Numeracy Medium term planning with differentiation.   Year 1 Autumn Term B 2017

Activities and groups adapted as necessary following ongoing formative assessments.

Week	Unit	Starters	Blue Squares	Yellow Diamonds	Green Triangles

			Adding more	Adding more	Adding more
1 30/10/17- 03/11/17	**Number:** Addition and Subtraction.	Addition Given a number, identify one more or one less.	Moving from counting all to counting on. Calculations in different orders e.g. the smallest number first. Varied fluency e.g. There are four pennies in a bag and I add two more how many do I have now? Reasoning e.g. If I add 0 to a number, the number stays the same? True or false. Problem Solving Working logically through problems using concrete objects to work out the answers. Answering questions when working, using mathematical talk to interact with the teacher. Finding a part Apply understanding of number bonds to solve missing number problems. Build on from counting on. Exposure to one part and the whole being the same so they understand the role of zero. Varied fluency e.g. Complete the part whole method. There are seven cars in total. Seven of them are green, how many are yellow? Reasoning Beginning to be exposed to money. I spend 10p and buy a chocolate bar. What else could I buy? Explain how you know. Problem Solving Using digits 0-9, how many part whole models can you complete? Using concrete objects to work out the answers. Answering questions when working, using mathematical talk to interact with the teacher.	Moving from counting all to counting on. Calculations in different orders e.g. the smallest number first. Varied fluency e.g. There are four pennies in a bag and I add two more how many do I have now? Using concrete objects to begin with and then moving on to pictorially recording in books or whiteboards. Reasoning e.g. If I add 0 to a number, the number stays the same? True or false. Using concrete/pictorial objects to work out the answers. Finding a part Apply understanding of number bonds to solve missing number problems. Build on from counting on. *Exposure to one part and the whole being the same so they understand the role of zero.* Varied fluency e.g. Complete the part whole method. There are seven cars in total. Seven of them are green, how many are yellow? Reasoning Beginning to be exposed to money. I spend 10p and buy a chocolate bar. What else could I buy? Explain how you know. Using concrete/pictorial objects to work out the answers.	Moving from counting all to counting on. Calculations in different orders e.g. the smallest number first. Using concrete objects to work out the answers and pictorially working if an understanding of concrete is seen. Ext- Reasoning e.g. If I add 0 to a number, the number st the same? True or false. Using concrete objects to work out the answers. Finding a part Apply understanding of number bonds to so missing number problems. Build on from counting on. *Exposure to one part and the whole being the same so they understand the role of zero.* Varied fluency e.g. Complete the part whole method. There are seven cars in total. Seven of them are green, how many are yellow? Reasoning Beginning to be exposed to money. I spend 10p and buy a chocolate bar. Wha else could I buy? Explain how you know. Using concrete objects to work out the answers and pictorially working if an understanding of concrete is seen.

2 06/11/17- 10/11/17	**Number:** Addition and Subtraction.	**Subtraction** Given a number, identify one more or one less	How many left Language of subtraction explored. Use of zero is explained that if nothing is taken away the start number remains the same. Varied fluency e.g. There were 7 birds in a tree and 3 fly away. Fill in the missing numbers in the written sentence. Reasoning Writing number sentences thinking about taking away and going into more detail. Problem Solving Some cakes have been eaten, I only have 2 left. How many cakes could there have been, and how many could have been eaten to be left with 2? Use the ten frame to explore answers. Using concrete objects to work out the answers. *Symbol to be introduced. (-)* Varied fluency e.g. Completing number sentences with the subtraction symbol included. Reasoning Matching calculations when they have been written in different ways e.g. 7=9-2 and 9-2=7 Problem Solving How many calculations can you complete? With one box filled in. *Using concrete objects to work out the answers.* Breaking apart Create stories about the calculations so they can deepen their understanding. Varied fluency e.g. How many dogs have spots? Using pictures and part whole methods.	*How many left* Language of subtraction explored. Use of zero is explained that if nothing is taken away the start number remains the same. Varied fluency e.g. There were 7 birds in a tree and 3 fly away. Fill in the missing numbers in the written sentence. Reasoning Writing number sentences thinking about taking away and going into more detail. *Symbol to be introduced. (-)* Varied fluency e.g. Completing number sentences with the subtraction symbol included. Reasoning Writing number sentences thinking about taking away and going into more detail. Using concrete/pictorial objects to work out the answers. Breaking apart Create stories about the calculations so they can deepen their understanding. Varied fluency e.g. How many dogs have spots? Using pictures and part whole methods.	How many left Language of subtraction explored. Use of zero is explained that if nothing is taken away the start number remains the same. Varied fluency e.g. There were 7 birds in a tree and 3 fly away. Fill in the missing numbers in the written sentence. Reasoning Writing number sentences thinking about taking away and going into more detail. *Symbol to be introduced. (-)* Varied fluency e.g. Completing number sentences with the subtraction symbol included. Reasoning Writing number sentences thinking about taking away and going into more detail. Using concrete objects to work out the answers and pictorially working if an understanding of concrete is seen. Breaking apart Create stories about the calculations so they can deepen their understanding. Varied fluency e.g. How many dogs have spots? Using pictures and part whole methods.

				Reasoning	Reasoning	Reasoning
				Using an image think of two questions to ask your friend about the image. Represent them as a calculation. Problem Solving There are no more than 10 counters in total, how many counters could be in the bag? Using concrete objects to work out the answers.	Using an image think of two questions to ask your friend about the image. Represent them as a calculation.	Using an image think of two questions to ask your friend about the image. Represent them as a calculation.

