

## Partitioning numbers lesson plan

<b>Subject:</b> Maths	<b>Lesson Title:</b> Partitioning numbers
<b>Date:</b>	<b>Time Span:</b>
<b>Year Group:</b> Year 2	<b>Group Size:</b> 30

### Desired Learning Outcomes

To understand how to partition numbers

### Key Language:

Partition, split, break, worth, value, units, tens, hundreds and thousands

### Use of ICT:

Place Value ITP

### Assessment (Make reference to each section of the lesson)

Intro – TA to check children who may / may not be able to count up to 20. Can children explain why teacher's deliberate mistakes are incorrect?

See if children are able to draw a representation of a number on their whiteboards

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 draw a suitable representation of a given number?

### Use of Other Adults

TA to work with lower ability children during main part of lesson

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

### Resources

<https://www.ictgames.com/mobilePage/arrowCards/index.html> (if the link does not work, Google 'place value interactive teaching tool' to find something similar)

Units blocks, tens sticks and hundreds cubes

Cards for plenary (laminated and cut up)

<b>Introduction</b>	<b>Time</b>
<p>Revise how columns in 2-digit numbers are tens and units and columns in 3-digit numbers are hundreds, tens and units</p> <p><a href="https://www.ictgames.com/mobilePage/arrowCards/index.html">https://www.ictgames.com/mobilePage/arrowCards/index.html</a> (if the link does not work, Google 'place value interactive teaching tool' to find something similar) to show how a number in the tens column is worth ten times as many as a number in the units column e.g. a 1 in the tens column is worth 10, whereas a 1 in the units column is worth only 1. Repeat to show how a number in the hundreds column is worth ten times as many as a number in the tens column e.g. the 1 in 100 is worth ten lots of ten</p> <p>Model how we can partition numbers e.g. <math>43 = 40 + 3</math> or <math>572 = 500 + 70 + 2</math> (Lower and middle ability start work)</p> <p>Repeat above model, but for thousands as well e.g. <math>3,891 = 3,000 + 800 + 90 + 1</math></p>	15 mins
<p><b>Main (including differentiated tasks)</b></p> <p>Lower ability – partition 2-digit numbers</p> <p>Middle ability – partition 3-digit numbers</p> <p>Higher ability – partition 4-digit numbers</p> <p>Extension – make up own numbers to partition on pupil whiteboards</p>	20 mins
<p><b>Plenary</b></p> <p>Give each child a card with either a number e.g. 43 or a number that has been partitioned e.g. <math>40 + 3</math>. Each child needs to find their corresponding partner (give lower ability 2-digit numbers, middle ability 3-digit numbers and higher ability 4-digit numbers)</p>	10 mins