<u>Maths at The Grange</u>
<u>A guide for parents</u>

Maths is everywhere and it's a skill that we have to be able to use throughout our entire life, whether it be saving up our pocket money or paying for items in a shop when we are younger; to paying rent or a mortgage or working out a budget as an adult; measuring up a room for a carpet, trying on an outfit in a shop or cooking a meal. Everything we do revolves around our understanding of maths and being able to calculate, estimate, measure, count and so much more.

<u>Growth mindset</u>

It is really important that we help children to develop a growth mindset around maths as well as their other subjects. Often maths can be seen as a subject about numbers and digits often which are presented in an abstract way which children find confusing and they get disheartened quickly when they can't get the right answer. We are working really hard in school to establish a growth mindset mentality with your children to ensure that they are able to deal with disappointments and persevere even when things become difficult. They might not be able to do it <u>yet</u> but they know that we will provide a safe learning space to make mistakes and learn from them, help them when they are in the 'learning pit' and encourage them to keep striving for more. We need to show our children that maths is real and it is all around us and they need to be hearing the same message from all the adults in their lives - they can achieve in Maths and that challenge is something to be embraced and worked through!

<u>Ideas for parents for promoting growth mindset and love of maths:</u>

- Go for a walk outdoors. Talk about all the maths you can see. Were there any things that surprised your child? Did they expect to be able to see so much maths outdoors?
- Involve them in maths relating to a weekly family task e.g. weekly shopping, cooking dinner etc
- Watch sport on the tv - talk about the timings of the game/sport, how do you know who is winning? What could the score be at the end of the match? What couldn't it be and why? Look at league tables and discuss findings.
- Talk about maths - perhaps you could pose a maths problem while walking to school or while eating dinner? Could be open-ended questions that you don't necessarily know the answer to but which gets your child reasoning and problem solving e.g. How many minutes in the week do we spend walking to and from school?

<u>Basic facts</u>

It is really important that as your child moves up through the school, they learn their basic number facts. These are the cornerstone of all maths problems and allow your child to be able to manipulate numbers to help them solve questions with ease. A child with gaps in their basic number facts, will find as they move up through school that things become more complicated and this is when frustration sets in. Below are the basic number facts that children should have mastered by the time they leave each year group.

Year group:	Basic facts:
By end of Reception	- count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. - using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. - solve problems, including doubling, halving and sharing - use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. - recognise, create and describe patterns.
By end of Year 1	- read and write numbers 1 - 20 - count to 100, forward and backwards - know number bonds to 20 - sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] - recognise and use language relating to dates, including days of the week, weeks, months and years - recognise and know the value of different denominations of coins and notes - tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
By end of Year 2	- read and write numbers to 100 - recall and use 2, 5 and 10 multiplication tables including recognising odd and even - tell and write the time to five minutes, including quarter past/to the hour - find different combinations of coins that equal the same amounts of money
By the end of Year 3	- read and write numbers up to 1000 in numerals and in words - compare and order numbers up to 1000 - recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables - add and subtract amounts of money to give change, using both £ and p in practical contexts - estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
By the end of Year 4	- order and compare numbers beyond 1000 - recall multiplication and division facts for multiplication tables up to 12 × 12 - estimate, compare and calculate different measures, including money in pounds and pence - read, write and convert time between analogue and digital 12- and 24-hour clocks
By the end of Year 5	- read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit - identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers know and use the vocabulary of prime numbers, prime factors and composite (non prime) numbers - establish whether a number up to 100 is prime and recall prime numbers up to 19 - convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) - understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints
By the end of Year 6	- read, write, order and compare numbers up to 10 000 000 and determine the value of each digit - identify common factors, common multiples and prime numbers - convert between miles and kilometres

This is not an exhaustive list of the expectations for each year group but we have picked out the areas that we feel you can work on with your children at home.   A little bit of practise each day on these areas will give your child the confidence to tackle some of the more taxing areas of the maths curriculum.

<u>Ideas for parents for practising basic facts:</u>
(These are just a few suggestions and no doubt, you will be able to think of many more)

- Count the door numbers on the way to school
- Take in turns to count in order and then try backwards
- Get your child to count a collection of toys or push them to describe which ones are bigger/smaller and how they know
- Quick fire multiplication questions in the car on the way to school. Challenge your child to get 5 in a row correct, then 10 etc
- Get child to count money needed for an item in a shop. Can they get the correct coins? Do they know how much change they should receive back?
- Ask child to tell you the time when you are going out or to tell you when it is a certain time
- Allow your child to go on mymaths and support them when they are stuck.

<u>My Maths</u>

Each child should be given their mymaths login by their teacher and the teacher will set work relating to latest topics. It may be that the teacher assigns a lot of modules for the term and your child can work through them as they want or a teacher may be more specific and set topic related questions for a week or fortnight period.

Most importantly remember that maths should be fun (for both you and your child!)

If you need any further support, contact your class teacher or alternatively speak to Mrs Duncton (maths lead) in school. Our door is always open!