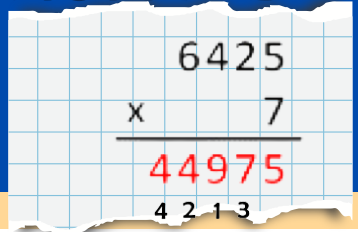
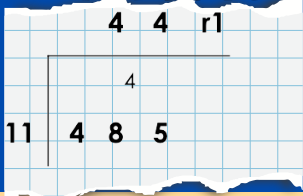


MATHS - MULTIPLICATION AND DIVISION B

YEAR 6



RECAP

- Recall division facts for multiplication tables up to 12×12
- Understand the commutativity of multiplication
- Multiply and divide a two-digit number by 10, 100 and 1000
- Multiply and divide four-digit number by a one or two digit number using a formal written method.

CRUCIAL KNOWLEDGE

- Multiply and divide numbers mentally drawing upon known facts.
- Multiplying and divide whole numbers and decimals by 10, 100 and 1000.
- Multiply numbers up to 4 digits by a two-digit number using a formal written method, including long multiplication for two-digit numbers
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context
- Solve problems involving the four operations and a combination of these, including understanding the meaning of the equals sign.
- Understand the order of operations.

EXTENDED KNOWLEDGE

Solve reasoning and problem solving questions using the above

KEY VOCABULARY

multiply	a mathematical operation where a number is added to itself a number of times	factor	a whole number is a smaller whole number which can be multiplied with another whole number to produce the first whole number
divide, division, dividend, divisor	to divide or division is sharing or grouping a number into equal parts	short division	arithmetical division in which the quotient is written directly without a succession of intermediate workings
product	the result when two numbers are multi-	long multiplication	arithmetical division in which the divisor has two or more figures, and a series of workings is made as successive groups of digits of the dividend are divided by the divisor, to avoid excessive mental calculation
commutative	involving the condition that a group of quantities connected by operators gives the same result whatever the order of the quantities involved, e.g. $a \times b = b \times a$	estimate	If you estimate a quantity or value, you make an approximate judgment or calculation

Multiply by 2 digits

$$\begin{array}{r} 475 \\ \times 37 \\ \hline 3325 \\ 14250 \\ \hline 17575 \end{array}$$

Short division

$$\begin{array}{r} 12.36 \\ \times 24 \\ \hline 49.44 \end{array}$$

Remainders as fractions or decimals

$$6 \overline{) 12342} \quad 4 \overline{) 132r3} \quad 4 \overline{) 132\frac{3}{4}} \quad 4 \overline{) 132.75}$$

	Th	H	T	O	$\frac{1}{10}$	$\frac{1}{100}$
$\times 100$				0	5	2
$\div 1000$	1	2	6	0		
			1	2		6

Multiply and divide by 10, 100, 1000
 Digits move to the left
 Digits move to the right

Order of operations

Brackets	$5 + 6 \times 7 + 2 = 5 + 42 + 2 = 49$
Indices	$(5 + 6) \times 7 + 2 = 11 \times 7 + 2 = 77 + 2 = 79$
Divide /	} Do in the order they appear
Multiply	
Add /	} Do in the order they appear
Subtract	