**Level 3**

**Number**

**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.

76 to the nearest multiple of 10 is 80.

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 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.

**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.

**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.

**Pairs to 100**

This is agame 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 crossout 6 numbers wins.

**Track games**

Make a number track to 20, or longer. Make it relevant to your child’s interests – sea world, space, monsters… Then play games on it.

1. Throw a dice. Move along that number of spaces. BUT before you move, you must work out what number you will land on. If you are wrong, you don’t move! The winner is the first to land exactly on 20. Now play going backwards to 1.
2. Throw a dice. Find a number on the track that goes with the number thrown to make either 10 or 20. Put a counter on it, e.g. you throw a ‘4’ and put a counter on either 6 or 16. If someone else’s counter is there already, you may replace it with yours! The winner is the first person to have a counter on 8 different numbers.

**Multiplication**

**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?

**All the sixes**

Time your child while he / she does one or more of these.

* Count in sixes to 60.
* Count back in sixes from 60 to zero.
* Start with 4. Count on in sixes to 70.
* Start with 69. Count back in sixes to 3.

Next week, try to beat the record.

**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?

**Division**

**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.

**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

**Capacity**

**Mugs**

Youneed 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.

**Time**

**Can you tell the time?**

Whenever possible, ask your child to tell you

the time to the nearest 5 minutes. Use a clock

with hands as well as a digital watch or clock.

Also ask:

* What time will it be one hour from now?
* What time was it one hour ago?

Time your child doing various tasks, e.g.

* getting ready for school;
* tidying a bedroom;
* saying the 5 times, 10 times or 2 times table…

Ask your child to guess in advancehow long they think an activity will take. Can they beat their time when they repeat it?

**Fractions**

Use 20 buttons, or paper clips or dried beans or…

* Ask your child to find **half** of the 12 things.
* Now find one **quarter** of the same group.
* Find one **third** of the whole group.



Repeat with other numbers.

**Money**

**Shopping maths**

After you have been shopping, choose 6 different items each costing less than £5 Make a price label for each one,   
e.g. £1.50, £1.99, 39p, 78p. Shuffle the labels. Then ask your child to do   
one or more of these.

* Place the labels in order, starting with the lowest.
* Add 19p to each price in their head.
* Take 20p from each price in their head.
* Say which coins to use to pay exactly for each item.
* Choose any two of the items, and find their total cost.
* Work out the change from £10 for each item.

**Shape**

**Guess my shape**

* Think of a 3-D shape (square based pyramid, cube, cuboid, prism). Ask your child to ask questions to try and guess what it is.
* You can only answer *Yes* or *No*. For example, your child could ask: *Does it have 3 sides?* or: *Are its sides straight? How many corners does it have? How many faces? What kind of faces does it have*
* See if they can guess your shape using fewer than five questions.

Now ask them to choose a shape so you can ask questions