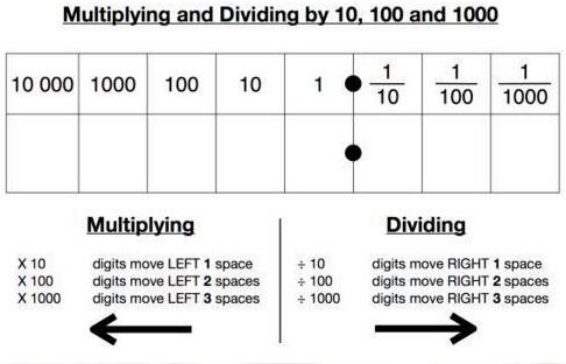
Margaret Wix Primary School

Year 6

Basic Number Facts
Practice Ideas

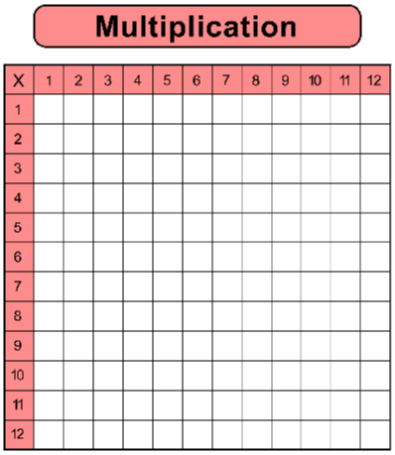
Stage one Maths Magicians involves understanding place value of numbers up to ten million and in numbers with up to three decimal places. You could practise this by:
- ask your parent/carer to choose a number and write down the value of each digit within the number
- draw part-whole models to show the value of digits in given numbers
- write an addition calculation to show what each digit within a number is worth e.g. 365,270 = 300,000 + 60,000 + 5,000 + 200 + 70
- roll a dice and create a number up to ten million, and with up to 3dp, explain to someone else what number you have made and what each digit is worth. You could turn this into a game with someone else and try to create the largest/smallest number when taking it in turns to roll a dice and add a digit to your number.

Stage two Maths Magicians involves multiplying and dividing by 10, 100 and 1000. You could practise this by:
- ask your parent/carer to choose a number, including one with one decimal place and try to multiply and divide it
- draw your own place value chart, like the one below, and practise moving the numbers across the columns
- ask your parent/carer to give you a number then create your own questions involving multiplying or dividing by 10/100/1000 which would give that answer

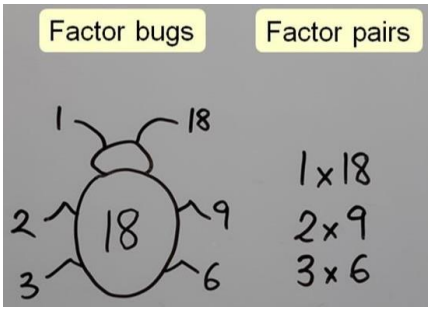


Stage three Maths Magicians involves multiplication tables up to 12x12. You could practise this by:
- completing a multiplication grid, like the one below, as quickly as you can
- asking your parents to write down some wrong multiplication questions and you correct them for them
- listening to fun times table songs (such as the ones linked) and singing along

https://www.youtube.com/playlist?list=PLaSZ7kwwxKqXpdLA0hIA9fa8RVmRC32pv
- focus on the times tables you are less confident with - you could make a poster to put up in your bedroom of the 7 times table for example

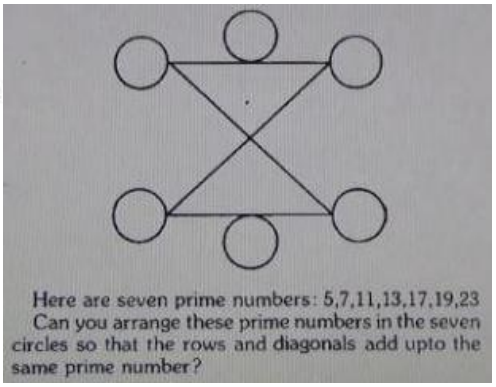


Stage four Maths Magicians involves identifying factors. Factors are whole numbers that divide into a given number with no remainder. Factors come in pairs e.g. 3 and 4 are factors of 12 because 3x4=12. You could practise this by:
- ask you parent to give you a number below 144 - can you identify all the factor pairs that multiply together to make that number?
- draw factor bugs (as shown below) for numbers such as 12, 24, 30, 48, 60, 72 and see if you can remember all the factor pairs that multiply together to make that number.
- set yourself a challenge - can you find the number below 144 with the most factors? Are there any numbers that have an odd number of factors - why is this?

