Mental Agility
Securing Skills in First Level

Learning at Home Guide
Support your child in mental agility

<u>About this booklet</u>

This booklet is designed to help you to support your child in learning vital number skills.
Some children may find this trickier than others, while some may need to be challenged by using larger numbers.
In order to be secure at First Level (by the end of P4 for most pupils or earlier for some) regular practice in mental agility is required.
Please see suggested activities and websites at the end of this booklet.

<u>Mental Agility Skills</u>

Numbers

- Recognise numbers in range from 1-1000. Begin by recognising numbers to 10, then up to 100, then up to 1000 and finally using a variety of 4 digit numbers
- Identify numbers between 1-1000 "What number is this?"
- Recognise numbers before/ after a given number
- Round numbers to the nearest 10 and 100

Counting

- Count forwards and backwards in 2s, 3s, 4s, 5s, and 10s building up to then counting up in 6s, 7s, 8s and 9s
- Count forward and backwards by 10s and 100s on and off the decade (eg 350, 450, 550 or 172, 182, 192)
- Say the number before/after/between for numbers up to 1000 building up tp numbers up to 10,000
- Count back verbally in 50s or 25s from 100

Sequencing and Ordering Numbers

- Sequence numbers up to 1000 (eg 693,703,713 or 530, 520, 510)
- Order random groups of numbers from 1-1000 (eg 3 numbers are given. Order from smallest to largest or largest to smallest)
- Place a number on a number line, building from numbers to 10, numbers within 100 then numbers to 1000
- Estimate where a number goes on an empty number line between 1 and 1000.

Number Structures and Place Value

- Know number partners to 10 (4 + ? = 10)
- Know number partners to 100 (26 + ? = 100)
- Split a number into its parts (eg 34 = 3 tens + 4 units)
- Show how the value of a digit depends on where it is placed (eg the 6 in 236 means 6 units or the 4 in 406 means 4 hundreds)
- Building up to knowledge of number up to 10,000

Addition and Subtraction

- Add doubles and near doubles to 20 (eg 15+15 or 15+16)
- Add and subtract single digits. Start with numbers to 10, then use 2 digit numbers with a single digit (eg 34 – 2)
- Add 3 or more numbers together
- Know and use addition and subtraction number stories "7 + 5 = 12, 5 + 7 = 12, 12 - 7 = 5, 12 - 5 = 7"
- Add and subtract multiples of 10 and then 100.
- Add and subtract a single digit number to/from a 2 digit number (eg 58+7, 61-5)
- Add and subtract money to £1

Multiplication and Division

- Count up in 2s, 3s, 4s, 5s and 10s to begin to recognise tables facts
- Make equal groups (eg here are 18 counters. Put them in sixes. How many groups have you made?)
- Determine the number in an equal share (eg share 24 counters between two people. How many does each person get?)
- Split numbers in two and begin to use the language "half"
- Reinforce to 2, 3, 4, 5 and 10 times table with multiplication and division
- Use the 2 and 4 times table to find half and quarter of quantities
- Know the multiplication stories (eg 5 x 4 = 20, 4 x 5 = 20, 20 ÷ 5 = 4, 20 ÷ 4 = 5)

Fun Activities to Help at Home

All the sixes (can be used to practise any table)
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.

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.

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.

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.
Choose a two-digit number on the board e.g. 24.
Roll the dice.
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.

Useful websites

https://learn.flipclacks.org/category/nursery-primary/p2-p4/

http://www.sumdog.com/

http://www.mathplayground.com/

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

https://www.bbc.co.uk/bitesize/subjects/zpdj6sg

http://uk.ixl.com/maths/

https://education.gov.scot/parentzone/learning-at-home/supporting-numeracy

https://www.topmarks.co.uk/maths-games/5-7-years/counting

Caterpillar Ordering