

Year 5 maths newsletter



Spring 1

This half-term will be split into two maths topics. Children will continue with the 'multiplication and division' unit before moving onto 'fractions'.

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Number: multiplication and division

This half-term children will be looking at formal methods

Multiply 4-digits by 1-digit.

Children build on previous steps to represent a 4-digit number multiplied by a 1-digit number using physical resources

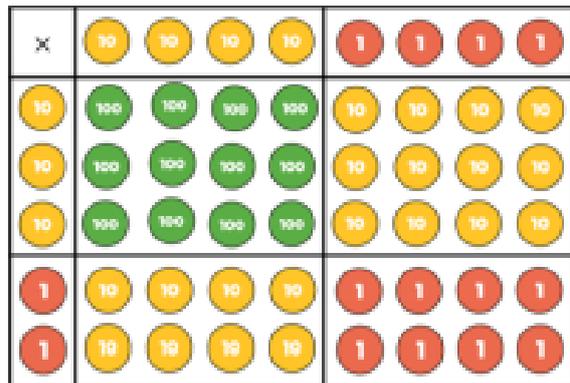
$$2543 \times 7 = 17801$$

| | | | | |
|---|---|---|---|---|
| | 2 | 5 | 4 | 3 |
| × | | | | 7 |
| 1 | 1 | 7 | 8 | 0 |
| | | | | 1 |

Multiplying by 2-digits

Children begin to multiply numbers by 2-digit numbers using area models.

$$44 \times 32 =$$



| | | |
|----|-------|-----|
| × | 40 | 4 |
| 30 | 1,200 | 120 |
| 2 | 80 | 8 |

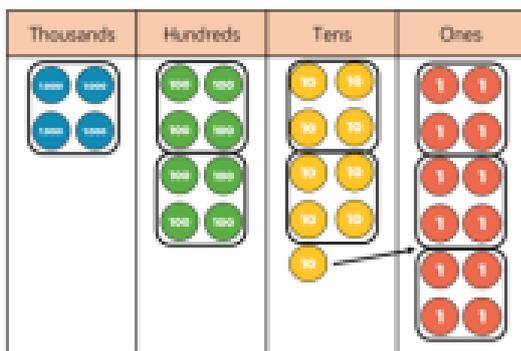
After this

s.

Divide 4-digits by 1-digit.

They will first partition their number then group to develop their understanding of the short division method.

$$4,892 \div 4 =$$



| | | | | |
|---|---|---|---|---|
| | 1 | 2 | 2 | 3 |
| 4 | 4 | 8 | 9 | 2 |

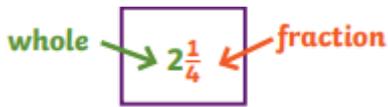
| | | | | |
|---|---|---|---|---|
| | | 1 | 3 | 2 |
| × | | | 1 | 4 |
| | | 5 | 2 | 8 |
| | 1 | 3 | 2 | 0 |

(132 × 4)
(132 × 10)

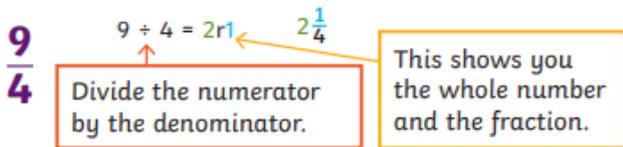
Fractions

Converting fractions

Mixed number Improper fraction



$\frac{5}{3}$
 o mixed numbers for the first time. An improper fraction is a fraction where the numerator is greater than the denominator.



