# **Mathematics**

All pupils at The Bridge School follow the requirements specified in the Foundation Stage and the National Curriculum. Appropriate modification and differentiation is implemented in order to meet the special educational needs of individual pupils. A co-ordinated multisensory approach to many subject areas enables pupils with higher levels of difficulty to develop and consolidate skills through a breadth of appropriate focused experiences and activities. We also plan for opportunities to develop and apply key mathematical skills, which include, number, shape, space and measure and handling data, throughout the year through the Creative Curriculum.

The mathematics teaching at The Bridge School is geared towards enabling each pupil to develop within their capabilities the mathematical skills and understanding required throughout life. We aim to increase pupils' confidence in maths so they are able to express themselves and their ideas using the language of maths. We are continually aiming to raise the standards of achievement.

#### **TEACHING AND LEARNING**

The teaching of maths at The Bridge provides opportunities for:

- Group work
- Paired work
- Whole class teaching

Individual work Pupils engage in:

- The development of mental strategies
- Practical work
- Investigational work
- Problem- solving
- Consolidation of basic skills and routines

Many of our children use alternative and/or augmentative means of communication other than speech; these include eye pointing, symbols, signing, switches and communication aids. Recording in mathematics for some children involves using technological aids and observational assessment, but some may also engage in:

- Mathematical discussion
- Written methods

We endeavour to set work that is challenging and motivating and which encourages the pupils to talk about what they have been doing.

### Play skills Activities

Below are a collection of sensory activities you could take part in with your child, at home, to develop their numeracy understanding further.

### **Problem solving**

- Find a hand in the sand, in the washing up bowl
- Play "Peek-a-boo" Cover your head and the child's head with chiffon and other materials
- Place torch or music box under a cover and then reveal it
- Taking turns -Using an activity or material a pupil likes to establish a simple pattern e.g.
  - o Roll a ball
  - o Bang a surface
  - Action games e.g. row, row, row your boat
  - Wait a turn for a swing
  - Clap together
  - Take a drink

#### Number

- Working with sound and vision turn a radio, TV, CD player or computer on and off, the sound and pictures appear and disappear
- Place/knock favoured object in a plastic bag, in a paper bag, in a tin, in a tube
- Tickle a child's hand or foot when covered with cloth so they move, feel and watch
- Count objects, sing number rhymes
- Listen to one repeated sound that is very interesting.
  - Beat a drum
  - Put an o loop tape
  - Chimes o Bells (and other musical instruments)

#### **Space, Shape and Measure**

- Put sinking and floating objects in a bowl, then colour the water so the object cannot be seen
- Use chiffon scarf or gauze to mould around the shape of a desired toy or other object then ...
  - Half hide a toy with slightly thicker material
  - o Gradually cover the toy with both materials
  - Then cover the toy with just the thicker material

#### • Orientating towards an object

- Reach and grab at interesting objects
- Swipe a mobile
- o Roll a ball to and fro

### • Responding to changes in your immediate environment

- Changing a routine
- o warm/cold water
- Windy/still (fan)
- Lights on/off
- o Going on a walk

#### Matching Shapes

- Eggs in an egg box
- Fingers into gloves
- Sets of pots and pans
- Measuring spoons
- Long and short ribbons
- Long and short scarves
- Cup and saucers
- Fingers into ring

# **Developing Play based Activities**

#### **Problem solving**

- Sing number songs (change the number to suit your child)
  - Ten green bottles
  - Five Little Ducks
  - Five little speckled frogs
- Fill the bag with bricks, fill the plant pot with soil, pour water from one container into another, etc.
- Sort objects or pictures into groups or piles of one and lots to show contrast
  - o Pasta
  - o Fruit
  - Vegetables
  - Socks

#### Number

- Sharing a cake between a group of people
  - o Sharing fruit, play dough, bread etc.
- 'Shop' Role play experience giving money to buy an item
- Counting
  - Number of socks
  - Teddies
  - o Fruit
  - o Vegetables

### Space, Shape and Measure

- Gain experience of time and capacity
  - cookery activities
  - o hide and seek
- Gain experience of shapes
  - Moulding play dough
  - o Bubbles
  - Sand and water play

## **Handling Data**

- Sort objects
  - o Fit all the balls in the basket.
  - Put all the socks in the drawer
  - Put all the furry toys in a box