Place value lesson plan

Subject: Maths	**Lesson Title:** Place value
Date:	**Time Span:**
Year Group: 2	**Group Size:** 30

Desired Learning Outcomes

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

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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 – 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

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Anticipated Misconceptions/Difficulties
Not making hundreds larger than tens or not making tens larger than units
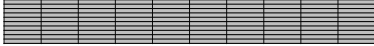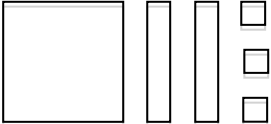

Resources
Place Value ITP on IWB http://www.taw.org.uk/lic/itp/place_val.html (if the link does not work just Google 'Place value ITP')
Base ten teaching materials
Worksheets / independent work on IWB
Pupil whiteboards

	Time
Introduction TA to take G+T children to work on place value with numbers with 1 decimal place: Show children a stick of ten: Show children another version of it: Explain how each unit in the second ten has been 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. Explain that 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 Show children how 1.0 and 1, 2.0 and 2, 3.0 and 3 (etc) are the same Emphasise how 1.0 is not worth more than 1 even though it has more digits. Same for 2.0 and 2, 3.0 and 3 etc Explain idependent work 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 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 Similarly we can exchange ten sticks of ten for one hundred square Model how we can use drawings to represent each number (like below). Model how to complete independent work On pupil whiteboards ask children to draw a representation of a given number. Tell children not to show their whiteboards until asked (to stop copying). Keep any children who are still unsure and go through with them again.	15 mins
Main (including differentiated tasks) Lower ability – draw representations to show the value of each digit in **2-digit numbers** Middle ability – draw representations to show the value of each digit in **3-digit numbers** e.g. for 123 Higher ability - draw representations to show the value of each digit in **4-digit numbers** e.g. for Gifted and talented – write the value of a representation of **numbers to 1 decimal place** e.g. is 3.2 Extension – think of own numbers to draw representations of, and draw them	20 mins
Plenary In ability partners give children a pupil whiteboard and a pen. Ask children to give their partners a number to draw a representation of. Discuss if they think their partner drew a suitable representation. Why / why not? Repeat	10 mins