Victoria Primary School

First Level Numeracy

Home Learning Information

"Numeracy is about being able to understand and use numbers in a range of situations, for example when solving problems or making decisions in situations involving numbers."

Education Scotland

This booklet has been created by representatives of Victoria Primary Parent Council and class teachers to help you to support your child in learning vital numerical skills. If you have any questions please contact the school.

We have listed many of the skills your child should be able to do in First Level by the end of Primary 4. The skills in this booklet are a progression of skills taught from the start of First Level (usually P2) to the end of First Level (usually P4.) A target may be harder than it seems, e.g. a child who can count up to 1000 may still have trouble saying which number comes after 479 or which number comes before 250. In order to be secure at First Level **regular** practise in mental maths is required. Please see suggested websites at the end of this booklet.

Counting (Forwards and Backwards)

- Count forwards and backwards by one e.g. 35, 36, 37… (within 100, then 1000)
- Count forwards and backwards by 2s e.g. 2, 4, 6, 8…
- Count forwards and backwards by 10s (on the decade) e.g. 30, 40, 50…
- Count forwards and backwards by 5s e.g. 15, 20, 25…
- Count forwards and backwards by 3s e.g. 3, 6, 9…
- Count forwards and backwards by 4s e.g. 4, 8, 12…
- Count forwards and backwards by 6s e.g. 6, 12, 18…
- Count forwards and backwards by 10s (off the decade) e.g. 32, 42, 52…
- Count forwards and backwards by 100s (on the hundred) e.g. 500, 600, 700… Then on the decade e.g. 350, 450, 550… And then off the decade e.g. 172, 272, 372…
- Count forwards and backwards by $\frac{1}{2}$ s e.g. $\frac{1}{2}$, 1, 1 $\frac{1}{2}$ …

Addition and subtraction: *The children will be practising this verbally, not written. Any brackets are for your understanding only and the children do not use them at this stage of learning.*

- Add using a count-on strategy (start at a number and count on by one) e.g. Question: 9+2, spoken answer- **9**, 10, **11**
- Subtract using a count-on or count-back strategy (e.g. for 5 – 3, count on from 3 to 5 or count back from 5 to 3)
- Use doubles (and near doubles) in addition sums e.g. Question: 3+4, knowledge of doubles (3+3) +1= 7
- Add numbers to 20 using number bond facts (e.g. 1+9=10, 2+8=10,)
- Bridging through ten (e.g. 8+5= (8+2)+3=13,) doubles and near-doubles
- Subtract numbers to 20 using counting back, number bond facts
- Bridging through ten. Subtract tens and units (Question: 76 – 35, first step 76-30, second step 46-5)
- Add 3 numbers together (e.g. 7 + 2 + 6)
- Know and use addition and subtraction family facts (e.g. 6+3=9, 3+6=9, 9-3=6, 9-6=3)
- Add on multiples of ten to a 2-digit number (e.g. 45 + 20)
- Subtract multiples of ten from a 2-digit number (e.g. 72 – 40)
- Add tens and units (Question: 34 + 21, first step: 34+20, second step 54+1.) Add tens and units with regrouping (Question: 65 + 27, first step 60+20, second step 5+7, third step 80+12)

Possible game

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.

Sequencing and ordering

Sequence numbers

- In the range 1 to 100 (e.g. 47, 48, 49, 50, 51, 52)
- On the decade within and beyond 100 (e.g. 370, 380, 390, 400, 410)
- Off the decade (e.g. 23, 33, 43, 53, 63) to 100 and then to 1000
- Going up in hundreds (e.g. 600, 700, 800)
- In multiples of 2, 3, 5 and 10

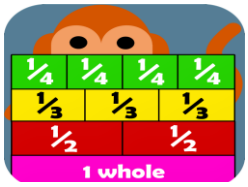
Order numbers:

- In the range 1 to 100 (e.g. 7, 13, 70, 88)
- In the range 1 to 1000

Equivalences

- Match simple fractions that have the same value (using pictures).
- Compare fractions with the same denominator.

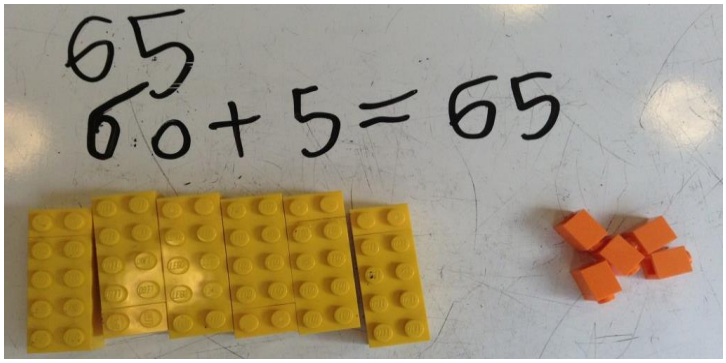
Possible games; *Use 12 buttons, or paper clips or dried beans etc. Ask your child to find **half** of the 12 things. Now find one **quarter** of the same group.*



Repeat with other numbers.

