<u>Number tricks</u>

<u>Evaluate the following multiplications</u>

0.4×0.002	0.00003×0.2	0.004×0.0002
0.05×0.0004	0.00011×0.02	0.00023×0.003
1.2×0.002	24.1×0.002	0.0000004×0.0007

<u>Extension</u>

$0.2 \times 0.3 \times 0.003$	$0.0004 \times 0.2 \times 0.1$
$0.00014 \times 0.3 \times 0.2$	$0.0005 \times 0.11 \times 0.001$

<u>Evaluate the following divisions involving decimals</u>

$0.0004 \div 0.02$	$0.000016 \div 0.008$	$0.0025 \div 0.5$
$0.08 \div 0.0002$	$120 \div 0.00002$	$0.27 \div 0.0000003$

Revision Sheets

Number: No calculator

$-20 \div 5 =$ $-4 \times 100 =$ $-3 \times -12 =$ $100 \div -20 =$ $(-7)^2 =$ $(-2)^3 =$	$3.21 + 1.5 + 0.7$	3.2×1.8
$10\% \; of \; 80 =$ $25\% \; of \; 60 =$ $20\% \; of \; 40 =$	$\dfrac{1}{3} \; of \; 60 =$ $\dfrac{1}{4} \; of \; 80 =$ $\dfrac{2}{7} \; of \; 35 =$	$-12 - 8 =$ $-15 + 7 =$ $-20 + 12 =$
Write 36 as the product of its prime factors	$20\% \; of \; a \; school \; have \; brown \; hairs.$ There a 102 people with brown hair. How many people in the school are there?	Write down the reciprocal of 12.
Find: $20 \div 0.1 =$ $30 \div 0.2 =$	Paul and Sam share £300 in the ratio 2:3. How much does Paul get?	Peter buys an antique for £40 and sells it for £52. What is his percentage profit?
Round: $4.12 \; to \; 1 \; dp.$ $3.267 \; to \; 2 \; dp.$	Exactly a quarter of the school wear glasses. Explain why there cannot be 205 people in the school	Jack travels 60miles between 12.00 and 15.00. What is his average speed?

Number sheets: Fractions

$\frac{2}{5}+\frac{1}{4}$	$3\frac{1}{2}+2\frac{3}{5}$	$\frac{2}{7}-\frac{1}{21}$
$\frac{3}{7}\div\frac{2}{4}$	$3\frac{1}{5}\times2\frac{1}{3}$	$5\div\frac{1}{7}$
$5\div3\frac{1}{2}$	$\left(2\frac{1}{2}\right)^2$	$\frac{2}{11}+\frac{1}{3}$
What is the LCM of 11 and 3	What is the LCM of 8, 4 and 12	What is the HCF of 11 and 7

Powers: evaluate the following

4^2	3^2	2^3	12^2
1^7	$(-4)^2$	$(-3)^2$	10^4

Write down the first 5 prime numbers…………………………………………….

Write down the first 10 square numbers……………………………………………………………….

Write down the first 4 cube numbers……………………………………………………..

What is the square number closest to 80?

Using the fact that $12^2 = 144$, what does 1.2^2 equal?

<u>Using calculations</u>

<u>Find</u>

170.8×10	$170.8 \div 10$	170.8×1000
$170.8 \div 100$	170.8×100000	170.8×100000

$YOU\ ARE\ TOLD\ THAT$: $122 \times 1.4 = 170.8$

Without a calculator, write down the answer to:

$1220 \times 1.4 =$	$12200 \times 1.4 =$
$122 \times 14 =$	$122 \times -1.4 =$
$-122 \times -1.4 =$	$12.2 \times 1.4 =$
$122 \times 2.8 =$	$122000 \times 0.14 =$

DECIMAL MULTIPLICATION:

Use the Grid Method to find:

3.2×1.4	5.1×2.9
1.22×3.9	326×14

Comparing Calculator and Non-Calculator use

Question	Calculator	Question	Non-calculator
Find 12% of 80		Find 14% of 70	
Jack gets 64 out of 80 in a test. What is this as a percentage?		Sam gets 24 out of 40. What is this as a percentage?	
Tim invests some money and it increases in value from £300 to £345. What is the percentage increase?		Sally invests some money. It increases from £400 to £540. What is the percentage increase?	
Jack gets 7 out of 12 in a test. Pete gets 3 out of 5 in a test. Who has done better?		Which is better? A score of 7 out of 10, or a score of 30 out of 30?	
What is 12/35 as a percentage?		Write 3/5 as a percentage?	
Find the number half way between −4.5 and 1.5		What number is half-way between 1.2 and 1.3	
Increase £300 by 32%		Decrease £200 by 20%.	