# Partitioning numbers lesson plan

Subject: Maths	Lesson Title: Partitioning numbers
Date:	Time Span:
Year Group: Year 2	Group Size: 30

### **Desired Learning Outcomes**

To understand how to partition numbers

Key Language:	Use of ICT:
Partition, split, break, worth, value, tenths,	Place Value ITP
units, tens, hundreds and thousands	

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

Intro – TA to take children who are confident with partitioning 4-digit numbers 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 think of their own numbers and partition them correctly?

#### **Use of Other Adults**

TA to work with G+T children

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

Place Value ITP at <a href="http://www.taw.org.uk/lic/itp/place\_val.html">http://www.taw.org.uk/lic/itp/place\_val.html</a> (if link does not work, just Google 'Place Value ITP')

Units blocks, tens sticks and hundreds cubes

Unit squares and tenth strips

Pupil whiteboards and pens

Introduction	Time
TA to ask G + T children to partition some 4-digit numbers; if confident with this go with TA to work on partitioning numbers with a decimal place; if not stay with the rest of the class	
Have TA take G+T children to work on partitioning numbers with a decimal place:  Show children a stick of ten:	
Show children another version of it:	
Revise how each unit can be split in to tenths Give each child a unit that has been split in to tenths and have them cut it up in to ten strips. Revise how each of these is called a tenth, so a unit is made up of ten tenths Show children some examples of numbers, representing them using these units squares and tenths strips e.g. 3.2 would be 3 unit squares and 2 tenth strips, 8.9 would be 8 unit squares and 9 tenth strips etc Ask the children to show you some examples of their own Model how to partition numbers with one decimal place	15 mins
(Teacher with remainder of class) Revise how columns in 2-digit numbers are tens and units and columns in 3-digit numbers are hundreds, tens and units Use Place Value ITP at <a href="http://www.taw.org.uk/lic/itp/place_val.html">http://www.taw.org.uk/lic/itp/place_val.html</a> (if link does not work, just Google 'Place Value ITP') 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 Model how we can partition numbers e.g. 43 = 40 + 3 or 572 = 500 + 70 + 2 Repeat above model, but for thousands as well e.g. 3,891 = 3,000 + 800 + 90 + 1	
Main (including differentiated tasks)	
Lower ability – partition 2-digit numbers	
Middle ability – partition 3-digit numbers	
Higher ability – partition 4-digit numbers	20 mins
G+T – partition numbers with 1 decimal place	
Extension – make up own numbers to partition on pupil whiteboards	
Plenary	
Ask children to come up with some of their own numbers and partition them on their pupil whiteboards. Explain what they have done to a partner	10 mins