Hindu-Arabic Numeral System (S2 & 3)
(Seat students in a circle on floor)

Thousands of years ago, people used to draw pictures or use marks like tally marks to record how many they had counted. For example, if a farmer wanted to count how many goats he had, he might have recorded like this…….. (draw goats) or like this…….. (draw tally strokes).

However, if a large number of items had to be counted, for eg. a whole field full of goats, both these systems took a long time to record and could possibly have to be recounted every time they wanted to remember how many there were altogether. So people tried to invent better ways of recording their counting.

*Around 2,300 years ago, some mathematicians in India invented a system based on groups of 10 **(10 x 10's = 100, 10 x 100's = 1000)** and then used numerals or glyphs from 1-9 to show how many groups of each of these they had. So if they were working in a market place and needed to record how many beans were left at the end of a day, they counted then recorded like this……*

> *Count, bag and collect on a large place value mat 106 beans, then record….*
> *1 hundred, 6 ones*

*They counted and recorded like this for about 900 years but still felt that the system could be improved because they didn't have a numeral to show when a group was empty. So they invented the symbol 0 or **sunya:** meaning empty which enabled them to just record numerals and no words, so instead of writing '1 hundred, 6 ones', they could record '106', which was much faster and simpler.*

*This is the same Base 10 system we use today in most countries in the world, including Australia! (**Optional:** Now let's use it to count and record how many _____ we have here…..)*