Place Value Question 1 and 2:

Objective: I can count over one thousand objects.

I can group objects in ones, tens, hundreds and thousands to help me when counting.

NPV6 identify, represent and estimate numbers using different representations.

Assessment Question 1 and 2:

Although the children should have a good understanding of numbers to 1000 from their learning in year 3, it is still important to provide children with counting opportunities with large amounts. The children are required to move their learning on to how a thousand is made. The children should be able to use their knowledge from year 3 of grouping objects in to tens and hundreds to help them to understand that when we have 10 groups of 100, a new group has been formed. We have made a thousand.

Most children should be familiar with base ten representations of one, ten and hundred. Therefore, you may want to use base ten with **some** groups of children. However, for some children base ten is still abstract, therefore real life objects may be more beneficial with the children making their own groups of ten, hundred and thousand. You may want to use things like straws, pasta, paper clips, sweets or loom bands.

Assessment Task:

Place different objects on to the tables in trays. Children to have a tray to count. Ensure you know how many there are in the tray so that you can assess if the children have this correct. Children could have a simple sheet to record their answers for each object. If possible, try to watch children as they are counting and observe how they group the objects or count the objects using their knowledge of grouping in to tens and hundreds. You also want to spot which children understand how one thousand is formed.



Input ideas:

- Encourage talks and conversations about how things are grouped in ten and hundred. How does this make life easier for us? What if we need a large amount of something? Show the children objects grouped in tens or hundreds such as paper clips, bead strings, sweets etc.
- Use large bead strings. Encourage the children to identify that there are 100 beads as there are ten groups of ten beads. Now count in hundreds. I don't need to count the groups of ten as all of the bead strings are the same. So that means each bead string has 100 beads. Encourage the children to count 9 bead strings. How many do I have? Now introduce a tenth bead string. Show just one bead. How many do I have? Prove that to me? What if I add ten more beads how many will I have? If I collect ten whole bead strings, how many beads do I have? How do you know? How would I write this? How can I show that I have 1000 beads? I have made another group of ten. I have 10 lots of 100 beads. I can make a new group. I want to carry on counting but I want to remember I have one thousand. Take suggestions as to how we can show that these are one thousand. For example: tie in pipe cleaners or put into a bag. Carry on counting in ones, hundreds and see if the children can make another thousand.
- Create a class counting table. Ask the children to bring in objects from home such as bottle lids, buttons, football cards etc. You may also want to link this to an art project or a topic on recycling. Build up bags and boxes of items with the children, encouraging them to count and group these to help make it easier to count on each day when children bring more objects in. Create boxes/ tubs for over a thousand objects. This will familiarise the children with counting in groups of ten, hundred and thousand. As you collect more over the term, the children will see how larger amounts in the thousands are formed. Ask for something like milk lids from other classes around the school too to help create larger amounts.

Practice Activities

<u>Purple Practice</u>: most suited for children who show difficulties in assessment task Question 1 and demonstrate difficulty in counting over a thousand objects .

Practical: provide the children with objects to count. If the children have understanding of items being grouped in to tens and hundreds, they could be given the items already grouped. Some children may need to cross boundaries counting in ones, ten or hundred. Check that children know what numbers come next and why they are adding one, ten, or hundred. Give the children some objects already counted out. Then ask the children to count on such as 956 objects and children to count on in ones. Then get the children to cross the boundaries such as counting items to 1110, so that the children experience crossing a thousand, crossing hundred, crossing ten. Every time the children make a new group model how this changes the number on the green place value chart. Model what happens to the digit and what we say.

<u>Green Practice</u>: For children who are ready to group objects in to tens hundreds and thousands to help them with counting over one thousand objects.

Practical: children to start grouping the objects in thousands, hundreds, tens and ones. Children to group own amounts and to show how they do this. Encourage the children to pause at different amounts to say how much they have, count on one more, ten more, hundred more to show their understanding. Place value charts may help, as the children can place these objects on to here to help them to see the amount they have created. The children could use elastic bands, bags, little boxes or plastic wallets to group the objects.

<u>Yellow Practice</u> Most suited for children ready to count with objects already grouped in tens, hundreds and thousands.

Practical: Give the children amounts already grouped into hundreds, tens, ones and thousands. Children to count the amount they have been given , ensuring they have a variety of 4 digit amounts. You could give the children amounts made with bead strings or Base Ten. However, if the children are using the thousand block in Base Ten, make sure that they know how the thousand block has been formed and what it represents as many children have misconceptions here. Forming it themselves with 10 lots of the 100 blocks often helps the children to see this (see mastery).

<u> Mastery – reasoning</u>

Although some children are familiar with Base Ten equipment up to one thousand, many children make errors when introduced to a thousand block. This mastery task encourages the children to look at 2 viewpoints. Encourage the children to talk about the different viewpoints and to use Base Ten hundred blocks to help them to explain who is right. Ask the children to prove this and to think about why one child thought that the block represented 600. Encourage the children to apply their understanding that ten hundred blocks have been stacked on top of each other to make a thousand block. Some children may benefit exploring this practically.



Green Practice

Resource sheet

	ones		
	tens		
	hundreds		
	thousands		
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