



Mintlaw Cluster Schools

Supporting your child in Numeracy and Mental Agility

Stage 3

An awareness raising booklet – working in partnership

***SKILL - USING NUMBER LINES***

Children are working towards being able to:

\* Place a number on a number line between 1 and 1000

\* Estimate where a number goes on an empty number line between 1 and 1000.

\* Round numbers to the nearest 100 using number lines.

Activities to Help:

1. Stick number cards up using clothes pegs on a piece of string or washing line. Have a ‘1’ card at the first end and a ‘1000’ card at the other end and then write new cards for your child to estimate where they go.
2. Make a part number line with missing numbers. Ask your child to put in the missing numbers.

***SKILL – COUNTING (FORWARDS AND BACKWARDS)***

Children are working towards being able to:

\* Count forwards and backwards in 2s from 2

* Count forwards and backwards in 5s within 100
* Count forwards and backwards in 10s within a 100 from any number.
* Count forwards and backwards in 3s from 3
* Count forwards and backwards in 4s from 4
* Count forward and backwards in 100s on the 100 (e.g “300, 400, 500…”) and the decade (e.g “350, 450, 550…”) to at least 1 000.

**Activities to Help:**

1. Practice the above sequences together. See how high your child can go or take it turns to say a number each in the sequence while passing a ball.
2. Use your surroundings to look for opportunities to count in the above intervals. For example in a busy room or train count fingers by counting up in 5s, feet in 2s or in the supermarket count up items that come in packs of 10 or 100. Once you start looking you’ll see these numbers everywhere!
3. **Left Overs**: Take turns to choose a two digit number less than 50. Write it down. Now count up to it in fives. What number is left over? The number left over is the number of points you score (e.g if you chose 27 you would end up with 2 left over so you score 2). First to 12 or more wins. Try with other numbers and see if you can spot which numbers will score you points.

***SKILL – ADDITION AND SUBTRACTION***

Children are working towards being able to:

\* Use doubles and near doubles in addition sums - 6 + 6 = 12 so 6 + 6 + 1 = 13, double 24 is 48, so 24 + 27 is 24 + 24 + 3 = 51

• Know and use addition and subtraction family bonds/ facts – 6 + 3 = 9, 3 + 6 = 9, 9 - 6= 3, 9 - 3 = 6”

• Add and subtract 10s numbers to any whole number up to 100 e.g. 30+40 = 70, 60-20 = 40

**Activities to Help:**

1. Look for opportunities for adding and subtracting in everyday life. What is your child plus their brother’s age? What is the number of rooms in the house minus the number of houses on the street?
2. **Match Attax**: If your child has Match Attax cards give them puzzles to work out using them. For example ask who would win between Ronaldo’s skill and power added and Messi’s shooting and defence.
3. **Out and About**: Choose a three-digit car number (e.g 569). Make a subtraction from this (e.g 56-9). Work it out and say the answer. If you are right you score a point - first to 10 points wins.
4. **Dicey tens**: Find 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 then take it in turns to roll the dice (if you roll a six, miss that turn). Multiply the dice number by 10 (e.g 4 becomes 40) and then either add or subtract this number to or from the two digit number in the board (e.g 24+40 = 64). If you are right put a counter on the answer. First to 10 counters on the board wins.
5. **Sum it up:** Each player will need a dice. One player says ‘Go!’ and both players roll their dice. Add up all the numbers showing on your dice (sides as well as top) and and whoever has the highest total scores 1 point. First to 10 points wins.
6. There are many useful addition and subtraction games at [www.topmarks.co.uk](http://www.topmarks.co.uk)

***SKILL – SEQUENCING AND ORDERING NUMBERS***

Children are working towards being able to:

\* Know the forward number sequence to 1 000.

* Know the backward number sequence from 1 000 to 0.
* Order non-consecutive numbers within a 1 000 – forwards and backwards.

**Activities to Help:**

1. Set out some cones or paper on the floor. Give your child a 3 digit number to start with. As your child steps or jumps between them have them shout out which is the next 3 digit number.
2. Give them a different number to start on each time and go backwards as well as forwards

***SKILL – IDENTIFYING AND RECOGNISING NUMBERS***

Children are working towards being able to:

\* Read and write numbers to 1 000.

\* Identify numbers between 1-1000

**Activities to Help:**

1. Make cards with the digits 0-9 on them. Place them face down on a table. Ask your child to turn 2 or 3 cards over randomly. Ask your child to make different numbers with the cards. Get them to tell you the number.
2. **Number eye spy**: When out and about spot numbers around the place and see if your child can find them also. This is particularly good when waiting near a bus or train timetable.
3. **Multi-sensory questions:** Use sand, dough or rice to write numbers and have your child say what they are. Then reverse the roles.

