

Chiddingly School



Maths Is Fun!

Home Learning

Activity Pack

Year 3

Please enjoy these games with your child on a regular basis. Talk with them about what you have both learnt, or about strategies that you notice them using.

Please initial and date each time you play. After you have played any of the games on 5 different days, show the book to the class teacher and your child will receive a sticker. Do the same after playing it 10 times to receive a certificate.

Please remember that the stickers and certificates are not the main thing (*though don't discourage your child from working towards them!*). The real reward for your child will be spending time with you doing something worthwhile and enjoyable, and of course your child (and maybe you!) will make invaluable progress in their mathematics.

Finally, please don't panic about the games.



1: Roll Two Dice.

Similar to the Year 2 game but this time we are multiplying!

Take it in turns to roll two dice.

You score a point for correctly saying a number sentence about the 'product' of the top numbers. e.g. "*Four times 2 equals 8.*"

If your child is not sure, lay out 2 rows of 4 counters so that they can check it really is 8, at least for the above example.

Each have 10 turns. Play this game on 10 different days – it is a great way to practise tables up to 6x6.

1 Initials and Date:	2	3	4	5
6	7	8	9	10

2. NIM

Start with 10 objects or counters on the table. Pennies work well, but it could just as easily be teaspoons. Take it in turns to take away either one or two counters. The aim is to be the person who removes the final counter. After a while you (and your child) should start to realise that there is a winning strategy, but don't rush them into this realisation.

Again, play this game on 10 different days. Once they have the idea, why not start from 20 instead? Or even 50 for a long car journey! Once they have it, ask them to play against their teacher and try to win!

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3. Out and About

There really are an amazing number of different uses of numbers out there. This activity will help your child realise just how much we depend on numbers. When you are out with them on a shopping trip, give them a digital camera (or if more practical, a clipboard and pencil.) Their mission is to record as many different ways in which numbers are used as they possibly can. Try to encourage them to find at least 10 each time you play.

This seems a lot, but just look at this list of possibilities:

Bus numbers, speed limit signs, number-plates, house /shop numbers, clocks, prices, percentage discounts, fraction discounts, distances, ages on cards, phone numbers (and even a mobile network?!), fax numbers, coins, opening and closing times, 3for2 offers, clothing sizes, shoe sizes, quantities of liquid products (pints, litres, ml etc), dates – and there are lots more!

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4. Fingers

A game that can be done any time, any place, anywhere! This game is similar to 'Roll Two Dice' but can be done with an element of competition if required. It is designed to encourage rapid recall of multiplication tables in a fun way.



You and your child each put a hand behind your back. Secretly extend between 1 and 5 fingers. Say "Ready Steady GO!" and both of you must bring the hand out in front of you.

Each of you must now call out the product of (*i.e. multiply together*) the number of fingers on each hand. For example, if you show 2 fingers and your child reveals all 5, you must both quickly call out "TEN"! The winner writes down one letter from the word "FINGERS (in sequence)", and the first person to write down all six letters is the winner of the whole game.

If your child is not confident with their tables, do not make it a competition – simply give your child a letter for each time they get it right and see if they can get to spell FINGERS with a specific time limit.

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5. Shut the Box

Another game with two dice. Both write out the numbers from 1 to 9. Take it in turns to roll the dice and add them up. Cross off the total, or if you prefer, cross off any two numbers that make the total, or indeed any two numbers that make the total.

So, if you roll 3 and 4, you could cross off 7, or 2 and 5, or 1 and 6, or 3 and 4. Assuming you can cross off two numbers (or their total), you can roll again.

The aim of the game is to cross off all your numbers before becoming stuck, at which point play passes to your opponent. Once you have both become stuck (or succeeded), your remaining numbers become your final score – the aim is to have as low as score as possible (preferably zero!)

So, a player whose card looked like this at the end would score 237.

1 2 3 4 5 6 7 8 9

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6. Count On

SIZE OF JUMP STARTING NUMBER

2	0
3	5
4	6
5	7
10	10

This is an easy game for two players which needs no equipment at all. One of you chooses a number from the first column (the size of jump), and the other chooses a number from the second (the starting number).

Taking it in turns, you must say the next number in sequence.

So, if you chose to start with jumps of 2, and your child chooses to start at 7, the conversation would go (hopefully):

You: “7”

Child: “9”

You: “11”

Child: “13” etc.

Stop when you get up to 50, or whenever you feel that your child is struggling, and swap roles. Repeat this until you have got to 50 at least 5 times.

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7. Count Back

SIZE OF JUMP	STARTING NUMBER
2	50
3	40
4	45
5	42
10	29

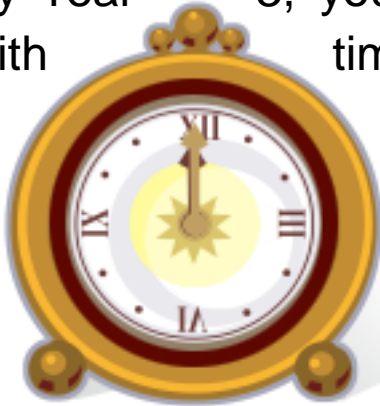
Once children have mastered the 'Count On' game, it is important that they also learn to count back as well.

So, this game should not be attempted before your child is familiar with 'Count On', but it does provide a useful extension activity. It is exactly the same, but this time keep counting until you get to zero.

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8. Clock Watch

By Year 3, your child may well be sufficiently confident with time to manage not just quarter past and quarter to, but also any exact multiple of 5 minutes.



As per Year 2, using a clock face (either real, toy, or drawn) ask your child to say what time it is, but make sure that it is one of the above examples. Then give them a time and ask them to set or draw the hands.

You can make a simple clock face by drawing round a circle, adding the numerals 1-12, and using two lolly sticks as the hands.

Check with the teacher which level your own child should be doing for this game – they will be able to advise you accordingly.

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9. Shopkeeper

Lots of young children like playing shops. In this game, they have to work out the change you would receive from a £1 coin when paying for something costing up to a pound.



Do not use pencil and paper – this is designed to be done ‘in the head’.

Encourage them to think how many pennies it would need to get up to the next multiple of 10p (this is known as using ‘bonds to 10’), and then from there to get up to 100.

This is similar to the mental methods they are taught at school for subtraction – years ago it was unofficially known as the ‘shopkeeper’s method.’

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10. Straw Shapes

Roll a dice. If it is an odd number, write down '*irregular*', and if it is an even number, write down '*regular*.' Roll it a second time and write down the corresponding word from the table:

- | | |
|---|---------------|
| 1 | Triangle |
| 2 | Quadrilateral |
| 3 | Pentagon |
| 4 | Hexagon |
| 5 | Heptagon |
| 6 | Octagon |

So, for example, if you rolled a 2 then a 5, you would write "*regular heptagon*". Your child must now use lolly sticks, drinking straws or similar to make the appropriate shape. If they need help, remind them that regular means that all sides are the same length and all angles are equal. The number of sides of the shape is always two more than the second roll of the dice!

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