Year 10 – Maths – Autumn 1

٥	Academy Brislington			raciis
L		U	nit 1 - surds	
L	No.	Question	Answer	HIGHER
L	1.1	A surd is	An irrational root	Х
	1.2	$\sqrt{a} \times \sqrt{b}$	\sqrt{ab}	Х
	1.3	$\sqrt{\frac{a}{b}}$	$\frac{\sqrt{a}}{\sqrt{b}}$	Х
	1.4	$\sqrt{a} + \sqrt{a}$	$2\sqrt{a}$	Х
	1.5	$\sqrt{a} - \sqrt{a}$	0	Х
	1.6	$\sqrt{a} \times \sqrt{a}$	а	Х
Г	1.7	$(\sqrt{a}+1)(\sqrt{a}-1)$	a - 1	Х
	1.8	$a \times a$	a^2 ("a squared")	
	1.9	$a \times a \times a$	a^3 ("a cubed")	
	1.10	$a \times a \times a \times a$	a^4 ("a to the power of 4")	
	1.11	±√25	The square roots of 25 are 5 and -5	
	1.12	³ √64	"The cube root of 64 is 4"	
	1.13	Index	The power	
	1.14	$a^b \times a^c$	a^{b+c}	
	1.15	$\frac{a^b}{a^c}$	a^{b-c}	
	1.16	$(a^b)^c$	a^{bc}	
Г	1.17	a^0	1	
	1.18	a^{-b}	$\frac{1}{a^b}$	Х
	1.19	$\frac{b}{a^c}$	$\sqrt[c]{a}$ b	Х
	1.20	Standard form	A way of writing numbers in the form $a \times 10^n$ where a must be between 1 and 10 and n is an integer	
Г	1.21	10-2	0.01	
Г	1.22	10 ⁻¹	0.1	
T	1.23	100	1	
	1.24	10 ¹	10	
	1.25	10 ²	100	
Γ	1.26	10³	1000	
	1.27	0.0004 in standard form	4×10^{-4} (the number must be between 1 and 10)	
	1.28	40000 in standard form	4×10^4 (the number must be between 1 and 10)	

		Unit 2 - % increase and decrease				
	No.	Question	Answer	HIGHER		
	2.1	% increase (non calculator)	Find the % and add it on			
	2.2	% decrease (non calculator)	Find the % and take it away			
┨	2.3	% Change (calculator)	original x % multiplier			
+	2.4	Compound Percentages	original x % multiplier time interval			
	2.5	Convert a fraction to a decimal	Make the denominator 10 or 100 OR divide the numerator by the denominator			
	2.6	Convert a decimal to a %	X 100			

Date (week commencing)	Numbers to learn
05/09/21	1.8 – 1.17
12/09/21	1.13 – 1.22
19/09/21	1.8 – 1.22
26/09/21	1.19 – 2.6
03/10/21	1.1 – 1.4 & 2.1 – 2.6
10/10/21	1.1 – 1.12
17/10/21	1.1 – 2.7

Learning means...

I am using look >> cover >> write >> check at least twice for this week's facts

and/or

I made flash cards ("Question" on one side and "Answer" on the other) for the facts and got someone to test me on them at least twice

so that...

I achieve the minimum score of 8/10 on the quiz