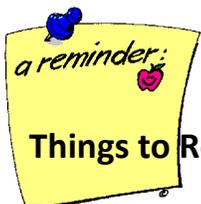




Counting: The Building Blocks of Number Sense

- Counting is a powerful tool and is intricately connected to number sense and operation sense.
- Counting involves both reciting a series of numbers and representing a quantity by a symbol.
- First experiences with counting are not initially attached to an understanding of the quantity or value of the numerals.

What we're looking for when students are counting:	
Stable Order Understanding that the counting sequence stays consistent.	Conservation Understanding that the number of objects in a group stays the same no matter whether they are spread out or close together.
Abstraction Understanding that the quantity of five large things is the same count as a quantity of five small things. And that the quantity is the same as a mixed group of five small and large things.	Order Irrelevance Understanding that the counting of objects can begin with any object in a set and the total will stay the same.
One-to-One Correspondence Understanding that each object being counted must be given one count and only one count.	Cardinality Understanding that the last number of a count of group of objects represents how many there are in the group.
Movement is Magnitude Understanding that as you move up the counting sequence, the quantity increases by one and as you move down or backwards, the quantity decreases by one. In skip counting, such as counting by 10's, the amount goes up by 10 each time.	Unitizing Understanding that in our base ten system, objects are grouped by successively larger (to the left) and smaller (to the right) multiples of ten. Our basic unit is the ones. The ones are regrouped into one unit of tens and then one unit of hundred etc. as the numbers move to the left.



- Students need to count in meaningful, everyday situations.
- Students need to count from different points in a count.
- Students need to count backwards.
- The count should be associated with a symbol and/or a quantity where possible.