MAKE MATHS FUN!

Give your child lots of praise and encouragement.

"Pure mathematics is, in its way, the poetry of logical ideas." Albert Einstein

Supporting your child at home with maths

Key Stage One
Year One

Number and Place Value

Pupils will be taught to:

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens

- given a number, identify one more and one less

- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least

- read and write numbers from 1 to 20 in numerals and words.

Secret Numbers

0123456789

- Write the numbers 0 to 20 on a sheet of paper.
- Ask your child secretly to chose a number on the paper. Then ask them some questions to find out what the number is, e.g.
    - Is is less than 10?
    - Is it between 10 and 20?
    - Does it have a 5 in it?
    - Is it odd?
  They may only answer yes or no.
- One you have guessed the number, it is your turn to choose a number. Your child asks the questions.

Easier: use numbers to 10.

Extend: numbers up to 100.

Dicey Coins

For this game you need a dice and about twenty 10p coins.

- Take turns to roll the dice and take that number of 10p coins.
- Guess how much money this is. Then count aloud in tens to check, e.g. *saying ten, twenty, thirty, forty…*
- If you do this correctly you keep one of the 10p coins.
- First person to collect £1 wins.

Daily Practise: Counting in 10s to and from 100 from 0 or any given number regularly will increase fluency and will support addition subtraction.

Practise counting on and back in 2s, 5s and 10s.

Daily Practise: Help your child to identify numbers in everyday life. Can they read door numbers, the number of different channels on TV, page numbers in books etc.

Track Games

Make a number track to 20, or longer. Make it relevant to your child's interests- space, castles, sea world, monsters. Then play on it.

1 2 3 4 5 6 7 8 9 10

- 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.
- 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.

Birthdays!

Star with your child's age. Ask your child:
- How old will you be when you are 1 year older?
- How old were you last year?
- How old will you be 2/5/10 years from now?

Repeat with the ages of different relatives. You may want to make up your own age!

Cut out numerals from newspapers, magazines or birthday cards. Then help your child to put the numbers in orders.

Going round the houses

When walking down the street with your child, look at house numbers. These will probably follow a pattern of either odd or even numbers. Can your child predict what number will be on the next house? Talk about the pattern.

Daily Practise: Make mistakes when chanting, counting or ordering numbers. Can your child spot what you have done wrong?

Beans and Flower Pots

THE IMAGINATION TREE

- Label 21 empty pots (e.g. yoghurt pots) 0-20.
- Children count the right number of beans into each pot. Other small objects could be substituted.
- A 0 pot is important to consolidate that 0 represents a nil value.
- When they are done ask your child to pour out each of the teen number jars and arrange the beans into a group of ten and then ones (units).

Addition and Subtraction

Pupils will be taught to:

- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.

Give your child an answer. Ask them to write as many addition sentences as they can with this answer

Practise the number bonds (pairs of numbers) for all the numbers from 5 – 10.

Number Fact Bingo!

- Draw a simple grid for a bingo board. This can be done on any scrap of paper.
- Each player chooses five answers (e.g. numbers to 10 to practise simple addition, multiples of 5 to practise the five times tables).
- Ask a question and if a player has the answer, they can cross it off.
- The winner is the first player to cross off all their answers.

Go Fish: Pairs for 10

- Make number cards from 0-10 (3 sets of each number).
- Play "Go Fish" to add numbers to 10.
  e.g. You have fished a 4. What number do you need to fish to make 10?
  The winner is the first person to find all the pairs that add to 10.

Have a '*fact of the day*', e.g. 16=8+8. Pin this fact up around the house. Practise reading it in a quiet, loud, or squeaky voice. Ask your child over the day if they can recall the fact.

Adding Circles

For this game, you need a dice, a pencil and paper.

- Each of you should draw four circles on your piece of paper.
- Write a different number between 2 and 12 in each circle.

| 2 | 6 | 8 | 9 |

- Roll the dice twice. Add the two numbers.
- If the total is one of the numbers in your circles then you may cross it out.
- The first person to cross out all four circles wins.

You can make this game harder by choosing bigger numbers and rolling more dice.

Number Fact Race

Give your child a number fact (e.g. 5+3=8). Ask them what else they can find out from this fact (e.g. 3+5=8, 8-5=3, 8-3=5). It is important that children understand subtraction can 'undo' an addition and therefore it is the inverse.

They may also be able to find other facts, such as near doubles, too, e.g. 50+30=80, 500+300=800, 5+4=9, 15+3=18). How quickly can they find all associated facts?

Dice Game

3

0 1 2 3 4 5 6 7 8 9 10
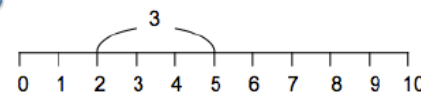
You need a 1–6 dice, paper and pencil.
- Take turns.
- Choose a number between 1 and 10 and write it down.
- Throw the dice and say the dice number.
- Work out the difference between the chosen number and the dice number, e.g. if you wrote down a 2 and the dice shows 5, the difference is 3.

You could also draw a number line to help your child to see the difference between the two numbers.

Takings

For this game you will need a dice and a collection of small things such as Lego bricks, sticky shapes or dried pasta. You will also need a pencil and paper.

- Take turns.
- Roll a dice. Take that number of pieces of pasta. Write down the number.
- Keep rolling the dice and taking that number of pieces of pasta. But, before you take them, you must write down your new total.
- For example, Sam has 7. She throws 4. She has to work out how many she will have now. She starts counting from seven: *eight, nine, ten, eleven.* She writes 11.
- You can only take your pieces of pasta if you are right.
- The first person to collect 20 pieces of pasta wins!

Regular practise of forming each digit correctly will really embed this skill.

Sort things out: if you have a box of beads, sort them by size or colour. Challenge your child to sort them in multiple ways, e.g. can you sort by colour and size?

Grab Bag Subtraction

- Choose a number of things to work with, and put that many objects into a bag.
- You can use crayons, coins, beans, buttons, etc.
- Grab a handful of the items and count them. Use subtraction to work out how many items are now left in the bag.
- Write down the calculation.
- Encourage counting up or back.
- Let your partner have a turn.
- Whoever leaves the least amount in the bag is the winner.

Count in multiples of 1, 2, 5 and 10. Miss a number(s) out and clap. Your child has to guess the missing number.

Useful Websites

http://www.mathsisfun.com/links/curriculum-year-1.html

http://www.snappymaths.com/year1/

http://www.topmarks.co.uk/Interactive.aspx?cat=8

https://uk.ixl.com/math/year-1

http://urbrainy.com/maths/year-1-age-5-6

https://www.gov.uk/ (National Curriculum can be downloaded here)

http://www.theschoolrun.com