



Mintlaw Cluster Schools

Supporting your child in Numeracy and Mental Agility

Stage 4

An awareness raising booklet – working in partnership

***SKILL - USING NUMBER LINES***

Children are working towards being able to:

• Find missing numbers in part of a number line or square up to 1 000.

• Estimate the position of any number up to 100 on a number line/square.

Activities to Help:

1. Create your own number lines with numbers missing. Ask your child to write in or say what the missing numbers should be.
2. Hang up a piece of string – have 0 at one end and 100 at the other. Give your child a card with a number on it ask them to clip the number on the string where they think it should go.

***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 100 from any number.
* Count forwards and backwards in 3s from 3
* Count forwards and backwards in 4s from 4
* Say the number 1, 10 and 100 before and after a given number in the range of 0-1 000.

**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. Look for 2 or 3 digit numbers. Ask your child to tell you the number 1,10 or 100 (where appropriate) before or after. They get a point every time they are correct.
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:

\* Know the basic facts for addition and subtraction and number families to 100.

\* Partition 2 and 3 digit numbers to mentally add/subtract the ones then the tens, with carrying e,g 234+28=234+20=254+8 = 262

\* Add and subtract 10s and 100s to any whole number up to 1 000

\* Use the relationship between adding and subtracting to check written calculations.

**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. **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.
3. There are many useful addition and subtraction games at [www.topmarks.co.uk](http://www.topmarks.co.uk)
4. Give your child a number say 6 ask them what you would need to add to it to make 10. Repeat for tens numbers e.g 60.
5. When in the car give your child 2 and 3 digit addition/subtraction sums.
6. Give your child a 3 digit number e.g 241 ask them to tell you the number 10 or 100 more or less.

***SKILL - MONEY***

Children are working towards being able to:

\* Identify and name coins and notes to £20.

\* Explore different ways of making the same total up to £10.

\* Work out (mentally) change from £10.

**Activities to help:**

1. When using money ask your child to tell you which coins/notes you are using.
2. When shopping ask your child to count out the money needed to pay (up to £10). If you only have notes ask the child how much change you would get from £5 or £10.
3. Challenge your child to tell you different ways they could use coins and notes to make a specified amount e.g £4.50.

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

Children are working towards being able to:

\* Order consecutive numbers within 1 000 (smallest to biggest and biggest to smallest).

\* Order non-consecutive numbers within 1 000 (smallest to biggest and biggest to smallest).

**Activities to Help:**

1. Give your child 4-6 cards with consecutive 3 digit numbers – ask your child to order the numbers. Repeat with non-consecutive 3 digit numbers. Specify if they are putting them in smallest to biggest or biggest to smallest order.

***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. Look for 3 digit numbers and ask your child to tell you what they are.
2. Write 2 or 3 digit numbers down on a chalk/white board. Ask your child to say the number.
3. Make numbers using pasta/rice/sand/beads etc. Ask your child what number you have made. Get them to make certain numbers themselves.

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

Children are working towards being able to:

* Construct 3 digit numbers and put them in order.
* Understand zero as a placeholder in whole numbers to at least 1 000
* Partition 3 digit numbers into hundreds, tens and ones, identifying the value of each digit.
* Use place value to partition numbers up to 100 e.g 27=20 + 7
* Describe the value of each digit in a numeral up to 1 000.

**Activities to Help:**

1. When out and about look for 2 or 3 digit numbers. Ask your child the value of each digit. If it is a 2 digit number ask your child to partition the number.
2. Give your child 3 different digits. Ask them to make and write different numbers. Ask them to then tell you the numbers in order.
3. **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’).
4. **“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 its 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 all of the times tables to solve multiplication and division problems.

\* Multiply a single digit number by 100

\* Divide a 3 digit multiple of 100 by 10/100

\* Divide a 3 digit multiple of 10 by 10

**Activities to Help:**

1. Make 1 – 9 cards. Put them face down on a table. Ask your child to turn 1 over. Ask them what 100 times that number would be. They can keep the card if correct if not either you keep the card and the winner is the person with the most cards at the end of the game or the card is turned face down again and you see how long your child takes to gather all the cards.
2. Write 100 and its multiples to 900 on separate cards. Make 5 ÷ by 10 and 5 ÷100 cards on different coloured cards. Turn them face down. Your child turns 1 of each type of card over and answers the question.
3. As above except the first set of 10 cards are 3 digit multiples of 10 e.g. 340 and you are asking your child to divide by 10.
4. Randomly ask your child table facts e.g. what is 3 x 2, 9 x 4 etc.
5. Give your child counters. Ask them to set out 3 sets of 4. Ask how many beads they have altogether. Now ask them to put out another 3 sets of 4. How many sets do they now have? Repeat with other 3 sets of then 6 sets of. Discuss the fact that 6 x 4 = 24. The answer is double 3 x 4 = 12 and 6 is double 3.
6. Give your child a 3 times table fact. Ask them what 6 times the same number would be.
7. **Online games**: Use the games at timestables.com

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

Children are working towards being able to:

\* Split a whole object up into any reasonable fraction and use associated vocabulary.

\* Read and write fractions using fraction notation e.g one eighth is 1/8.

\* Place simple fractions, in order, on a number line.

\* Use multiplication and division facts to find half and quarter of a whole number.

\* Explain the role of the denominator and the numerator.

\* Compare the size of fractions.

**Activities to Help:**

1. Ask your child to cut cupcakes/pizzas into 6ths/8ths. Discuss how many equal sized pieces there are. Ask your child to tell you and write down what each fraction is e.g. 1/6, 1/8. What fraction would it be if 2 pieces were eaten 2/6, 2/8 etc.?
2. Write down different fractions on individual cards. Ask your child to place them in a line in order.
3. Divide squares/rectangles of card into equal sized pieces (quarters/sixths/eighths etc.). Ask your child to write on the piece of card what fraction it is. Compare the different sized pieces of card. Ask your child to order the pieces from smallest to biggest/biggest to smallest. What do they notice regarding the denominator?
4. Make a pizza with your child. Ask them to cover half the pizza in one type of topping. A quarter of the pizza in another and so on. This can also be done when decorating a cake.

***SKILL – TIME***

Children are working towards being able to:

\* identify the 24 hour notation from analogue and digital clocks in real life situations

\* use a calendar/ timetable to plan events when relevant

\* read a timetable in 12 hour notation

\* add important events into a calendar

\* know that 1 day is 24 hours

\* know how many days are in each month

\* know there are 52 weeks in a year

\* know that there are 365 days in a year and 366 days in a leap year

\* know Jan is the first month, Feb the second, etc and link them to the seasons

\* have an understanding of how long a second, minute and hour is and what can be done in this time

\* understand that the real life tasks/ events may take seconds, minutes or hours