### Measurement

- Understand language tall/small/long/short/more/less/heavy/ light- and be able to order accordingly
- Be able to use non standard units including: thumbs, handspan, feet and cubes
- Be able to compare and discuss different volumes
- Be able to compare and discuss different weights

- Using simple ICT programmes create bar graphs and pictographs
- Begin to undertake basic data collecting, including tally marks
- Know that signs and charts are ways of communicating information e.g. No running in corridors

# St. Andrew's Primary School and Nursery Class

# Numeracy and Mathematics Milestones

# Shape

- Securely know all 2D shapes and their properties
- Understand faces and relate similarities between 2D shapes and 3D objects
- Be able to group and match 3D objects of different dimensions

# Angles and Symmetry

- Be able to use and understand basic positional language
- Be secure with positional language e.g. Below, above etc.
- Use turtle to follow basic positions, routes and movements
- Explore symmetry in their environment e.g. Butterfly wings, leaves, flowers, pairs of shoes, signs etc
- know that in simple line symmetry one half of a picture or pattern is a mirror image of the other
- Use language associated with symmetry, e.g. Turn, flip over, patterns, symmetrical, reflections, match, different

# **Information Handling**

- Be able to sort using Carroll and Venn diagrams to sort by 2 dimensions
- Be able to select own criteria to sort
- Be able to display and create bar graphs bar graphs up to 3 categories
- Be able to interpret and discuss results of bar graphs, pictographs, Carroll and Venn diagrams

contact us at: St. Andrew's Primary School

We would love to hear your views on our

Mathematics and Numeracy Milestones. Please

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The Milestones outlined in this booklet set the **minimum** expectations we have for the children in St. Andrew's within Numeracy and Mathematics for our nursery pre-school children.

It is our aim to ensure a smooth transition for our children into Primary 1 with a clear focus on clear and progressive learning pathways.

The Milestones are split into the following sections:

- Estimation & Rounding
- Number & Number Processes and Patterns & Relationships
- Fractions, Decimals and Percentages
- Money
- Time
- Measurement
- Shape
- Angles and Symmetry
- Information Handling

Under each heading there is detail about the specific learning children will experience.

### **Estimation & Rounding**

- Recognise quantities at a quick glance using dominoes or cards with regular number patterns
- Estimate the size of an object by comparing it with one of a known size e.g This is what 10 looks like, how many might there be?
- Use number names and related vocabulary in discussions about size and amount, e.g. larger/smaller, more than/less than, guess, about, same, different

# Number & Number Processes and Patterns & Relationships

- Count up and down to 20
- Know odd numbers to 19 and even numbers to 20
- Count in 10s to 100
- Recognise and say all numbers from 0-10

- Order objects by size (smallest to biggest / biggest to smallest)
- Order numbers from 0-5
- Count doubles to 10 e.g. double 2=, double 3=
- Know all number bonds to 10
- Be able to correctly form all numbers from 0-20
- Match quantity to numbers 0-5
- Match numbers to words from 0-20
- Mentally calculate 1 or 2 more and less than
- Identify number more/ fewer/ less than/ larger than/ smaller than between 0-20
- Identify number after/ before/ between 0-20
- Understand the language- add, plus, more, together, +
- Record formal addition
- Count sets of 2 (using pictures) and add together
- Count sets of 2 (using concrete matrials) and add together
- Use number line to add to 10
- Mentally add 0
- Recognise order does not affect answer e.g. 1+2 same as 2+1
- With support can apply addition skills to complete complimentary addition
- Mentally subtract 1 and 2
- Mentally subtract 0
- Mentally subtract a number from itself
- Identify language- take away, minus, subtract, find the difference, -, fewer
- Record formal subtraction
- Use pictures to physically 'cross' and take away
- Use cubes (concrete materials) to take away
- Use number line to take away
- Understand larger number comes first when setting out subtraction sums
- Mentally subtract within 5
- Recognise a link between addition and subtraction using visual aids

## **Fractions, Decimals and Percentages**

- Understand that constructing fair shares from a whole object requires splitting it into equal sized parts
- Understand that constructing fair shares from a whole collection requires splitting it into equal sized groups
- Know the link between sharing into two equal portions and the concept of 'halving'
- Use the language of sharing and fractions in play and everyday situations e.g. half a cup of milk, half price sale, equal, the same

#### Money

- Recognise all coins to £2
- Be able to order coins by value
- Distinguish between pounds and pence
- Add 1p, 2p and 5p to the value of 10p
- Show/ layout coins to value of 10p
- Appreciate that the exact amount, or a greater amount, of money can be used to pay for items
- Be aware that change is given when more money is paid than the cost of the item

#### Time

- Recite the days of the week in order
- Understand the difference between night and day
- Awareness of the seasons
- Be able to sequence the events of the day
- Know that time is related to the clock
- Securely know days of the week and months of the year
- Recognise o'clock- digital, analogue and written
- Know the seasons in order and key features
- Be able to sequence key events of the day
- Can distinguish between night, day, evening, morning and afternoon