Term 3 Grade R: Addition and Subtraction 1-20		wits maths connect
Adding with a bead string		CAPS
Level 1 *[1-20 bead string (on the chalkboard), number line]* **Whole class:** • Write 8 + 5 on the board and tell the class that you want to work this out on a bead string. • Stick the bead string on the board and explain the structure of the bead string to the class (5 of each colour). • Move 8 beads over in one go, saying "I have moved 8 beads over in one go. How did I know that was eight?" Here you want to emphasize 5+3 is 8. • Move 5 beads over to the middle of the bead string saying, "I moved 5 beads in one go. How did I know that was five?" Here you emphasize that 2+3 is 5. • Say, "I don't want to count in ones. When I look at the 5 beads I can see that if I move 2 beads over then I will have ten beads because 8+2 is 10." Move two beads over. • Say, "How many more must I still add?" whilst pointing at the 3 beads. Once children answer move the three beads over saying, "So, what is ten plus three?" Write your answer in the number sentence. • Encourage mental working **without counting on in 1's**. • Do three more similar tasks with the class. Get learners to do the 3rd task with you on their own bead strings. For example: A. **9 + 6** and follow the same process as above (Move 9 beads over on a 1-20 bead string. Say: I have 9 beads and I want to add 6 more beads. I am going to start by adding 1 bead to give me 10. I added 1 bead to get to ten, how many more beads do I need to add? Five more, because 1 and 5 make 6. What is ten plus five?) B. **7 + 5** C. **8 + 6** • Replay these activities on a number line then record as a number sentence (8 + 5 = 13)	**What to look for**: • Children can say the number of additional beads needed • Children can show the combination on the bead string • Children can record by: ○ replaying their calculation on a number line ○ writing/or completing the number sentence	TERM 3
Level 2 *[1-20 bead string]* **Pair work:** • Pairs can work on similar problems given by the teacher. • Learners have to show and explain to each other how they solve given problems using the bead string by first jumping to 10.	• Children first add to ten and then add the rest of the second addend. • Children do not count in ones on the bead string to get their answers.	