# Year 6 Key Understanding 

( Apply knowledge of tables rapidly in calculations to $12 \times 12$.
$\bigcirc$ Reasoning about remainders. Knowing when dividing by 5 that there will always be a remainder unless the last digit is 0 or 5 . Eg when you divide 77 by 5 the remainder will be 2 . When you divide 96 by 10 the remainder will be 6 .
O Estimate answers to calculations quickly by rounding the numbers. Eg when shopping by able to keep a running total be rounding to the nearest $£ 1$.

Multiply and divide whole numbers and decimals mentally by 10,100 or 1000 . Knowing that dividing by 10 gives $10 \%$ and dividing by 100 gives $1 \%$ and use these key facts to solve any percentage problem.
$\bigcirc$ Understand the equivalence between fractions and percentages eg $50 \%$ off is half price.
$\bigcirc$ To use their maths to solve everyday problems eg which is best value buy one, get one free or buy two for three?

O Use mathematical skills to read and interpret bus timetables. Eg what bus do we need to catch to get into town for 10:00am? How long will the journey take?
○ Being able to convert between measures - gms to Kgs; cms to ms and kms; mls to l.

A key aspect of year 6 is the development of increasingly rapid mental maths. Being able to convert between measures eg how many grams are there in $1 \frac{1}{2}$ Kilograms, to calculate differences in temperatures, calculate prices, add 3 or more multiples of 10, know the remainder of a number when divided by 5 are all skills that a year 6 child will be tested on at the end of their time in Year 6. They have between 5 and 15 seconds to answer these questions - any support to increase rapid mental maths skills will benefit your child enormously.

## Recipes

Find a recipe for 4 people and rewrite it for 8 people, e.g.

| 125 g Flour |  |
| :--- | :--- |
| 50 g butter |  |
| 75 g sugar |  |
| 30 m treacle |  |
| 1 teaspoon ginger | 250 g flour <br> 100 g butter <br> 150 g sugar <br> 60 ml treacle <br> 2 teaspoons ginger |



Can you rewrite it for 3 people? Or 5 people?

## Fours

- Use exactly four $4 s$ each time.
- You can add, subtract, multiply or divide them.
- Can you make each number from 1 to 100 ?
- Here are some ways of making the first two numbers.

$$
\begin{aligned}
& 1=(4 \times 4) /(4 \times 4) \\
& 2=4 \div 4+4 \div 4
\end{aligned}
$$

## Three in a row

For this game you need a calculator. Draw a line like this:


## How to help your Year 6 child.

- Take it in turns to choose a fraction, say $2 / 5$. Use the calculator to convert it to a decimal (Le. $2+5=0.4$ ) and mark your initials at this point on the line.
- The aim of the game is to get 3 crosses in a row without any of the other player's marks in between.
- Some fractions are harder to place than others, e.g. ninths.


## Flowers

- Take turns to think of a flower.
- Use an alphabet code, $A=1, B=2, C=3$... up to $Z=26$.
- Find the numbers for the first and last letters of your flower, e.g. for a ROSE, $R=18$, and $E=5$.
- Multiply the two numbers together, e.g. $18 \times 5=90$.
- The person with the biggest answer scores a point.
- The winner is the first to get 5 points.

When you play again you could think of animals, or countries


