Supporting your child at home

Year 4

Maths

**By the end of Year 4, most children should be able to…**

* recall all multiplication facts to 12 x 12.
* round any number to the nearest 10, 100 or 1000 and decimals with one decimal place to the nearest whole number.
* count backwards through zero to include negative numbers.
* compare numbers with the same number of decimal places up to 2-decimal places.
* recognise and write decimal equivalents of any number of tenths or hundredths.
* add and subtract numbers with up to 4 digits using the formal written methods of column addition and subtraction.
* divide a 1 or 2-digit number by 10 or 100 identifying the value of the digits in the answer as ones, tenths and hundredths.
* multiply 2-digit and 3-digit numbers by a 1-digit number using formal written layout.
* solve two step addition and subtraction problems in context.
* solve problems involving multiplication and division.
* compare and classify geometrical shapes, including quadrilaterals and triangles, based on their properties and sizes.
* know that angles are measured in degrees and can identify acute and obtuse angles.
* compare and order angles up to two right angles by size.
* measure and calculate the perimeter of a rectilinear figure in cm and m.
* read, write and convert between analogue and digital 12 and 24 hour times.
* interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.

**Dicey tens**

For this game you need a 1–100 square (a snakes and ladders board will do), 20 counters or coins, and a dice.

* Take turns.
* Choose a two-digit number on the board e.g. 24.
* Roll the dice. If you roll a 6, miss that turn.
* Multiply the dice number by 10, e.g. if you roll a 4, it becomes 40.
* Either add or subtract this number to or from your two-digit number on the board, e.g. 24 + 40 = 64.
* If you are right, put a coin on the answer.
* The first to get 10 coins on the board wins.

 **Left overs**

* Take turns to choose a two-digit number less than 50.
* Write it down. Now count up to it in fours. What number is left over?
* The number left is the number of points you score, e.g. Choose 27. Count: 4, 8, 12, 16, 20, 24. 3 left over to get to 27. So you score 3 points.
* The first person to get 12 or more points wins. Now try the same game counting in threes, or in fives. Can you spot which numbers will score you points?

**Sum it up**

* Each player needs a dice.
* Say: Go! Then each rolls a dice at the same time.
* Add up all the numbers showing on your own dice, at the sides as well as at the top.
* Whoever has the highest total scores 1 point.
* The first to get 10 points wins.

**Number game 1**

You need about 20 counters or coins.

* Take turns. Roll two dice to make a two-digit number, e.g. if you roll a 4 and 1, this could be 41 or 14.

Add these two numbers in your head. If you are right, you win a counter. Tell your partner how you worked out the sum.

* The first to get 10 counters wins. Now try subtracting the smaller number from the larger one.

**Number game 2**

Put some dominoes face down

* Shuffle them.
* Each choose a domino.
* Multiply the two numbers on your domino.
* Whoever has the biggest answer keeps the two dominoes.
* The winner is the person with the most dominoes when they have all been used.

**Number game 3**

Use three dice. If you have only one dice, roll it 3 times.

* Make three-digit numbers, e.g. if you roll 2, 4 and 6, you could make 246, 264, 426, 462, 624 and 642.
* Ask your child to round the three-digit number to the nearest multiple of 10. Check whether it is correct, e.g. 176 to the nearest multiple of 10 is 180. 134 to the nearest multiple of 10 is 130. (A number ending in a 5 always rounds up.)
* Roll again. This time round three-digit numbers to the nearest 100.

 **Dicey division**

You each need a piece of paper. Each of you should choose five numbers from the list below and write them on your paper.

 **5, 6, 8, 9, 12, 15, 20, 30, 40, 50**

* Take turns to roll a dice. If the number you roll divides exactly into one of your numbers, then cross it out, e.g. you roll a 4, it goes into 8, cross out 8.
* If you roll a 1, miss that go. If you roll a 6 have an extra go.
* The first to cross out all five of their numbers wins.

 **Tables Practise the 3x, 4x and 5x tables.**

Say them forwards and backwards. Ask your child questions like: What are five threes? What is 15 divided by 5? Seven times three? How many threes in 21?

**Out and about**

* Choose a three-digit car number, e.g. 569.
* Make a subtraction from this, e.g. 56 – 9.
* Work it out in your head. Say the answer.
* If you are right, score a point.
* The first to get 10 points wins.

**Mugs**

You need a 1 litre measuring jug and a selection of different mugs, cups or beakers.

* Ask your child to fill a mug with water.
* Pour the water carefully into the jug.
* Read the measurement to the nearest 10 millilitres.
* Write the measurement on a piece of paper.
* Do this for each mug or cup. Now ask your child to write all the measurements in order.

**Measuring**

Use a tape measure that shows centimetres.

* Take turns measuring lengths of different objects, e.g. the length of a sofa, the width of a table, the length of the bath, the height of a door.
* Record the measurement in centimetres, or metres and centimetres if it is more than a metre, e.g. if the bath is 165 cm long, you could say it is 1m 65cm (or 1.65m).
* Write all the measurements in order.

**Pairs to 100**

 This is a game for two players.

 Each draw 10 circles. Write a different two-digit number in each circle – but not a ‘tens’ number (10, 20, 30, 40…).

* In turn, choose one of the other player’s numbers. ♦
* The other player must then say what to add to that number to make 100, e.g. choose 64, add 36.
* If the other player is right, she crosses out the chosen number.
* The first to cross out 6 numbers wins.

**Looking around**

Choose a room at home.

Challenge your child to spot 20 right angles in it.