

# Year 4 Maths Homework - Autumn Part 2

Recall multiplication facts for 3, 4, 6, and 8 and 9 times-tables and derive associated division facts.

Example:  $8 \times 3 = 24$  and  $24 \div 3 = 8$

Suggestion: Listen to a times-table song or chant as you drive or walk to school.

Play Hit The Button on your tablet/computer. Visit the Top Marks website and search for this game.

Please refer to the booklet we sent home: How to Learn Times-Tables, which is full of ideas of how to learn them. Also available on our website.

Use place value and known/derived facts to multiply mentally - including multiplying together 3 numbers.

Example:  
Choose which part of the calculation to complete first based on the numbers given:

$$5 \times 2 \times 4 =$$

$$5 \times 4 = 20$$

$$20 \times 2 = 40$$

Suggestion: Roll a dice three times. Multiply the 3 numbers together.



Recognise and use factor pairs and commutativity in mental calculations.

Example:

The 'Commutative Law' means that multiplication calculations can be performed in any order so...

$$7 \times 5 \text{ is the same as } 5 \times 7$$

Factor pairs are two numbers that, when multiplied together, equal another number,

Example:

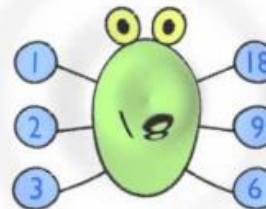
Factor pairs of 60 =

$$1 \times 60 \quad 2 \times 30 \quad 12 \times$$

$$5 \quad 6 \times 10$$

Suggestion: Make factor bugs!

Find the factors of 18



The factors of 18 are 1, 2, 3, 6, 9 and 18

Multiply two-digit and three-digit numbers by a one-digit number using the 'grid method' - please refer to our Calculations Policy and do not be tempted to introduce your child to 'short hand' methods yet.

Example:

Children will continue to use arrays to lead into the grid method of multiplication.

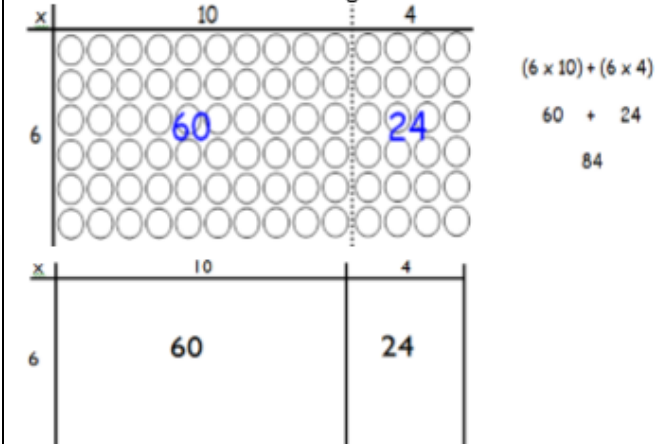
$$14 \times 6$$

The 14 is partitioned (split) into 10 and 4.

The answer to  $6 \times 10$  is found = 60

The answer to  $6 \times 4$  is found = 24

The two answers are added together  $60 + 24 = 84$



Suggestion:

Pick numbers you find on packaging and use them to make up a calculation... then use a calculator to check them.

Read, write and convert time between analogue and digital, 12-hour and 24-hour clocks

Suggestion: Ask your parent/carers to test you at reading a clock at different times of the day. Try to convert it to digital/analogue too.



Convert between different units of measure (e.g. kilometre to metre; hour to minute).

Example:

$$100\text{cm} = 1 \text{ metre}$$
$$256\text{cm} = ??? \text{ metres}$$
$$256\text{cm} \div 100 = 2.56 \text{ metres}$$

Suggestion: Use your measurements from finding the perimeter of different shapes and convert them into centimetres/millimetres/metres.

Use partitioning to double or halve any number, including decimals to one decimal place.

Examples:

Half of 46

$$\text{Half of } 40 = 20$$
$$\text{Half of } 6 = 3$$
$$20 + 3 = 23$$

Double 54

$$\text{Double } 50 = 100$$
$$\text{Double } 4 = 8$$
$$100 + 8 = 108$$

Half of 34.8

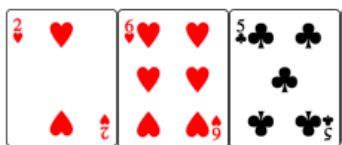
$$\text{Half of } 30 = 15$$
$$\text{Half of } 4 = 2$$
$$\text{Half of } 0.8 = 0.4$$
$$15 + 2 + 0.4 = 17.4$$

Double 12.2

$$\text{Double } 10 = 20$$
$$\text{Double } 2 = 4$$
$$\text{Double } 0.2 = 0.4$$
$$20 + 4 + 0.4 = 24.4$$

Suggestion: Hit the button - doubling and halving. (Top Marks website)

Create a whole number or a decimal number using playing cards. Double the number.

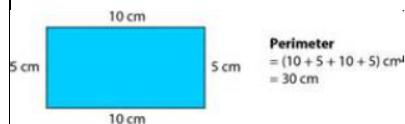


Create another number and halve it.

Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.

Example:

Perimeter is the distance around a two dimensional shape.



Suggestion:

Find objects around your houses that are rectangles or squares. Measure each side. Calculate the perimeter. Remember, you can work out some sides without measuring as they are the same as others.



Examples:

$$23 \times 6 = ?$$

$$? = 45 \times 7$$

$$508 \times 9 = ?$$

$$? = 174 \times 5$$