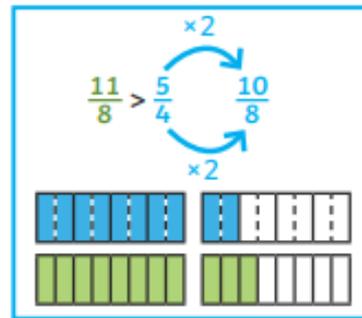
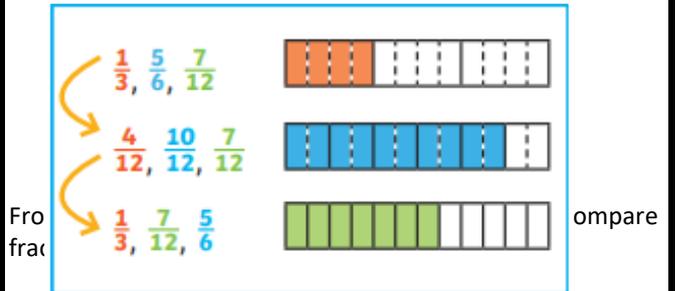
Multiply the whole by the denominator to make an improper fraction.

$$2\frac{5}{6} = \frac{12}{6} + \frac{5}{6} = \frac{17}{6}$$

Add the fractions together.

Compare and order fractions

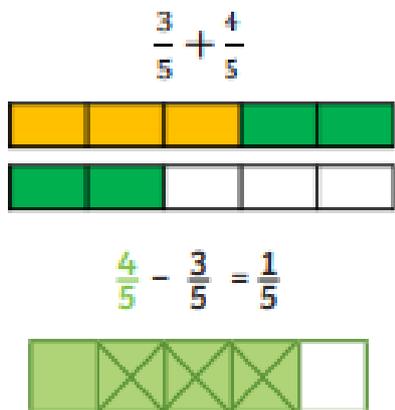
Children build on their equivalent fraction knowledge to compare and order fractions less than 1.



Add and subtract fractions

Children begin to add and subtract fractions by recapping their previous learning from Year 4. They will continue to find common denominators to help them complete the calculation and use pictorial representations to support them in visualising the problem.

Adding and subtracting with the same denominator.



Adding

Mixed denominations.

$$\frac{1}{2} + \frac{3}{4} + \frac{5}{8} = \frac{4}{8} + \frac{6}{8} + \frac{5}{8} = \frac{15}{8} = 1\frac{7}{8}$$



$$1\frac{1}{4} + \frac{3}{8} = 1\frac{2}{8} + \frac{3}{8} = 1 + \frac{5}{8} = 1\frac{5}{8}$$

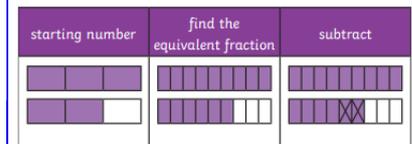
$$1\frac{1}{4} + \frac{3}{8} = \frac{5}{4} + \frac{3}{8} = \frac{10}{8} + \frac{3}{8} = \frac{13}{8} = 1\frac{5}{8}$$



Subtracting

Subtract from a mixed number

$$1\frac{2}{3} - \frac{2}{9} = 1\frac{6}{9} - \frac{2}{9} = 1\frac{4}{9}$$



$$2\frac{3}{4} - 1\frac{5}{8} = 1\frac{1}{8}$$



$$2 - 1 = 1$$

$$\frac{3}{4} - \frac{5}{8} = \frac{1}{8}$$

Vocabulary

The following vocabulary is used in the classroom to support learning. Please continue to support your child at home by using the same vocabulary.

Multiplication and division

multiply, groups of, lots of, times

divide, share

factor

multiple

prime, composite

squared, cubed

Fractions

Numerator, denominator

Unit, non-unit fraction

Mixed number, improper fraction

Simplest form

multiple

Common numerator, denominator

Further support at home

To support your child at home, we encourage the use of the classroom vocabulary and the same methods/strategies of calculation.

When working with your child at home, you can ask them the following question starters to further demonstrate their understanding.

How do you know...

Can you estimate...

What pattern do you notice?

Are there any patterns in sequence of square numbers?

What other strategies can we use to work out?

What is the difference between perimeter and area?

What strategies can we use to work out perimeter?

What properties of these shapes do you need to know to help you work this out?

Times tables practise

Times Table Rock Stars is a fun and interactive way for your child to practise their times tables at home. By Year 5, children will have been taught all their times tables up to 12 X 12. Please continue to practise and support your child with these at home.

<https://trockstars.com/>

If you have any questions on how to support your child at home or need any log in information, please contact your child's class teacher.