			Facts	Facts	Facts
3 13/11/17- 17/11/17	**Number:** Addition and Subtraction.	**Subtraction** Recognising numbers on a 100 square. Counting sounds or objects.	Varied fluency e.g. Using the image, how many calculations can you create? Reasoning Looking at a selection of number calculations explain the mistakes. Counting back *Building on counting forwards, now apply this to count backwards when subtracting.* Varied fluency e.g. Completing number lines. Thinking of own number sentences. Reasoning Number line questions related to counting back. Problem Solving Start a t 10 roll a dice and subtract the amount. What would be good to roll? Why would you not want to roll 1? Using concrete objects to work out the answers. Finding the difference *Finding the difference to be introduced, use skills of counting back to help find the answers.* Varied fluency e.g. How many more cakes does Beth have than Stephen? Fill in missing number using the pictures. Reasoning Two numbers have a difference of 4, the larger number is less than 10 what could they be?	Varied fluency e.g. Using the image, how many calculations can you create? Reasoning Looking at a selection of number calculations explain the mistakes. Using concrete/pictorial objects to work out the answers. Counting back *Building on counting forwards, now apply this to count backwards when subtracting.* Varied fluency e.g. Completing number lines. Thinking of own number sentences. Reasoning Number line questions related to counting back. Finding the difference *Finding the difference to be introduced, use skills of counting back to help find the answers.* Varied fluency e.g. How many more cakes does Beth have than Stephen? Fill in missing number using the pictures. Reasoning Two numbers have a difference of 4,	Varied fluency e.g. Using the image, how many calculations can you create? Reasoning Looking at a selection of number calculations explain the mistakes. Using concrete objects to work out the answers and pictorially working if an understanding of concrete is seen. Counting back *Building on counting forwards, now apply this to count backwards when subtracting.* Varied fluency e.g. Completing number lines. Thinking of own number sentences. Reasoning Number line questions related to counting back. Finding the difference *Finding the difference to be introduced, use skills of counting back to help find the answers.* Varied fluency e.g.	

				Problem Solving The difference between 7 and 4 is 3? True or false?	the larger number is less than 10 what could they be? Using concrete/pictorial objects to work out the answers.	How many more cakes does Beth have than Stephen? Fill in missing number using the pictures. Reasoning Two numbers have a difference of 4, the larger number is less than 10 what could they be? Using concrete objects to work out the answers and pictorially working if an understanding of concrete is seen.	

| 4 19/11/17- 23/11/17 | Number: Addition and Subtraction/ **Geometry Shape** | **Subtraction** Say the number one more or one less than any given number to 20. | *Working through the same steps fluency, reasoning and problem solving (see small steps for more detail)* Comparing statements 3D shapes Introduce simple 3D shapes, cuboids, cubes, pyramids, spheres, cylinders and cones. Recognise 3D shapes from a group and name them. Match the shape to the name and see how 3D shapes with the same can look different. Practical activities and written with increasing independence. | *Working through the same steps fluency and reasoning (see small steps for more detail)* Comparing statements 3D shapes Introduce simple 3D shapes, cuboids, cubes, pyramids, spheres, cylinders and cones. Recognise 3D shapes from a group and name them. Match the shape to the name and see how 3D shapes with the same can look different. Practical activities and written with adult support. | *Working through the same steps Fluency and reasoning (see small steps for more detail)* Comparing statements 3D shapes Introduce simple 3D shapes, cuboids, cubes, pyramids, spheres, cylinders and cones. Recognise 3D shapes from a group and name them. Match the shape to the name and how 3D shapes with the same can look different. Practical activities with adult guidance and modelling. | |

5 27/11/17- 01/12/17	**Geometry Shape**	**Geometry Shape** Identify various patterns in numbers when counting.	2D shapes Looking at the surface of 3D shapes to see 2D shapes. Notice 2D shapes as flat shapes. Looking at 2D shapes, triangles, squares, rectangles and circles. Sorting 2D shapes. Practical activities and written with increasing independence.	2D shapes Looking at the surface of 3D shapes to see 2D shapes. Notice 2D shapes as flat shapes. Looking at 2D shapes, triangles, squares, rectangles and circles. Sorting 2D shapes. Practical activities and written with adult support.	2D shapes Looking at the surface of 3D shapes see 2D shapes. Notice 2D shapes as flat shapes. Looking at 2D shapes, triangles, squares, rectangles and circles. Sorting 2D shapes. Practical activities with adult guidance and modelling.
6 04/12/17- 08/12/17	**Assessment Week** **Geometry Shape**	**Geometry Shape**	Recap 2D and 3D shapes as needed. Looking at fluency, reasoning and problem solving. Comparing and noticing shapes. Patterns with 2D and 3D shapes.	Recap 2D and 3D shapes as needed. Looking at fluency, reasoning and problem solving. Comparing and noticing shapes. Patterns with 2D and 3D shapes.	Recap 2D and 3D shapes as needed. Looking at fluency, reasoning and problem solving. Comparing and noticing shapes Patterns with 2D and 3D shapes

7 11/12/17- 15/12/17 **8** 18/12/17 19/12/17 **Christmas weeks**			**Christmas week** **Christmas related numeracy activities. Based upon things learn during the term.** 18.12.17 D&T Curriculum Day