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Aim: Compare and order numbers from 0 up to 100; use < > and = signs. To use the equals sign.	Success Criteria: I can find equal values. I can represent equal values. I can use the equals sign in an equation.	Resources: Lesson Pack Whiteboards and pens - class set Equipment for representing place value, such as base ten equipment, number shapes, tens frames and coins.
	Key/New Words: Numbers 0-100, up, back, zero, teen, two-digit, represent, tens, ones, equal, quantity, value, equation, equals, is the same as, equivalent to, is equal to and the equals sign.	Preparation: Extended Place Value Cards 0-100 – 1 per pair Finding Equal Values Activity Sheet – 1 per child True or False Mat – 1 per pair Place Value Dominoes - as required Diving into Mastery Activity Sheets - as required

Prior Learning: It will be helpful if children can partition 2-digit numbers in different ways. For lessons to help children have secure understanding of this, click [here](#).

Learning Sequence

	Remember It: Children use their knowledge of place value and ordering numbers to complete the challenge featured on the Lesson Presentation . Children use given digits to form two-digit numbers and order them, e.g. from greatest to smallest. How many different number ordered sequences can they make? Children record their results on whiteboards and explain whether they have ordered the numbers from smallest to greatest or greatest to smallest.				
	Finding Equals: Read through the slides on the Lesson Presentation to introduce the concept of the equals sign. Ensure that the children understand that the values on each side of an equals sign must be equal in order for an equation to be balanced. Draw the children's attention to the language focus of the lesson: equals, is the same as, equivalent to, is equal to and the equals sign. Work as a class to complete number sentences using the equals sign. Can children find equal values?				
	Equal Values: Children may continue this activity using the Extended Place Value Cards 0-100 . Children work in pairs. One child selects one card at random and both children try to represent an equal value. Children may work with equipment or record their ideas using whiteboards. Alternatively, the cards could be used as a matching up activity where children work in pairs to identify the representations that are equal to each other. Can children represent equal values and use the equals sign in an equation?				
	Finding Equal Values: Children complete the differentiated Finding Equal Values Activity Sheet , using knowledge of place value to find equal values up to 100. <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; text-align: center;">  <p>Children find equal values from numbers represented in different ways. Children also complete an unfinished number sentence.</p> </td> <td style="width: 33%; text-align: center;">  <p>Children find equal values from numbers represented in a greater variety of different ways. Children also find two possible answers to complete an unfinished number sentence.</p> </td> <td style="width: 33%; text-align: center;">  <p>Children find up to three equal values from numbers represented in a greater variety of different ways. Children also find two possible answers to complete an unfinished number sentence.</p> </td> </tr> </table>	 <p>Children find equal values from numbers represented in different ways. Children also complete an unfinished number sentence.</p>	 <p>Children find equal values from numbers represented in a greater variety of different ways. Children also find two possible answers to complete an unfinished number sentence.</p>	 <p>Children find up to three equal values from numbers represented in a greater variety of different ways. Children also find two possible answers to complete an unfinished number sentence.</p>	
 <p>Children find equal values from numbers represented in different ways. Children also complete an unfinished number sentence.</p>	 <p>Children find equal values from numbers represented in a greater variety of different ways. Children also find two possible answers to complete an unfinished number sentence.</p>	 <p>Children find up to three equal values from numbers represented in a greater variety of different ways. Children also find two possible answers to complete an unfinished number sentence.</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 recognise numbers that have been represented in different ways and write them in digit form. They can then represent these digits using other equipment or pictorially.</p> <p> Children use their reasoning skills to work out whether both sides of the calculation are equal or not.</p> <p> Children use their knowledge of partitioning in different ways to find all the representations that are equal to a given number.</p>	
	<p>True or False: Children work in pairs to challenge one another using the Extended Place Value Cards 0-100 and the True or False Mat. Children create equations using the equals sign that the other child must prove to be true or false. Can the children spot the false equations?</p>	

Exploreit

Investigateit: Allow children to investigate the concept of equal values using a pair of balance scales and interlocking cubes. Children can write the corresponding equations on whiteboards.

Playit: Children play with the _____ in pairs. The children shuffle and distribute the dominoes equally. The aim of the game is to place as many dominoes with matching values as possible. The child with the most dominoes in their possession at the end of the game loses.

Learnit: Children will find this visually exciting _____ a useful tool for supporting their place value knowledge.