***SKILL – NUMBER STRUCTURE AND PLACE VALUE***

Children are working towards being able to:

\* Understand that 0 is a place holder in whole numbers.

\* Use number bond knowledge to say what number gets us to and from a decade, “240 + ? = 300” “540 - ? = 500”Split a number containing units in a non-standard way “36 is 2 tens and 16 units”

\* Show how the value of a digit depends on where it is placed “The 3 in 236 means 3 tens or 30”.

\* Split a number into its place value parts “364 = 300 + 60 + 4”

**Activities to Help:**

1. Have some 1-9 number cards. Turn them over on a table and have your child pick 3. They then have to arrange them and say what different numbers can be made using them as quickly as they can. They could get a point for telling you the value of each digit. They could get a sticker once they have reached 10 points.
2. **Number bond tennis**: Choose a decade to work on (e.g 200) and take it turns to ‘serve’ 5 quick numbers to each other, with the second person responding with the corresponding number bond (e.g person 1 serves 130 and person 2 replies ‘70’).
3. **“I Spy with my place value knowledge…”:** In the car or on foot be on the lookout for any two or more digit numbers in the environment. The first person to split it into it’s place value parts gets a point (e.g 135 would be 100 + 30 + 5).

***SKILL – THE CONCEPT OF MULTIPLICATION AND DIVISION***

Children are working towards being able to:

\* use mathematical language to discuss multiplication and division for example total, shared, equally

* Know and use the 2, 4, 5, 8 and 10 times tables to solve multiplication and division problems.
* Multiply a single digit number by 10.
* Demonstrate an understanding that some collection of objects can be shared equally and some collections will have objects left.

**Activities to Help:**

1. Make equal groups using counters/ sweets etc. E.g say “Here are 10 counters/sweets. Put them in twos. How many groups do you have?”.
2. Make equal groups of counters/sweets etc. but have some counters/sweets left over. E.g. “Here are 13 sweets. Put them in fours. How many sweets are there in each group? How many sweets are left over?
3. Pick out the ace to 9 cards of a particular suit, from a deck of cards. Turn them face down. Ask your child to turn a card over. Ask them what is the number they have chosen x ten. If they get the answer correct they keep the card. If not you keep the card. The person with the most cards at the end wins. This could also be a timed activity. How long does it take your child to collect all the cards?
4. The same as number 1 – 3, but focus on a particular times table – 2, 4, 5, 8, and 10.
5. **Multiplication catch**: Throw a (soft!) ball at your child after asking a times table question. They get a point every time they answer before the ball gets to them.
6. **Online games**: Use the games at timestables.com

***SKILL – FRACTIONS, DECIMALS AND DECIMALS***

Children are working towards being able to:

* Split a whole object into halves and quarters.
* Read and write fractions for halves and quarters.
* Compare the size of fractions.
* Can place simple fractions, in order, in a number line
* Show understanding that the bottom part of the fraction(denominator) tells how many equal parts the whole or whole group has been divided into and the numerator tells how many of the equal parts have been used, for halves and quarters.

**Activities to Help:**

1. Cut a cupcake/pancake/muffin, chocolate, etc. into 2 or 4 equal sized pieces. (Using different items shows that halves and quarters come in different shapes) Talk with your child about what you have done i.e. I have cut the cake into 2 equal sized pieces, each piece being called one half. Show how a half is written ½. Discuss where the 2 comes from and what the 1 represents. Repeat for quarters (you can look at how 2/4 and ¾ are written).
2. Cut 1 cupcake/pizza etc. into halves and another into quarters. Look at the size of each piece. Discuss which piece is bigger/smaller. Why might this be?
3. Practice dividing everything and anything (peas at dinner time, jelly babies, Lego bricks, cuddly toy collections) into equal parts like halves and quarters. Make sure you discuss the sizes of the pieces reinforcing that they are equal in size – there is no bigger half or quarter!

***SKILL – TIME***

Children are working towards being able to:

\* record the time from analogue and digital clocks (o’clock, half past, quarter past and quarter to)

\* understand that am is before midday and pm is after midday

\* record the date in a variety of different ways in words and numbers within my daily routine

\* read and change classroom visual calendars and timetables

\* know that 1 minute is 60 seconds

\* know that 60 minutes is 1 hour

\* learn ways of remembering how many days are in each month

\* sequence the seasons of the year

\* know the months of the year

\* use and select a variety of timers for specific purposes