


















Number and Place Value: Number Comparisons

<p>Aim: Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.</p> <p>To order and compare numbers to at least 1 000 000.</p>	<p>Success Criteria: I can determine the value of each digit in numbers up to 1 000 000.</p> <p>I can use visual and abstract methods to compare numbers.</p> <p>I can choose a suitable method to compare numbers in a range of mathematical contexts.</p>	<p>Resources: Lesson Pack</p> <p>Box – one per group, if not using the Popcorn Box Net</p>
	<p>Key/New Words: Place value, number, digit, greater than, less than, order, compare, partition.</p>	<p>Preparation: Popcorn Box Net – one per child/pair</p> <p>Popcorn Number Cards – one per group of three, cut out and screwed up into a ball to look like popcorn, and placed into the Popcorn Box or a different, suitable box</p> <p>Popcorn Symbol Cards – one per group of three, cut out and screwed up into a ball to look like popcorn, and placed into the Popcorn Box or a different, suitable box</p> <p>Diving into Mastery sheets – as required</p>

Prior Learning: It will be helpful if children have covered reading and writing numbers up to at least 1 000 000, and identifying the value of each digit. Click [here](#) for lessons that cover this.

Learning Sequence

	<p>Remember it: Using the Lesson Presentation, subtract digits provided from numbers up to 1 000 000. Discuss methods of calculation and final answers.</p>	
	<p>Numbers in Words: Children solve the calculations shown on the Lesson Presentation on their whiteboards. <i>Can children solve the calculations using written and visual methods?</i></p>	
	<p>Greater Than and Less Than: Introduce the use of the greater than and less than symbols to compare numbers, referring to the examples shown on the Lesson Presentation. Explain how the wider side of the symbol opens out towards to bigger number, using the diagram on the Lesson Presentation. Click to identify the meaning of the symbol. <i>Can children solve the calculations using written and visual methods?</i></p>	
	<p>Symbol Selection: Children select the correct symbol to complete each number sentence. Choose children to click on a symbol for each number sentence. If they choose correctly, the symbol will turn green. <i>Can children use the greater than, less than and equals symbols to compare numbers? Can children recognise which digit in a number they should look at first when comparing numbers?</i></p>	
	<p>Popcorn Comparisons: Put children into groups of three, where possible. Give each group their Popcorn Box (if using) filled with the screwed up Popcorn Number Cards and the Popcorn Symbol Cards. Each group member takes a Popcorn Card. Each group should have two white cards and one yellow card. Groups assemble their cards to create an accurate inequality. Repeat with the remaining Popcorn Cards in the box. You may wish to photograph children's work or they could record their calculations in their books. <i>Can children use the correct mathematical symbols when comparing numbers?</i></p>	

	<p>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.</p> <p> Children use concrete and pictorial resources (including place value counters and place value grids) to compare numbers as digits or written in words. They compare numbers using the correct mathematical symbols.</p> <p> Children answer a range of reasoning and problem solving questions using concrete, pictorial and abstract representations. They use the correct mathematical symbols to compare numbers, justifying their responses with reasoning and examples.</p> <p> Children answer problem solving questions that have a wide variety of potential solutions. Using the mastery approach, children find all potential solutions to a given problem, justifying their reasoning with evidence and explanation where necessary.</p>	
	<p>Destroy the Digits: Using the Lesson Presentation, children decide which digits need to be destroyed to make the calculation correct.</p>	

ExploreIt

RollIt: Children work in pairs and take turns to roll a four-digit, five-digit or six-digit number. Children compare their numbers using the greater than or less than symbols.

CompareIt: Use these differentiated _____ to master ordering and comparing numbers.

LearnIt: Children will find this visually exciting _____ a useful tool for learning how to compare numbers up to 1 000 000.