

Maths Resources Week 2

20 x 36

How could we work out the answer?

We can multiply 36 by 2, then by 10 (or vice versa). Do this to work out the answer – you are using the factors of 20!

Which way did you find quicker or made more sense?

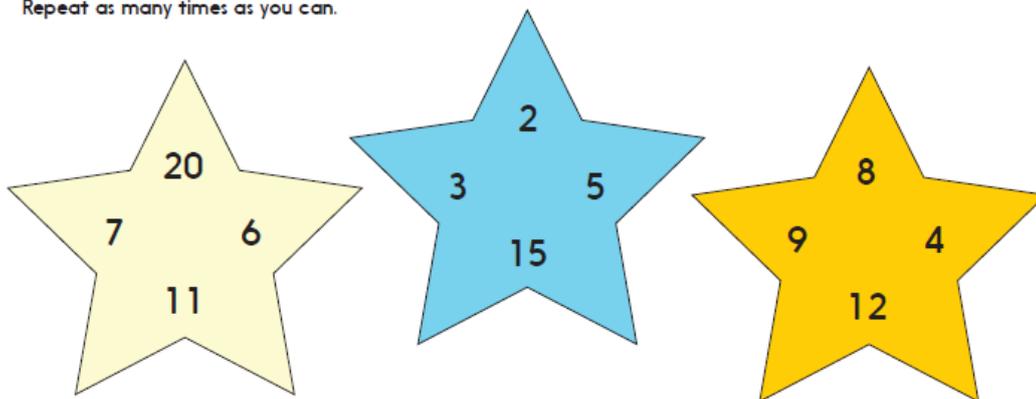
How else could we multiply by 20?

Multiply 36 by 4 (doubling twice) and then by 5. Do you get the same answer?

List ALL the pairs of factors of 20, i.e. the pairs of numbers that multiply together to make 20.

1. Write all the pairs of factors of 12.
Choose a pair to help you to work out 12×31 .
2. Write all the pairs of factors of 16.
Choose a pair to help you to work out 16×25 .
3. Write all the pairs of factors of 30.
Choose a pair to help you to work out 30×42 .
4. Write all the pairs of factors of 18.
Choose a pair to help you to work out 18×31 .
5. Use factor pairs to quickly find 6×123 .

Choose one number from each of the 3 stars.
Decide the easiest order to multiply them together.
Repeat as many times as you can.



Challenge

Find the missing numbers:

$$\square \times 7 \times 6 = 420$$

$$8 \times 11 \times \square = 440$$

$$3 \times \square \times 5 = 135$$

Problem solving and reasoning questions

Find three different multiplication facts that you can multiply by 10 to give an answer of 400.

Use doubling to help you help solve: 23×4 18×8 141×4

How could you use the factors of 12 to help multiply a number by 12?

Try this to find: 16×12 23×12 34×12

Use and explain a mental method to find: 8×13 7×16 12×13

Use knowledge of times tables and place value to divide multiples of 10, e.g. $350 \div 7$.

$$\begin{array}{l} 35 \div 7 \\ 350 \div 7 \\ 3500 \div 7 \end{array}$$

The answer to the second is 10 times the first, and the answer to the third is 100 times the first.

So, we can use our times tables and place value to divide really big multiples of 10!

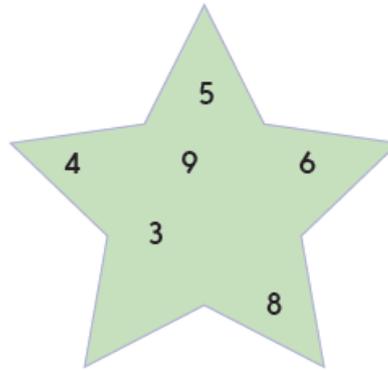
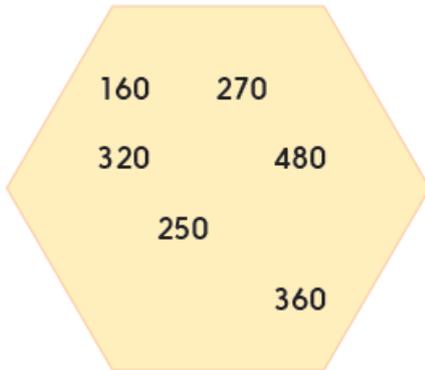
List ALL the factors of 24.

$$\begin{array}{l} 240 \div 4 = 60 \\ 240 \div 6 = 40 \\ 240 \div 8 = 30 \end{array}$$

We can use these to write lots of divisions beginning with 240.

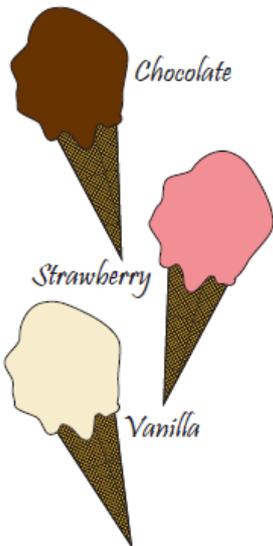
Can you think of any more?

Choose a number from the first set to divide by a number from the second set. Your answer must be whole number.

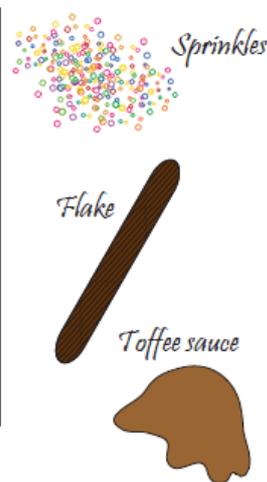


How many divisions can you write using times tables facts that you know?

Each flavour ice cream can be served with one topping. Work out how many possible combinations there are. Try to be systematic to make sure you have all combinations. You could copy and continue this table.



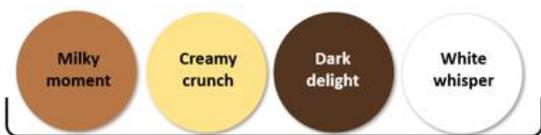
Ice cream	Topping
Chocolate ice cream	Sprinkles
Chocolate ice cream	Flake
Chocolate ice cream	



Problem solving and reasoning questions

Write lots of divisions beginning with 3600, e.g. $3600 \div 4 = 900$.

The top-seller at Giovanni's café is the 'Quad-Choc-Challenge' – a dessert with 4 different flavours of chocolatey ice cream in a long thin dish! Here is one arrangement of flavours; how many others are there?



REVISING AND EDITING YOUR WRITING

Revising your writing

Add things:

Detail:

adjectives

simile

adverbs

metaphor

Add more interesting or complex connectives

Add Interesting openings to sentences

Add an extra sentence – complex sentence or short sentence for effect

Add more interesting punctuation:

?

!

()

:

;

Move things: (Think about the audience and the purpose).

Are things in the best order?

Change your sentences around:

Start with the verb

Move the subordinate clause

Start with the connective

Start with an adverb

Cut: (don't cut too much!).

Just cross it out. Don't completely erase it!

- Is there anything that doesn't make sense?
- Is there anything that is not relevant to your audience/purpose?

Editing your writing

Punctuation

- Check your punctuation – is it correctly used?
Have you missed any punctuation out?
 - capital letters
 - ., ? ! () ; :
- Are your paragraphs in the right place?

Grammar and Spelling

Check your grammar.

- Read your work aloud. Do all the sentences make sense?
- Have you used your connectives in the right context?
- Check your spelling.