

Counting and place value lesson plan

Subject: Maths	Lesson Title: Counting and place value lesson plan
Date:	Time Span:
Year Group: Year 2	Group Size: 30

Desired Learning Outcomes

To be able to count reliably up to 20

To understand that the position of a digit gives it its value

Key Language:

Digit, number, place, hundreds, tens, units and tenths

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

Counting an item more than once

Counting in the incorrect sequence e.g. one, two, three, six, nine, five

Not understanding that mixed items can be counted e.g. counters and pencils

That if a group of items takes up more space then it has 'more' items

G+T - Not understanding that there are values less than one e.g. tenth

Resources

Range of objects to count

Place Value ITP on IWB http://www.taw.org.uk/lic/itp/place_val.html (if the link does not work just Google 'Place value ITP')

Base ten teaching materials

Abaci

Worksheets

Pupil whiteboards and pens

Introduction	Time
<p>TA to take children who are unable to count reliably (if unsure if can count reliably ask child to quickly count a number of items) and cover the following principles:</p> <p>One-to-one – each item should only be counted once. TA to make deliberate mistake of continuously counting each item more than once, until children say ‘No! That’s wrong’. Ask them to explain why</p> <p>Stable-order – that the order of number names does not change. TA to make deliberate mistake of counting incorrectly e.g. one, two, five, three, eight, until children say ‘No! That’s wrong’. Ask them to explain why. Practice counting up and down to 20.</p> <p>Cardinal – the last number counted tells us ‘how many’ items there are</p> <p>Abstraction – that anything can be counted, including unrelated and mixed items. TA to count mixed objects e.g. pencils, rubbers and sharpeners, as one group.</p> <p>Order-irrelevance – that we can count from any object; we don’t have to start from right to left. TA to count from objects in the middle and on the right.</p> <p>Conservation of number – TA to show children a smaller number of larger items e.g. 4 biscuits and a larger number of smaller items e.g. 6 small coins. Discuss with the children which group has ‘more’ items.</p> <p>Discuss how we can make it easier to not make mistakes when we count e.g. arranging the items in to a row or moving the ‘counted’ objects away from the ‘to be counted’ ones</p> <p>Children to practice counting groups of items correctly in pairs. (If all children can count to 20, have TA take G+T and explain how units and tenths)</p> <p>Teacher (with remainder of class): Revise how we need to look at the position, or place, of a number to know what it is worth i.e. is it in the hundreds, tens or units column. Use place value ITP from http://www.taw.org.uk/lic/itp/place_val.html to model how 4 is worth 4 units, 40 is worth 4 tens and 400 is worth 4 hundreds, so 40 is worth more than 4 and 400 is worth more than 40. Repeat with other similar numbers e.g. 6, 60 and 600. Also explain with base-ten materials http://www.worldwideshoppingmall.co.uk/toys/shelves/numeracy-base-10.asp (if have them) Model how we can ‘exchange, ten units for one stick of ten and explain how ten units are worth the same as one stick of ten. Show children a real Slavonic abacus (if you have one) or show them an image of one if you don’t and explain how to use one Explain how to complete independent work (see below), modelling some examples</p>	<p>15 mins</p>
<p>Main (including differentiated tasks)</p> <p>Lower ability – count objects up to 20</p> <p>Middle ability – write 2-digit numbers to match representations of them on an abacus e.g.</p> <p>Higher ability – write 3-digit numbers to match representations of them on an abacus e.g.</p> <p>Gifted and talented – as higher ability, but with numbers to one decimal place</p> <p>Extension – think of own numbers to draw representations of, and draw them</p>	<div data-bbox="1034 1406 1168 1713" data-label="Image"> </div> <p>20 mins</p>
<p>Plenary</p> <p>In ability partners give children a pupil whiteboard and a pen. Ask children to give their partners a number to draw a representation of on an abacus. Discuss if they think their partner drew a suitable representation. Why / why not? Repeat</p>	<p>10 mins</p>