Dear families,
Year 2 will be shortly starting the school's times table initiative called 'Rainbow Times Tables' which will enable children to learn and progress through each times table. If you have an older child at Loose Primary School you will already be aware of how this works. The National Curriculum for Maths, states that by the end of year 2 , all children should be able to recall $10 \mathrm{~s}, 5 \mathrm{~s}$ and 2 s multiplication and division facts. This will then progress to learning to count in 3 s . This is a progressive scheme where the children will learn a new times table but also have to retain the knowledge of the previous times table(s). Children will start at red level which will involve learning the 10 times table. They will be asked to complete a range of questions about the 10 times table. When they have successfully answered all the questions on 4 consecutive occasions, the children will then receive a small certificate and move to yellow level. When at yellow level, they will start learning their 5 times table. The times table questions in yellow level will involve the 10 times table and the 5 times table. Rainbow Times Tables is bespoke to our school and although it is similar to other schools, it is not the same.

Times tables are a crucial and integral part of everyday Maths. Knowing the times tables (and their associated division facts) supports mathematical learning and understanding; those children who have a strong grasp of them tend to be more self-assured when learning new concepts throughout their time at school. Times table facts are used in Year 2 for mathematical concepts such as: calculating mathematical statements for multiplication and division, solving multiplication and division real life problems, developing multiplicative reasoning and using methods to show arrays, grouping and sharing. They will then begin to relate these to fractions and measures.

With this in mind, we have organised the learning of times tables and grouped them into coloured bands, similar to reading book bands in KS1; this scheme will be called 'Rainbow Times Tables'. By using the colour bands, children and parents can see:

- Where they are in relation to expected year group attainment
- The end goal!
- Their individual progress

The table below shows expected attainment for each year group. (The National Curriculum has a program of study per year group, not by Key Stage.)

| Red | Yellow | Blue | Green | Orange | Turquoise | Purple | Bronze | Silver | Gold |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10x | 10x 5x | 10x $5 \times 2 \mathrm{x}$ | $\begin{aligned} & 10 x 5 \times 2 x \\ & 3 x \end{aligned}$ | $\begin{aligned} & 10 x 5 x 2 x \\ & 3 x 4 x \end{aligned}$ | $\begin{aligned} & 10 x 5 x 2 x \\ & 3 x 4 x 8 x \end{aligned}$ | $\begin{aligned} & 10 \times 5 \times 2 x \\ & 3 x 4 x 8 x 6 x \end{aligned}$ | $\begin{aligned} & 10 \times 5 x 2 x \\ & 3 x 4 x 8 x 6 x \\ & 11 x 9 x \end{aligned}$ | $\begin{aligned} & 10 x 5 x 2 x \\ & 3 x 4 x 8 x 6 x \\ & 11 x 9 x 7 x \end{aligned}$ | $\begin{aligned} & 10 \mathrm{x} 5 \mathrm{x} 2 \mathrm{x} \\ & 3 \mathrm{x} 4 \mathrm{x} 8 \mathrm{6x} \\ & 11 \mathrm{x} 9 \mathrm{x} 7 \mathrm{x} \\ & 12 \mathrm{x} \\ & \hline \end{aligned}$ |
| Year 2 curriculum and government expectations |  |  | Year 3 curriculum and government expectations |  |  | Year 4 curriculum and government expectations |  |  |  |


| Platinum | Diamond/Rainbow |
| :---: | :---: |
| Multiplication and division (inverse) |  |
| Decimals and Place Value |  |
| Year 5/6 curriculum and government expectations |  |

To progress to the next band, your child needs to complete a 1.5 minute challenge answering questions on a given times table or several times tables (4 times). In class, children will learn the times tables associated to their year group. At home, children can practice times tables according to their Rainbow Times Table level.
We have included a sample for you to look at. Alternatively - when you know the format, you could make your own!

| Red <br> $10 \times$ |  |
| :--- | :--- |
| $A$ | $12 \times 10=$ |
| $3 \times 10=$ | $10 \times 10=$ |
| $5 \times 10=$ | $2 \times 10=$ |
| $4 \times 10=$ | $10 \times 5=$ |
| $10 \times 3=$ | $10 \times 7=$ |
| $7 \times 10=$ | $6 \times 10=$ |
| $10 \times 8=$ |  |
| $11 \times 10=$ |  |

Times tables can be learnt in a process to make it easier for children to retain:

| Stage 1 | - Learn the sequence in a times table e.g. 3,6,9,12 etc. <br> - Recite/write parts of the pattern from a given number e.g. $9 . .$. the children would then say $12,15,18$. This can be forward or backwards so that they really get to know the sequence and pattern. <br> - Know the digits either side of a number e.g. 15 - either side would be 12 and 18 . <br> - How quickly can they say/write the pattern in full backwards and forwards? |
| :---: | :---: |
| Stage 2 | - Learn the number sentences in order by saying 1 times 3 equals 3,2 times 3 equals 6 etc. By this time they should be very familiar with the number patterns from stage 1 . |
| Stage 3 | - Say the times tables they are learning as number sentences, in and out of order e.g. 1 times 4 equals 4, 7 times 4 equals 28 . |
| Stage 4 | - Rapidly answer any questions in a times table in any order e.g. $3 \times 7=$ ? |
| Stage 5 | - Manipulate the number sentence so that they can find the missing factor e.g. if when learning the 4 times table they will be able to say '?' $\times 4=16$. |
| Stage 6 | - Give the corresponding division facts in and out of order to show inverse knowledge. Start with the whole sequence of inverse facts in order e.g. 60 divided by 5 equals 12,55 divided by 12 equals 11 etc. <br> - Learn the inverse facts in any order. E.g. 25 divided by 5 equals 5 . |

## Handy websites for you to use at home.

TT Rockstars is our online programme which supports the learning the times tables. It will also help you to check how fluent your child is at recalling each times table.
https://www.ictgames.com/mobilePage/duckShoot/index.html
https://www.topmarks.co.uk/maths-games/7-11-years/times-tables
https://www.multiplication.com/games/all-games
The Maths Team

