Year 8 Mathematics

Understanding Accuracy

Factors of 1000	
1	1000
2	500
4	250
5	200
8	125
10	100
20	50
25	40

Factors of 100	
1	100
2	50
4	25
5	20
10	

Factors of 10	
1	10
2	5

Thousands	Hundreds	Tens	Ones	Decimal point	Tenths	Hundredths	Thousandths
Whole part				.	Decimal part		
Th	H	T	O	.	t	h	th
				.			

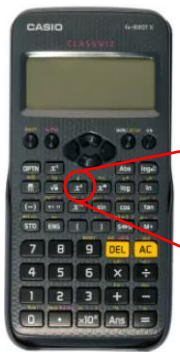
1st decimal place

2nd decimal place

3rd decimal place

Tenths		
Decimal Form	Fraction Form	Simplest Form
0.1	$\frac{1}{10}$	$\frac{1}{10}$
0.2	$\frac{2}{10}$	$\frac{1}{5}$
0.3	$\frac{3}{10}$	$\frac{3}{10}$
0.4	$\frac{4}{10}$	$\frac{2}{5}$
0.5	$\frac{5}{10}$	$\frac{1}{2}$
0.6	$\frac{6}{10}$	$\frac{3}{5}$
0.7	$\frac{7}{10}$	$\frac{7}{10}$
0.8	$\frac{8}{10}$	$\frac{4}{5}$
0.9	$\frac{9}{10}$	$\frac{9}{10}$

Square numbers	Square roots
$10^2 = 100$	$\sqrt{100} = 10$
$9^2 = 81$	$\sqrt{81} = 9$
$8^2 = 64$	$\sqrt{64} = 8$
$7^2 = 49$	$\sqrt{49} = 7$
$6^2 = 36$	$\sqrt{36} = 6$
$5^2 = 25$	$\sqrt{25} = 5$
$4^2 = 16$	$\sqrt{16} = 4$
$3^2 = 9$	$\sqrt{9} = 3$
$2^2 = 4$	$\sqrt{4} = 2$
$1^2 = 1$	$\sqrt{1} = 1$



Recurring decimal

Error Intervals

lower bound* ≤ *x* < *upper bound

Command Language		Notation	
• **Calculate** • **Work out** • **Evaluate**	work out ***exactly***	=	equal to
Truncate	*limit the number of digits after the decimal point without rounding*		
Round	*replace exact number with a simpler,* ***approximated*** *value*	integer	whole number
		d.p.	decimal place
		s.f.	significant figure
Estimate	*calculate using approximate values*	≈	approximately equal to