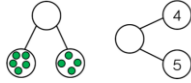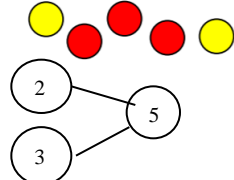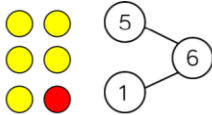# Year 1 Maths Parent Overview –Autumn Term 2 2021

Pupils will be taught maths in a way that ensures a deep understanding of number through using concrete objects and pictorial representations. Pupils develop their reasoning skills by explaining their answers in full sentences and using the correct mathematical language. This approach helps children to reason and solve problems and supports their understanding of abstract methods.

KIRFS- Number Bonds to 5

Maths Objective	Ways of supporting this objective
Introducing the Part Whole Model	• Choose any number of objects (0-10) eg buttons, raisins and split the group into 2 parts. The stating total eg 9 raisins is called the "Whole" and the 2 parts it is split into eg 4 and 5 are the 2 parts. Represented on a part whole model (you can draw these models on paper quickly and easily) • How many ways can you split any number 0-10 into 2 parts. Place the whole number eg raisins into the circle on its own and then split these raisins into 2 groups, moving these groups out of the whole and into the 2 parts (2 remaining circles)
Addition by combining 2 parts to make a whole.	• Group these counters by colour and say how many of each "There are 2 yellow counters **plus** 3 yellow counters which is **equal** to 5 counters. 2+3=5
Fact Families/Number bonds within 10	• These are the different ways of makind numbers between 0-10. The calculations can be presented in lots of different ways:- $$1 + \underline{\quad} = 6$$ $$\underline{\quad} + 1 = 6$$ $$\underline{\quad} = \underline{\quad} + 1$$ $$6 = \underline{\quad} + \underline{\quad}$$ • Play about with different numbers of objects (0-10) eg pencils, crayons , lego pieces, beads etc… and split them into different combinations of 2 partsDraw a part whole model and place the objects on the whole circle before moving them into the 2 parts.
Number Bonds within 10	• Explore all the different ways you can make numbers up to 10 using a pat whole model and any number of objects. Say your number sentences out loud as you move the objects into the 2 parts. $5 = 3 + 2$ 3 cubes plus 2 cubes equals 5 cubes • or 5 cubes equals 32 cubes plus 3 cubes
Addition by counting on from the biggest number	• Board games, playing with 2 dice. Say the biggest number first and count on the smaller number of dots, without starting from 1 each time. • Counting the fruit in the fruit bowl,eg counting bananas first and then apples – 6 bananas and 2 more apples is **6** - 7 , 8 = 8 pieces of fruit altogether • Counting 2 sets of books eg top shelf and bottom shelf- 8 on the top shelf , plus 6 more on the bottom shelf is **8**- 9,10, 11, 12, 13, 15=15 books altogether.

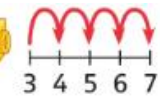|	
Finding missing numbers , using their part whole models	Use buttons, pencils, lego blocks, beads, pennies to split into 2 parts and the whole $5 + \square = 9$? Make the whole number 9 , then take the 5 to create the first part , how many are now in the 2nd part ? ie 4 **whole** 9 is the whole number, so the 9 objects go into the whole circle. Next split the 9 objects into the 2 parts ie 5 in the first part and the missing number is the 2nd part. **part** 5 ? **part**
Subtracting numbers by crossing out.	- Begin with solid objects- 9- 5 = 4 - 9 raisins on a plate.5 get eaten, how many are left? - Next, draw the raisins and cross out the 5 that have been eaten. - Finally write the number sentence 9-5= 4 - Extend thinking – If I started with 8 apples , but some were eaten so that I only have 3 left, how many have been eaten?- Again, use part whole model as illustrated above. Place the 8 apples or draw these in the whole section and move 3 of them into one of the parts. The apples left move into the other part and this shows how many have been eaten 8 apples could also be drawn and cross apples out until there are only 3 left, How many have been crossed out?
Explore addition and subtraction through "fact families".	If I had 6 hoops and I gave 2 to my friend, how many would I have left? = 6 2 4 There are 8 different number sentences to make from this part whole model $6 - 2 = 4$ $4 = 6 - 2$ $6 - 4 = 2$ $2 = 6 - 4$ $2 + 4 = 6$ $6 = 2 + 4$ $4 + 2 = 6$ $6 = 4 + 2$
Finding the difference between 2 numbers	- What is the difference between 2 numbers? - If I have 8 counters and you have 6. What is the difference? The counters/ apples/raisins / pencils need to be lined up so both lines can be compared (1 to 1 correspondence) 8-6=2 So the difference is 2 because each counter has a partner up to the number 6 , but 2 counters on the top line don't have a partner.These 2 counters are what makes our 2 lines of counters different from each other. Practise this lots of times with different objects, always lining them up carefully.

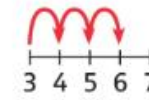| Comparing +/- facts using <> = symbols	• Who has the more cubes? You ⬛⬛⬛🟨🟨🟨 ∩∩∩∩ $3 + 4 = 7$ 3 4 5 6 7 Me ⬛⬛⬛🟨🟨 ∩∩∩ $3 + 3 = 6$ 3 4 5 6 7 $7 > 6$

This can be played around with using dice scores, food, socks , anything you choose.Try to make it relevant eg who has more fruit? – me with 4 cherries and 2 starwberries, or you with 5 cherries and 4 strawberries?