tens Sequence Total Group Groups of Equal Arrays Columns Rows Double Share Sharing Left over	GD: Children are introduced to bigger 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'. SEND: Pre-teaching is used as an intervention to build upon EYFS skills in preparation for Year 1 content. Activities are made more 'concrete' when appropriate and	Confusion between pronunciation of tens and teen numbers (for example, Forty – Fourteen) Confusion with pronunciation of some tens numbers (for example, children may find numbers such as twenty, thirty and fifty trickier than forty, sixty and seventy – 'twoty' 'threety' etc.) Assumptions that all quantities can be shared into equal groups. Inconsistencies in drawing arrays with clear columns and rows.	See Y1 folder for slides and resources for 7 lessons. Consolidation resources also included for additional lessons.

				additional resources are used to support visual and kinaesthetic learning. 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'.		
Fractions (Week 4-5)	To find a half (1). To find a half (2). To find a quarter (1). To find a quarter (2).	Recognise, find and name a half as one of two equal parts of an object, shape or quantity. Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. Compare, describe and solve practical problems for lengths and heights (for example, double/half).	Whole Half Quarter Split Parts Equal Non-equal	GD: Children can be challenged to work with higher quantities, more complex shapes and objects with non-equal parts. SEND: Children could be supported by using concrete resources and ensuring that the objects or quantities they are finding fractions of are already split into equal parts. Children introduced to problem solving as an oral group activity. Adults model how to verbally use the word 'because'.	Misconceptions between the terminology of 'half' and 'quarter'. Children may associate anything less than a whole as a half - e.g. if something is not full it is 'half full'. Misconceptions surrounding the importance of equal parts. Assumptions that all objects and quantities can be split into equal halves or quarters. Assumption that halves are always greater or more than quarters.	See Y1 folder for slides and resources for 4 lessons. Consolidation resources also included for additional lessons.

		Compare, describe and solve practical problems for mass/weight (for example, half, half full, quarter).				
Position and Direction (Week 6)	To describe turns. To describe position (1). To describe position (2).	Describe position, direction and movement, including whole, half, quarter and three quarter turns.	Direction Turns Full turn Half turn Quarter turn Three-quarter turn Position Left Right Forwards Backwards Between Above Below	GD: 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. Verbal discussions with adults using key vocabulary to support children's understanding and model correct use of language. Children complete a majority of fluency style questions and are introduced to problem solving as an oral group activity. Adults model	Inconsistencies in applying knowledge of fractions to turns. Unfamiliarity with correct use of positional language. Children may have difficulty remembering starting points. Children may confuse left and right.	See Y1 folder for slides and resources for 3 lessons. Consolidation resources also included for additional lessons.

				how to verbally use the word ‘because’.		
Consolidation (Week 7)						Use the final 4 lessons of the term for assessment and consolidation of key skills.

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 our schools, 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.

Multiplication and division are key skills which children will use throughout their lives, providing children with the main tool for many aspects of Maths later in their school lives and beyond. Fractions allows comparison skills to be developed, introducing children to the notion of comparing quantities, shapes and sizes and the understanding that other amounts exist that are not ‘whole’. Position and direction supports the development of children’s decision making and spatial awareness, helping children to gain a deeper understanding of their surroundings and where objects and places are in relation to their location.

Resources

Trust shares > Primaries > Departments > KS1 > Planning Cycle B > Summer 1 > Maths > Year 1