Place Value

- Demonstrate how the value of a digit depends on where it is placed e.g. the 3 in 236 means 3 tens or 30
- Split a number containing tens and units
- In a standard way e.g. (36 is 3 tens and 6 units)
- In a non-standard way (e.g. 36 is 2 tens and 16 units)
- Split a number into its place value parts e.g. 364 = 300 + 60 + 4 (numbers up to 1000)



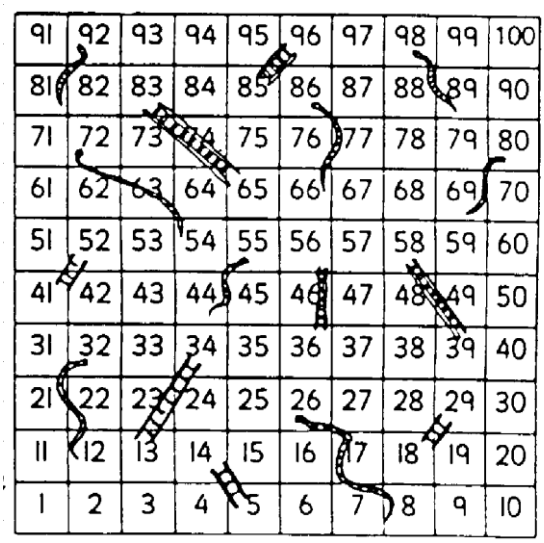
Recognising and identifying numbers

- In the range 1 to 100

(e.g. "Point to the number 72")

- In the range 1 to 1000

(e.g. "What number is this?")



Possible games: *Make a board like above. The numbers are arranged differently from usual. The games will still work if you use a normal Snakes* and Ladders board. *Roll a dice twice. Add the two numbers. Move along that number of spaces. Before you move, you must work out what number you will land on. If you are wrong, you don't move! The first to the end of the board wins. For a change, you could roll the dice and move backwards. Or you could roll the dice once, then move the number that goes with your dice number to make 10, e.g. throw a 3, move 7.*

Calculations

- Know and use the 2 times table to solve multiplication and division problems. (E.g. Two people are having dinner, how many knives and forks are there altogether?)
- Know and use the 10 times table to solve multiplication and division problems. (E.g. 9 x 10 = 90, 9 people had 10p each, how much did they have altogether?)

And so on with the 5, 3, 4 and 6 times tables.

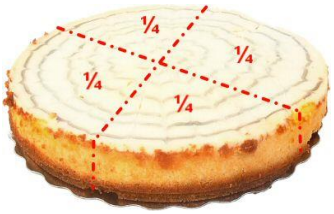
Explore multiplication and how it can help us to solve problems (e.g. 7 x 5 is the same as 5 x 7 – easier to count in 5s.)

Finding quantities

- Find a fraction of an amount (linked to times table knowledge) e.g. ⅓ of 15. (*Do not select fractions of an amount that leave a remainder.*

Equal sharing of a whole

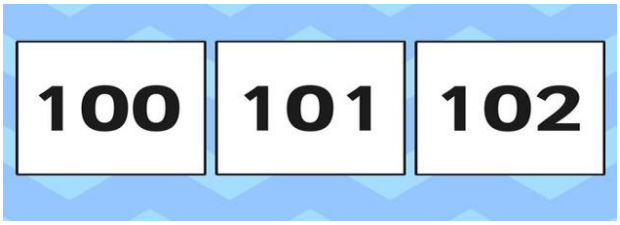
- In practical situations, or pictorially, share a whole into equal parts (e.g. share a bag of sweets into thirds)
- Show, using practical items, that e.g. 4 quarters make a whole.



Number lines

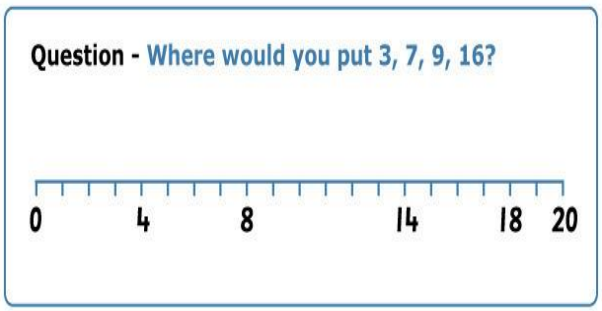
Place a number on a number line

- In the range 1 to 100
- Then 0 to 1000



Estimate where a number goes on an empty number line

- In the range 1 to 100
- Then 0 to 1000



Number before/after

Say the number before/ after/ between for numbers up to 1000.

Say the number 10 before/after a given number. Say the number before/after in the times table (e.g. in the 3 times table, what is the number after 21?)

Combining and Partitioning

- Partition (split) numbers up to ten into number bonds (e.g. know that 5 = 1 + 4 and so on)
- Use number bond knowledge to say what number gets us to/from a decade (e.g. 34 + ? = 40, 54 - ? = 50)

Possible games; ***Shopping maths***

After you have been shopping, choose 6 different items each costing less than £1. Make a price label for each one, e.g. 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.*
- *Say which price is an odd number and which is an even number.*
- *Add 9p 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.

Grouping and Sharing: Make equal groups (e.g. "Here are 10 counters. Put them into twos. How many groups have you made?")

- What is the number in an equal share (e.g. "Share 10 counters between two people? How many does each person get?")
- Share a whole into equal parts (e.g. thirds.)

Recommended Websites

Parent support and information:

www.educationscotland.gov.uk/parentzone

All areas of maths and numeracy- games:

http://www.sumdog.com/

http://www.topmarks.co.uk/maths-games/7-11-years/mental-maths

http://www.coolmath-games.com/

http://www.mathplayground.com/

http://www.mathsisfun.com/numbers/math-trainer-multiply.html

http://www.bbc.co.uk/bitesize/firstlevel/mathematics/

http://resources.woodlands-junior.kent.sch.uk/maths/

Other supports…

The Library Service: those registered with the library can access a free ipad resource called 'mathletics.'

Primary 2 and Primary 3 pupils will each receive a "read, write, count' pack in the Autumn. The bag will contain fun resources and activities that will give parents and children the confidence to have fun reading, writing and counting together at home.