## STM Knowledge Organiser Year: 8 Subject: Maths

**Topic: Standard Form** 

Core Knowledge		
Topic/Skill	Definition/Tips	Example
1. Standard	$A \times 10^{b}$	$8400 = 8.4 \text{ x } 10^3$
Form		
	where $1 \le A < 10$ , $b = integer$	$0.00036 = 3.6 \ge 10^{-4}$
2. Multiplying	Multiply: Multiply the numbers and add	$(1.2 \times 10^3) \times (4 \times 10^6) = 8.8 \times 10^9$
or Dividing	the powers.	
with Standard	Divide: <b>Divide the numbers</b> and <b>subtract</b>	$(4.5 \times 10^5) \div (3 \times 10^2) = 1.5 \times 10^3$
Form	the powers.	
3. Adding or	<b>Convert</b> in to <b>ordinary</b> numbers, <b>calculate</b>	$2.7 \times 10^4 + 4.6 \times 10^3$
Subtracting	and then <b>convert back</b> in to standard form	= 27000 + 4600 = 31600
with Standard		$= 3.16 \times 10^4$
Form		

Links to ordering numbers, Pythagoras, using Laws of Indices

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