Partitioning numbers lesson plan

Subject: Maths	Lesson Title: Partitioning numbers
Date:	Time Span:
Year Group: Year 3	Group Size: 30

Desired Learning Outcomes	NC PoS ref:
To understand how to partition numbers	

Key Language:	Use of ICT:
Partition, split, break, worth, value, units, tens, hundreds and thousands, tenths, hundredths and thousandths	Smartboard for intro

Assessment (Make reference to each section of the lesson)
Intro – Children to attempt sample questions on the carpet on their pupil whiteboards. More able children to attempt to partition 4-digit numbers independently
Main – Mark children's work as they complete it. Sit with any children who are struggling, bringing them back to the carpet if necessary. If still unsure by end of lesson sit with TA during plenary.
Plenary – Can children partition the numbers that their partner gives them?

Use of Other Adults
TA to monitor progress of G+T children attempting work without listening to intro
TA to monitor progress of other children once begin work
TA to sit and continue working with children (of any ability) who struggled in plenary

Anticipated Misconceptions/Difficulties
Children not including the right number of 0s e.g. 47 = 4 + 7 or 678 = 60 + 7 + 8
Children being confused by the equals sign coming at the beginning of the number sentence
G + T – children not understanding / forgetting that they need to write zero point … to show tenths e.g. 0.8, not 08 or just the digit 8

Resources
Units blocks, tens sticks and hundreds cubes
Unit squares and tenth strips
Pupil whiteboards and pens

	Time
Introduction Go through PowerPoint covering the following: - Explaining how there are 10 digits: 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9 and that these digits are used to make all other numbers - Examples of 2-digit, 3-digit and 4-digit numbers At this point G+T children to go and attempt higher ability work (partitioning 4-digit numbers) - Explaining what place value means and how the place of a digit gives it its value - How to partition 2-digit numbers in to their tens and units, with visual representations of the tens and units - How to partition 3-digit numbers in to their hundreds, tens and units, with visual representations of the hundreds, tens and units - How to partition 4-digit numbers in to their thousands, hundreds, tens and units At this point G+T children who partitioned 4-digit numbers successfully to come to the carpet - Explaining how a unit can be split in to tenths, with a visual representation - Explaining how a unit can be split in to hundredths, with a visual representation - An explanation and visual representation of how a unit, tenth, hundredth and thousandth relate to each other - Explaining how zeros after the final digit in numbers with a decimal place are irrelevant - How to partition numbers in to their units and tenths, with visual representations of the units and tenths - How to partition numbers in to their units, tenths, hundredths and thousandths with visual representations of each - Some more examples of how to partition numbers in to their units, tenths, hundredths and thousandths. Emphasise the need to get the number of zeros right	15 mins
Main (including differentiated tasks) Lower ability – partition 2-digit numbers Middle ability – partition 3-digit numbers Higher ability – partition 4-digit numbers Gifted and talented – partition numbers with decimal places	20 mins
Plenary In partners children to give each other a numbers to partition on their whiteboards Partition each others' numbers, swap and check agree on partitioning, discussing any differences	5 mins