## Practical Maths

Parent Workshop

May 2018

## Practical Maths across the school

What the curriculum is.

What we do.

What could you do to help.

Questions.

## EYFS Curriculum

| Nursery | Reception |
| :--- | :--- |
| Uses the language of size (comparing sizes) <br> Uses positional language (where objects are) | Can describe their relative position (behind, next to) <br> Orders two or three items by length or height <br> Orders two items by weight or capacity <br> Beginning to use everyday language related to money <br> Early Learning Goal <br> Children use everyday language to talk about size, weight, <br> capacity, position, distance, time and money to compare <br> quantities and objects and to solve problems. |
| Understands some talk about immediate past and future, <br> (before, later or soon) <br> Anticipates time-based events (mealtimes, hometime) | Uses everyday language related to time (weeks, days, <br> hours) <br> Orders and sequences familiar events (daily routines) <br> Measures short periods of time in simple ways <br> (countdowns, |

## Y1-Y2 Curriculum

| Year One | Year Two |
| :---: | :---: |
| Compare and measure <br> - Lengths and heights <br> - Mass/weight <br> - Capacity and volume <br> Sequence events in chronological order Know days of the weeks, weeks, months, years Recognise and know the value of coins and notes | Estimate and measure <br> - Length/height in $\mathrm{m} / \mathrm{cm}$ <br> - Mass in kg/g <br> - Temperature in oC <br> - Capacity in $1 / \mathrm{ml}$ <br> Compare measurements using < > = <br> Recognise $£$ and $\rho$ and combine amounts <br> Combine coins to equal the same amount |
| Tell the time to the hour and half past the hour | Tell and write the time to five minutes incl quarter past/to Know how many minutes in an hour and hours in a day |

## Y3-Y4 Curriculum

| Year Three | Year Four |
| :---: | :---: |
| Measure, compare, add and subtract: <br> - Lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ) <br> - $\quad$ Mass (kg/g) <br> - Volume/capacity (l/ml) <br> Measure perimeter of simple 2D shapes <br> Add and subtract money to give change using both $£$ and $\rho$ | Convert km into m , hours to minutes <br> Measure and calculate perimeter of rectangles using $\mathrm{cm} / \mathrm{m}$ <br> Find area of rectilinear shapes by counting squares Estimate, compare and calculate measures including money in $£$ and $\rho$ |
| Tell and write the time using Roman numerals I to XII and in 12 and 24 hour clocks <br> Estimate and read time to the nearest minute Record time in seconds, minutes and hours Use vocabulary o'clock, am/pm, Know number of seconds in a minute, days in a each month, year and leap year | Read, write and convert time between analogue and digital 12 and 24 hour clocks <br> Solve problems involving converting hours to minutes, minutes to seconds, years to months, weeks to days |

## Y5-Y6 Curriculum

| Year Five | Year Six |
| :--- | :--- |
| Convert $\mathrm{km} / \mathrm{m}, \mathrm{m} / \mathrm{cm}, \mathrm{cm} / \mathrm{mm}, \mathrm{kg} / \mathrm{g}, \mathrm{l} / \mathrm{ml}$ <br> Use approximate equivalence between metric and imperial <br> units <br> Measure and calculate perimeter of rectilinear shapes in <br> cm and m <br> Calculate and compare the area of rectangles and use <br> cm2 and m 2 | Solve problems involving calculation and conversion of <br> units of measure, using up to three decimal places <br> Use, read, write, convert standard units using decimal <br> notation up to 3 decimal places <br> Convert from miles to kilometres <br> Recognise that shapes with the same areas can have <br> different perimeters and vice versa <br> Estimate volume and capacity |
| Use,,$+- \times$ and divide to solve problems involving measure <br> using decimals and including scaling | volume of shapes it is possible to use formulae for area and <br> Calculate the areas of parallelograms and triangles <br> Calculate, estimate and compare volume of cubes/cuboids <br> using cm3 and m3 |
| Solve problems involving converting units of time | Introduced to compound units for speed such as miles per <br> hour and apply within science |

William wants to travel to Paris by train.
He needs to arrive in Paris by $5: 30 \mathrm{pm}$.

Circle the latest time that William can leave London.

| Leaves London | Arrives Paris |
| :---: | :---: |
| $12: 01$ | $15: 22$ |
| $12: 25$ | $15: 56$ |
| $13: 31$ | $16: 53$ |
| $14: 01$ | $17: 26$ |
| $14: 31$ | $18: 53$ |
| $15: 31$ | $19: 20$ |
| $16: 01$ |  |

4 This graph shows the temperature in ${ }^{\circ} \mathrm{C}$ from 2 am to 3 pm on a cold day.


How many degrees warmer was it at 3 pm than at 3 am ?
${ }^{\circ} \mathrm{C}$
$\overline{1 \text { mark }}$
At 6 pm the temperature was 4 degrees lower than at 3 pm .
What was the temperature at 6 pm ?

## How do we teach it?

Tends to be in blocks

Often brought through other units of work
Constant reinforcement throughout the year

As practical as possible
Linking with other subjects - science, art, DT

## How could you help?

Constant reinforcement throughout the year
As practical as possible
Linking with daily routines
Termly challenge - new for 2018-19

## Termly Challenge Summer 2018 - time

| NURSERY <br> Understands some talk about immediate past and future, Anticipate time-based events IDEAS: use language before, later, soon and daily routines | RECEPTION <br> Use everyday language related to time Order and sequence familiar events IDEAS: use time related language, point out o'clock times |
| :---: | :---: |
| YEAR ONE <br> Tell the time to the hour and half past the hour IDEAS: point out o'clock and half past on a clock face throughout the day and relate to daily routines | YEAR TWO <br> Tell and write the time to five minutes incl quarter past/to Know how many minutes in an hour and hours in a day IDEAS: practise telling the time to five minutes throughout the day, five minutes until... etc. |
| YEAR THREE <br> Estimate and read time to the nearest minute Tell and write the time using 12 and 24 hour clocks IDEAS: practise telling the time to one minute on $12 / 24 \mathrm{hr}$ clocks throughout the day | YEAR FOUR <br> Read and convert time between analogue and digital clocks Convert hours to minutes, minutes to seconds, years to months, weeks to days IDEAS: practise converting 12 and 24 hour clock times |
| YEAR FIVE <br> Solve problems involving converting units of time IDEAS: work out transport times (bus, train, plane etc.) | YEAR SIX <br> Introduced to compound units for speed such as mph IDEAS: talk about distance travelled on car journeys |

