



Maths Masterclass

Year 5: Autumn 2



We hope you are enjoying our Maths Newsletters and find them useful. This is an opportunity for you to see the strategies we use to teach maths in the classroom, alongside some online resources and activities for your child to try at home. We hope this helps with supporting your child and celebrating their successes.

Number and place value

This half term, we will be focusing on multiplying and dividing numbers in different ways. We will first multiply and divide whole numbers by 10, 100 and 1000 using place value grids to support us. We will then look at mental strategies to multiply and how we can apply this to column multiplication for numbers up to 4-digit by 1-digit. Finally, we will do the same for short division, using the 'bus stop' method. Below are some examples of how we teach this in the classroom.

$$60 \div 10 =$$

$$270 \div 10 =$$

$$5520 \div 10 =$$

HTh	TTh	Th	H	T	O

What happens to the digits when we divide by 10?

1) To multiply a number by **10** each digit moves to the left on a place value grid.

2) To multiply a number by **100** each digit moves to the left on a place value grid.

3) To multiply a number by **1,000** each digit moves to the left on a place value grid.

HTh	TTh	Th	H	T	O

Fractions

In this unit of learning, we will first compare and order fractions with the same denominator, before comparing fractions with denominators which are multiples of the same number. We will then look to convert improper to mixed fractions and vice versa. Using all of this learning, in our second week we will start adding and subtracting fractions with different denominators, as well as mixed numbers. Finally, we will multiply some fractions by whole numbers.

Here are a few examples from our lessons.

Write >, < or = to compare the fractions

$\frac{3}{10}$ $\frac{7}{10}$ Which is bigger?

3/10

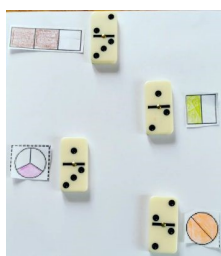
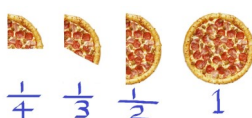
7/10

3/10 is than 7/10

How can we write this in a different way?

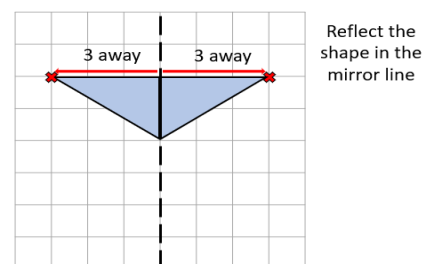
$\frac{3}{2} = 1\frac{1}{2}$ This is a mixed number. It is a number with a whole and a fraction.

To help embed your child's learning, you could encourage them to cut up food into fractions, for example a pizza into fifths or an apple in quarters. If they play dominoes, ask them to think about what the domino would look like as a fraction.



Geometry

In geometry, we are going to identify, describe and represent the position of a shape following a reflection or translation.



Reflect the shape in the mirror line

To remind the children of what they have learnt, you could ask the children what shapes they see in the street and in the home to help with their geometry knowledge, for example a toilet paper roll is a cylindrical shape.

Don't forget, there will be practise available for them in the form of questions and videos on SATs companion.



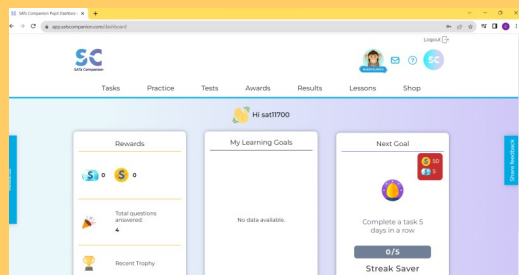
Maths at Home



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!

Maths website to support parents and Maths problem solving at home

On the SATs companion site, there are videos available to watch under the lessons tab that might help embed the children's learning.



Nrich has a range of maths games, problems and articles on all areas of maths. Parents can select either 'Stage 1' or 'Stage 2' to support and consolidate mathematical concepts. These usually tie in with the Key Stage of your child.
<https://nrich.maths.org/frontpage>
Each problem has a difficulty rating with 3 stars being the hardest.



Family Challenge

During our maths lessons, as a class, we take part in a maths meeting which encourages the children to use the skills that they have learnt to answer a problem or question.

Below is one example of a maths meeting that we will be doing in the next half term. Can you, as a family, make the total shown? You can use as many of the numbers as you like only once and can add, subtract, multiply and divide.

Maths Meeting

Reset
cards and
target

404

Generate
new
target

50

1

10

8

7

6

Homework

Children will be set 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 your child's teacher. Remember, there is a practice tab where the children can practise similar questions on a range of different topics. 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.

