

Partitioning numbers in different ways lesson plan

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

Desired Learning Outcomes

To understand how to partition numbers in a variety of ways

Key Language:

Partitions, split, break, worth, value, tenths, units, tens, hundreds and thousands

Use of ICT:

Place Value ITP

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 http://www.taw.org.uk/lic/itp/place_val.html (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

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

Model how to partition numbers with one decimal place in different ways

Ask the children to show you some ways of partitioning numbers with a decimal place

(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 http://www.taw.org.uk/lic/itp/place_val.html (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 in different ways e.g. 43 = 40 + 3 or 40 + 2 + 1 or 20 + 20 + 3 etc

Repeat above model for 3 and 4-digit numbers as well

Time

15 mins

Main (including differentiated tasks)

Lower ability – partition numbers up to 20

Middle ability – partition 2-digit numbers

Higher ability – partition 3-digit numbers

G+T – partition 4-digit numbers and numbers with 1 decimal place

Extension – make up own numbers to partition in different ways on pupil whiteboards

20 mins

Plenary

Ask children to come up with some of their own numbers and partition them **in more than one way** on their pupil whiteboards. Explain what they have done to a partner

10 mins