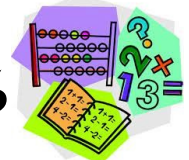




# Maths Masterclass



Year 6: Autumn 2

We hope you are enjoying our Maths Newsletters. We have included the strategies that we use for teaching maths in class, alongside some online resources and activities for your child to try at home. We hope this helps with supporting your child at home and celebrating their success.

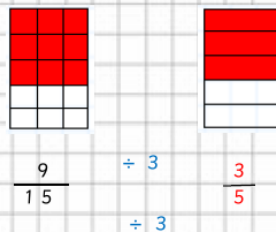
## Fractions

This term we will start our work on fractions. We will be looking at simplifying, comparing and using the four operations with fractions.

Use common factors to simplify fractions

1) Find a number that both the numerator and the denominator can be divided by.

2) Divide both the numerator and denominator by that number.



Add fractions

$$\frac{1}{3} + \frac{1}{6}$$

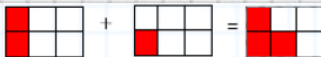
1) Convert both fractions to have the same denominator.

$$\frac{1 \times 2}{3 \times 2} + \frac{1}{6}$$

$$\frac{2}{6} + \frac{1}{6}$$

2) Add the numerators, but not the denominators

$$\frac{2}{6} + \frac{1}{6} = \frac{3}{6}$$



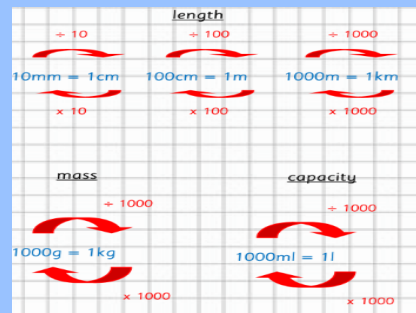
3) Simplify the answer if you can.

Useful websites

[Fractions Calculator \(calculatorsoup.com\)](http://calculatorsoup.com)  
[How to add and subtract fractions - BBC Bitesize](http://www.bbc.co.uk/bitesize/maths/fractions/)  
[Fractions \(mathsisfun.com\)](http://mathsisfun.com)

## Measures

We will be looking at converting and using measures. Being secure in being able to multiply and divide by 10, 100 and 1000 will be an advantage.



## Percentages

We will be looking at finding percentages and the decimal and fraction equivalents.

Calculate percentages

Remember: 'per cent' means 'out of 100'

Easy ones to remember:

- 50% = divide by 2
- 25% = divide by 4
- 75% = divide by 4, then multiply by 3
- 10% = divide by 10
- 5% = divide by 10, then divide by 2
- 1% = divide by 100

For all other multiples of 10%, divide by 10 to find 10%, then multiply by the first digit.

- 30% = divide by 10, then multiply by 3
- 40% = divide by 10, then multiply by 4
- 70% = divide by 10, then multiply by 7

## Multiplying Decimals

1. Multiply like whole numbers.
2. Count decimal places in the problem.
3. Put the same number of places behind the decimal in the product.

$$\begin{array}{r} 2.34 \\ \times 1.2 \\ \hline 2.808 \end{array}$$

2 decimal places  
+ 1 decimal place  
3 decimal places

## Decimals

We will be looking at multiplying and dividing decimals as well as rounding.



# Maths at Home



## Ideas to try at home

We will be looking at measures next half term. Maybe you could do some cooking together and discuss the weighing of ingredients, timing of the cooking or baking.

If you are doing any DIY, a trip to the shops would be a great opportunity to look at how materials are sold and the cost per unit. Could you work out the price of the materials needed? Can you work out the price of paint to cover a room?



Please try to spend 10-15 minutes practising times tables as often as possible to support fluency. Fast recall of times tables really helps children when they solve problems and do more complex maths!

## Family challenge



30

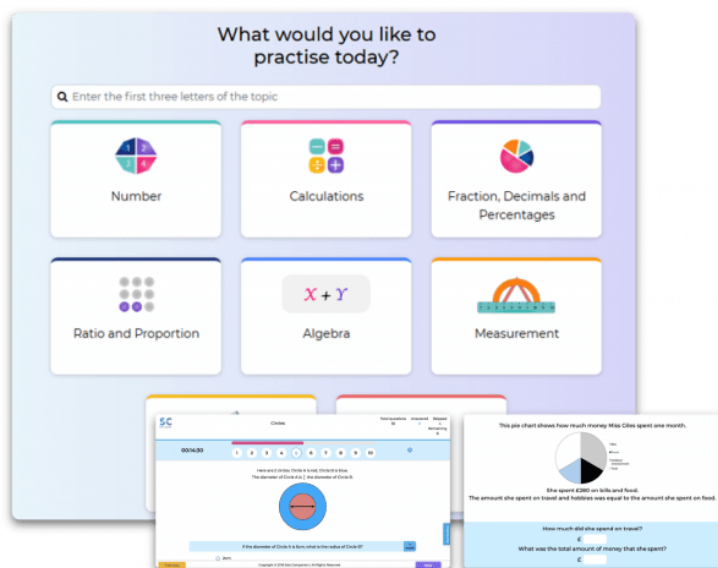
532

50 2 9 3 5 10

Can you make the total shown? You can use as many of the numbers as you like only once and can add, subtract, multiply and divide.

## Homework

Children will be set a weekly homework on the Sats Companion site. It can be accessed on tablets, laptops and phones. If your child has difficulty logging in or needs more support, please contact ask your child's teacher.



This website can also be used to watch any videos based on many topic areas.

Your child does not need to wait for this to be allocated– they can log on at any time and watch if they are finding a particular area tricky.