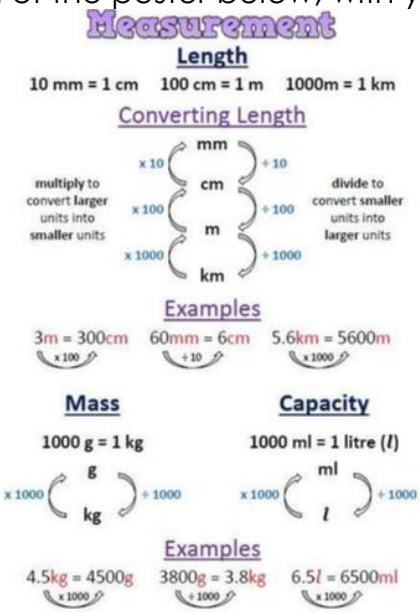


Stage five Maths Magicians involves identifying prime numbers. Prime numbers are numbers with only two factors: one and themselves. For example, 7 is a prime number because the only multiplication calculation you can do to give that product is 1 x 7.
You could practise this by:
- identify all the prime numbers on a 100 square
- answer questions such as the ones below
- teach your parent/carer/sibling what a prime number is
- ask you parents for a list of numbers below 144 and explain if each number is prime or not
- complete the prime number investigation below

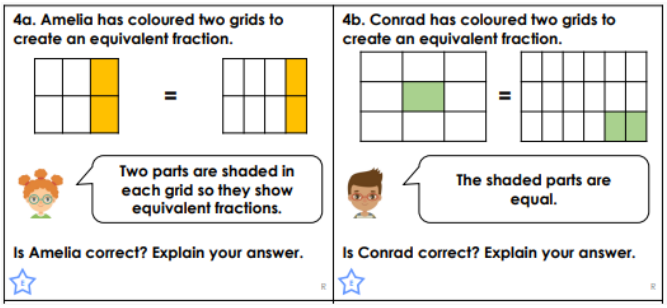
1. What is the first prime number?
2. What is the only even prime number?
3. How many factors do prime numbers have?
4. Is 29 a prime number?
5. Is 29 a prime number?
6. Is 31 a prime number?
7. What is the 13th prime number?
8. What is the 2nd prime number?
9. What is the 7th prime number?
10. What is the 14th prime number?

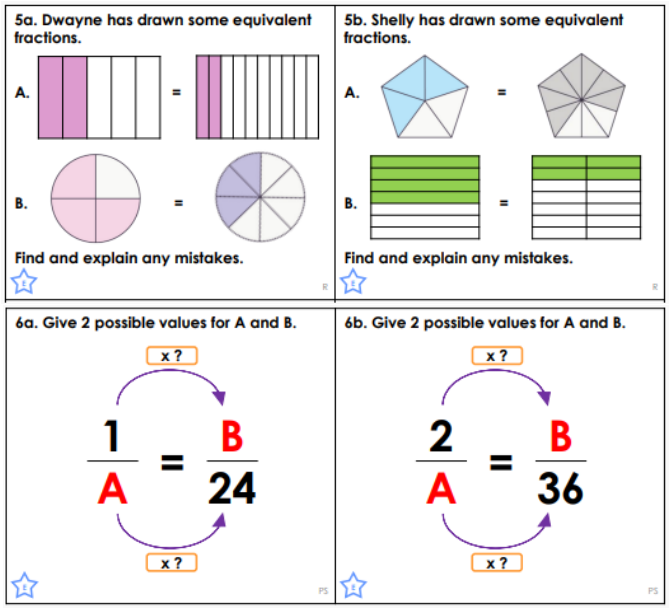


Stage six Maths Magicians involves converting units of measure. To do this, you will need to use your skills of multiplying and dividing by 10/100/1000.
You could practise this by:
- asking your parent to give you a unit of measure e.g. 500g and you convert it into another unit e.g. 0.5kg
- do some practical work - can you use your measure skills while baking, for example?
- create your own version of the poster below, with your own examples.

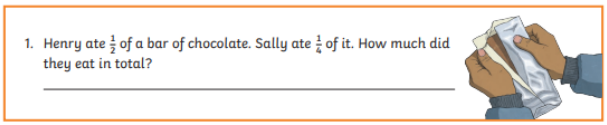


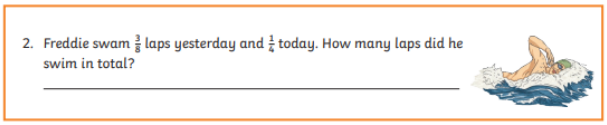
Stage seven Maths Magicians involves calculating equivalent fractions. To do this, you will need to use your skills of multiplying and dividing to ensure you have common denominators.
You could practise this by:
- asking a parent to write down one fraction and you see how many other, equivalent ones you can create
- try to answer questions such as the ones below

