## Three in a row

Draw a line like this:


- Take it in turns to choose a fraction, say $2 / 5$. Convert it to a decimal (i.e. $2 \div 5=0.4$ ) 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, $A=1, B=2, C=3 \ldots$ 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.

## Make it real!

You earn one voucher for every 3 visits to the sport centre. How many visits must you make to get 5 vouchers?

## Helping your child with Maths in Year 6



## A booklet for parents

Fun mathematical activities to do at home

## . This is some of the maths your child should be able to do by the end of Y6

- read, write, order and compare numbers up to 10000000 and determine the value of each digit
- round any whole number to a required degree of accuracy
- use negative numbers in context, and calculate intervals across zero
- solve number and practical problems
- perform mental calculations
- identify common factors, common multiples and prime numbers
- solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy
- use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- compare and order fractions, including fractions >1
- associate a fraction with division and calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. ${ }^{3} / 8$ )
- identify the value of each digit to three decimal places and multiply and divide numbers by 10,100 and 1000 where the answers are up to three decimal places
- recall and use equivalences between simple fractions, decimals and percentages, including in different contexts
- solve problems involving the calculation of percentages (e.g. of measures) such as $15 \%$ of 360 and the use of percentages for comparison
- solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
- use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places
- convert between miles and kilometres
- recognise that shapes with the same areas can have different perimeters and vice versa
- draw 2-D shapes using given dimensions and angles
- recognise, describe and build simple 3-D shapes, including making nets
- describe positions on the full co-ordinate grid

The activities given will all help your child towards achieving some of the maths they should be able to by the end of Year 6. Building confidence in maths is crucial so do praise their efforts.

## Recipes

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

| 4 people | 8 people |
| :--- | :--- |
|  |  |
| 125 g flour | 250 g flour |
| 50 g butter | 100 g butter |
| 75 g sugar | 150 g sugar |
| 30 ml treacle | 60 ml treacle |
| 1 teaspoon ginger | 2 teaspoons ginger |

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

## Fours

- Use exactly four 4s 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.

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

## Crash!

- Each person draws a $10 \times 10$ grid, with 'spaceships' at 6 different intersections.
- Players take turns to guess the grid references at which their opponent's spaceships are stationed.
- A correct guess 'crashes' the opponent's spaceship and the opponent must cross out that spaceship. The first to lose all their spaceships loses the game


## Make it real!

- The supermarket sells a 500 ml bottle of squash for 69 p and a 1.5 litre bottle for $£ 1.99$. Which is better value for money? How do you decide?
- On your next supermarket trip get your child to compare 2 products and decide which product is better value for money.

