

Ordering numbers lesson plan

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

Desired Learning Outcomes	NC PoS ref:
To be able to order numbers from lowest to highest	

Key Language: Higher, lower, units, tens, hundreds, thousands, tenths, hundredths, thousandths and negative numbers	Use of ICT: Smartboard for intro
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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 order 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 order the numbers that their partner gives them?
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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 understanding that numbers in the tens column are worth more than numbers in the units column or that numbers in the hundreds column are worth more than numbers in the tens column Children not understanding that numbers with more digits are always worth more e.g. 600 is worth more than 60 Children not understanding that the open part of either < or > needs to face the higher number Children forgetting to order the numbers from highest to lowest G+T – thinking that numbers with more digits are always worth more e.g. thinking that 4.0 is worth more than 4 or 7.5 is worth more than 8
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Resources Pupil whiteboards and pens
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Introduction	Time
<p>Go through PowerPoint covering the following:</p> <ul style="list-style-type: none"> • 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 (ordering 4-digit numbers) • Explaining what place value means and how the place of a digit gives it its value • Visual representations of some 2-digit numbers • Some 2-digit numbers for children to order. (Observe how well they do this) • Visual representations of some 2-digit numbers, with the same digit in the tens column • Some 2-digit numbers for children to order, with the same digit in the tens column (Observe how well they do this) At this point less able children can begin their independent work • Visual representations of some 3-digit numbers • Some 3-digit numbers for children to order. (Observe how well they do this) • Visual representations of some 3-digit numbers, with the same digit in the hundreds • Some 2-digit numbers for children to order, with the same digit in the hundreds (Observe how well they do this) • Some 4-digit numbers for children to order (Observe how well they do this) G+T children who have completed the work on ordering 4-digit numbers successfully to come to the carpet. Other children to start independent work • 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 • Some numbers with decimal places for children to order • An explanation of negative numbers, using a number line to explain them • Some examples of positive and negative numbers for children to order 	15 mins
<p>Main (including differentiated tasks)</p> <p>Lower ability – order 2-digit numbers</p> <p>Middle ability – order 3-digit numbers</p> <p>Higher ability – order 4-digit numbers</p> <p>Gifted and talented – order numbers with decimal places and negative numbers</p>	20 mins
<p>Plenary</p> <p>In partners children to give each other a set of numbers to order on their whiteboards Discuss how we can make it tricky for our partners e.g. have the tens be the same Order each others, swap and check agree on ordering, discussing any differences</p>	15 mins