Number and Place Value: Counting in Eights

Aim:	**Success Criteria:**	**Resources:**
Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. DfE Ready-to-Progress Criteria: Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number. (3NF-2) To count in multiples of eight.	I can count forwards in steps of eight. I can count backwards in steps of eight. I can recognise multiples of eight.	Lesson Pack REGENT STUDIES Focused education on life's walk! www.regentstudies.com
	Key/New Words: Multiple, counting in steps of.	**Preparation:** Differentiated Multiples of Eight Jewellery Activity Sheet – one per child Diving into Mastery Activity Sheets – as required

Prior Learning: Year 2 conceptual prerequisite: It will be helpful if children can calculate products within the 2, 5 and 10 multiplication tables.

Learning Sequence

	**Remember It:** Children practise counting in multiples of twos, fours and fives, following the rules on the Lesson Presentation. Choose children to demonstrate.	
	**Making Jewellery:** Revise counting in multiples of eight from zero by talking through the information on the Lesson Presentation. Repeat with additional examples if necessary. Can children count forwards in steps of eight from zero?	
	**Making Jewellery – Counting Backwards:** Children count backwards in steps of eight. Use the Lesson Presentation to help children to count backwards. Can children count backwards in steps of eight from a given starting point?	
	**Multiple of Eight Jewellery:** Children complete the differentiated Multiples of Eight Jewellery Activity Sheets, identifying and reasoning about multiples of eight.  Children identify multiples of eight from zero and solve missing multiples of eight sequence problems. The multiples of eight are within the 8 times table.  Children identify multiples of eight up to 160. They identify and correct mistakes in multiples of eight sequences. They explain how they know that a specific number is not a multiple of eight.  Children identify missing numbers in sequences of multiples of eight, where they have to count both backwards and forwards. They explain different methods to calculate missing multiples. They consider statements about multiples of eight and explain their reasoning.	
	Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.  Children practise their fluency skills of counting in multiples of eight. They continue sequences of multiples of eight and complete related multiplication facts.  Children consider statements about multiples of eight, giving examples to show their reasons why.  Children determine which sets of numbers would fit to a set of clues. They combine digits to make multiples of eight.	
	**Broken Bracelet:** Use the picture of a bracelet as shown on the Lesson Presentation. Children calculate what would be the fifth number if five more beads were added. They explain how they could calculate the answer in more than one way. For example: by adding 40 as this is five steps of eight. Can children find different ways to recognise multiples of eight?	

Exploreit

Costit: Children write as many multiples of eight as possible within a given time. Repeat. Can they beat their previous score?

Findit: Children practise counting in multiples of eight by filling in the next numbers in the sequences using this fabulous