

Year 6 Autumn Maths homework

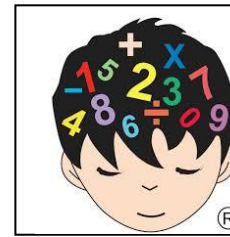
Please refer to the booklet that we sent home: How to learn your Times Table facts which is full of ideas of how to learn them. It is also available on our website.

Know by heart facts for all multiplication tables up to 12×12 .

Example: $4 \times 2 = 8$
 So $4 \times 4 = 16$
 $4 \times 8 = 32$

Suggestions: If I know my 2s I can double to find the 4s. If I know my 3s by doubling I know my 6s. If I know my 6s by doubling I know my 12s.

Mentally multiply and divide two-digit and single-digit numbers.



Example: 24×4
 Break it down in your head.
 $20 \times 4 (80) + 4 \times 4 (16) = 96$

Suggestions: Throw a die to create a number sentence.

Read and write any integer and use decimal notation for tenths, hundredths and thousandths and know what each digit represents.

Example:
 $3025 =$ three thousand and twenty five.
 $22.04 =$ twenty two and four hundredths
 Suggestions: What's the largest number you can write?

Find pairs of numbers with a sum of 100, decimals with a sum of 0.1, 1 or 10.

example:

$63 + 37 = 100$
 $0.063 + 0.037 = 0.1$
 $0.63 + 0.37 = 1$

$20 + 80 = 100$
 $0.02 + 0.08 = 0.1$
 $2 + 8 = 10$
 $0.80 + 0.20 = 1$

Suggestions: Look for patterns
 Try this:
 How many different ways can you make 0.1, 1, 100



Use partitioning to double or halve any number.

Example:
 Double - $20 + 20 = 40 (20 \times 2)$
 $15 + 15 = 30 (15 + 15)$
 Half - $40 = 40 \div 2$
 $30 = 30 \div 2$

Suggestions: Throw a die to create a 2 or 3 digit number then double or half the number.

Round whole numbers to the nearest 10, 100, 1000 or a number with up to three decimal places to the nearest integer or number of decimal places.

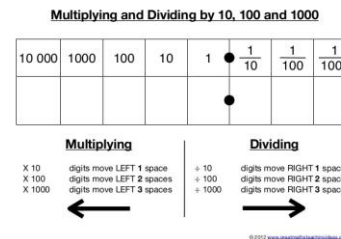
Example: round 649 to the nearest 10 = 650.
 649 to the nearest 100 = 600
 649.56 to 1 decimal place = 649.6

Order and compare whole numbers up to 1 000 000, negative numbers and decimals.

Example:
 $345,245, 4,350, 345,767, 756,896 =$
 $4,350 - 345,245 - 345,767 - 756,896$

Suggestions:
 Play a game with a partner: draw a grid, take turns to throw a die and write in the grid. The player with the largest number when the grid is complete is the winner.

Multiply and divide whole numbers and decimals mentally by 10 or 100,



Example:
 $2,567 \times 10 = 25,670$
 $2567 \div 10 = 256.70$

12 X 12 Multiplication Table

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10	11	12
2	0	2	4	6	8	10	12	14	16	18	20	22	24
3	0	3	6	9	12	15	18	21	24	27	30	33	36
4	0	4	8	12	16	20	24	28	32	36	40	44	48
5	0	5	10	15	20	25	30	35	40	45	50	55	60
6	0	6	12	18	24	30	36	42	48	54	60	66	72
7	0	7	14	21	28	35	42	49	56	63	70	77	84
8	0	8	16	24	32	40	48	56	64	72	80	88	96
9	0	9	18	27	36	45	54	63	72	81	90	99	108
10	0	10	20	30	40	50	60	70	80	90	100	110	120
11	0	11	22	33	44	55	66	77	88	99	110	121	132
12	0	12	24	36	48	60	72	84	96	108	120	132	144