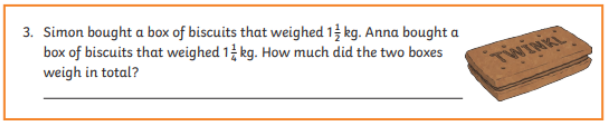




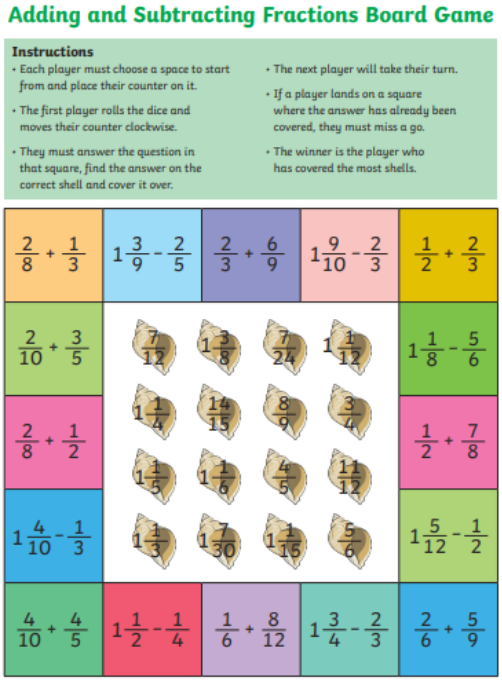
Stage eight Maths Magicians involves adding and subtracting fractions. To do this, you will need to use your skills of multiplying and dividing to ensure you have common denominators.
You could practise this by:
- asking a parent to write down two fractions and then seeing if you can add or subtract them
- try to answer word problems questions such as the ones shown below
- complete the fraction game shown below


1. Henry ate $\frac{1}{2}$ of a bar of chocolate. Sally ate $\frac{1}{4}$ of it. How much did they eat in total?


2. Freddie swam $\frac{3}{8}$ laps yesterday and $\frac{1}{4}$ today. How many laps did he swim in total?

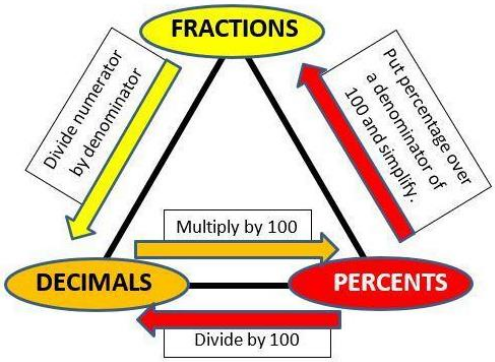


3. Simon bought a box of biscuits that weighed $1\frac{1}{2}$ kg. Anna bought a box of biscuits that weighed $1\frac{1}{4}$ kg. How much did the two boxes weigh in total?



Stage nine Maths Magicians involves converting fractions, decimals and percentages. Remember the top tip we shared in class - try to ensure that your fraction has a denominator of 100 before trying to convert.
You could practise this by:
- asking a parent to write down a percentage (start with multiples of 5 and 10) and then see if you can convert it to a decimal and fraction
- fill in the gaps in the table below and then see how more rows you can add to it with examples of your own equivalent fractions, decimals and percentages

- become an expert and teach someone at home how to convert between fractions, decimals and percentages



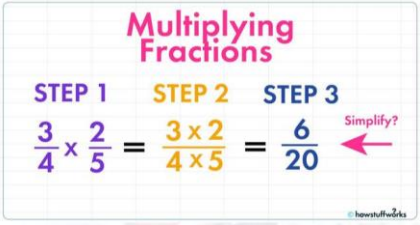
Fraction	Decimal	Percentage
$\frac{7}{100}$	0.07	
	0.35	35%
$\frac{3}{5}$		60%

Stage ten Maths Magicians involves scaling percentages. This involves finding an equivalent fraction with a denominator of 100 before converting to a percentage e.g. 12/20 = 60/100 = 60%
You could practise this by:
- asking a parent to write down a fraction with 2, 4, 5, 10, 20, 25 or 50 as the denominator. Then see if you can work out the equivalent fraction with 100 as the denominator before calculating the percentage.
- have a go at this online game which involves matching fractions to percentages (remember to think about an equivalent fraction with a denominator of 100 first)

$$\frac{13}{20} \times \frac{5}{5} = \frac{65}{100}$$

$$= 65\%$$

Stage eleven Maths Magicians involves multiplying fractions. You could practise this by:
- asking a parent to write down two fractions for you to multiply. Use the image below to remind yourself how to do this
- have a go at an online multiplying fractions game such as this one
- remind yourself how to multiply fractions using BBC Bitesize and then complete the interactive activity and quiz
- choose four playing cards and arrange them to create two fractions then multiply them together - turn this into a game by competing against someone else to answer fastest



Stage twelve Maths Magicians involves dividing fractions. You could practise this by:
- asking a parent to write down two fractions for you to multiply. Use the image below to remind yourself how to do this
- use this BBC bitesize link to help you learn how to divide fractions and complete a few activities
- play an online maths game such as this one

- create your own poster explaining how to divide fractions, perhaps like the one below