The importance of place value in mathematics?

Place value is perhaps the most fundamental concept imbedded in the Foundation to Year 6 mathematics curriculum. It is absolutely essential that students develop a solid understanding of the base ten numeration system and place value concepts.

- In our decimal number system, the value of a digit depends on its place, or position, in the number.
- Each place has a value of **10 times** the place to its right.
- Zero "holds the **place**" for a particular **value**, when no other **digit** goes in that position.
- A whole number is separated into groups of three digits with a small space in between so that we can read the numbers in their HTO (hundreds, tens & ones) groups.
  (We no longer use a comma in between.)
- These three numbers are always hundreds, tens and ones, repeated into the thousands place and then the millions place and so on.

Initially the children learn to understand and read one (ones), then two (tens and ones), then three digit numbers (hundreds, tens and ones) and **this sets the trend for reading and understanding the larger numbers**.

H	T	O
The Trend		
4	6	5

In standard form: 465
In word form: Four hundred **and** sixty five
In expanded form: 400 + 60 + 5

H	T	O
Thousands		
2	8	7

H	T	O
The Trend		
4	6	5

Then we can add HTO in the thousands place.
In standard form: 287 465
In word form: Two hundred **and** eighty seven thousand four hundred **and** sixty five
In expanded form: 200 000 + 80 000 + 7 000 + 400 + 60 + 5

And then we can add HTO in the millions place, and so on.

H	T	O
Millions		
		3

H	T	O
Thousands		
2	8	7

H	T	O
The Trend		
4	6	5