**Intent:**

At Hindley Nursery School we will provide activities that allow children to develop key skills in counting, calculating and using numbers, as well as matching, classifying, recognising patterns, shapes and measures. We build problem solving and mathematical learning into all aspects of the curriculum to ensure it takes place in a meaningful context for children.

**We intend to:**

* Provide opportunities for children to listen to and join in with number rhymes and songs and play mathematical games
* Give children opportunities to develop problem solving and thinking skills in meaningful contexts
* Encourage children to count in a variety of situations and play activities
* Provide activities that include sorting, comparing, classifying, matching and sequencing
* Support children to recognise and recreate patterns
* Support children’s awareness of shape, space and measure.
* Encourage children to begin to use and recognise numbers
* Provide practical activities that encourage children to record numbers in ways that are meaningful to them – mathematical mark making

***Approach***

Practitioners aim to provide a learning environment that is mathematically rich and promotes problem solving and thinking skills. Correct mathematical language is modelled and children are encouraged to use correct language. Mathematical experiences are promoted through areas of continuous provision to encourage children to talk about, describe and begin to understand how to count, use numbers and work with shape, space and measures. Practitioners build these experiences into play activities across the indoor and outdoor learning environments. The experiences are combined with adult led activities to target, support and challenge children and are complemented by activities that take place as part of the daily routines.

|  |  |  |
| --- | --- | --- |
| **MATHEMATICAL DEVELOPMENT: NUMBER** | | |
|  | **Sequence of learning** | **Our unique Approach** |
| **Two Year Old End Point** | |  |  |  | | --- | --- | --- | |  | |  | | --- | | * Children say numbers spontaneously through play but without real meaning * Children are curious about numbers in the environment * Children recognise ‘how many’ instantly when looking at a small group of objects, e.g. ‘one nose’, ‘two eyes’ | | | * Lots of opportunity to explore the number of objects in a range of different ways * Adults to model counting * Simple problems to solve, one missing… two more.. * Counting opportunities in continuous provision * Comparing amounts – lots, more, same |
| **Rising Three End Point** | * Children enjoy joining in with number rhymes, songs and chants * Children begin to know the sequence of numbers and can recite numbers with increasing accuracy to ten (rote counting) * Children begin to develop understanding of one-to-one correspondence * Children begin to recognise numerals which are personal to them, for e.g. ‘3’ because they are ‘3 years old’ | * Number rhymes and songs using props * Model and children join in with counting * Structured mathematical activities. * Routines and transitions include lots of counting opportunities. |
| **Pre-School End Point** | * Children instantly recognise quantity without object counting (up to 3) * Children can count objects to 10 with one to one correspondence * Children can confidently say ‘how many’ there are * Children begin to write and make makes to represent numbers | * Practitioners model counting, adding up, subitising and writing numerals. |

|  |  |  |
| --- | --- | --- |
| **MATHEMATICAL DEVELOPMENT** | | |
|  | **Sequence of learning** | **Our unique Approach** |
| **Two Year Old End Point** | |  |  |  | | --- | --- | --- | |  |  | * I can recognise that two things are the same shape. * I am able to fit pieces into an inset puzzle. * I can see simple patterns when they are pointed out to me. * I enjoy filling and emptying containers and can recognise when these are full and empty | | * **Adults model** and point out the characteristics of shapes and patterns as children play in malleable and open ended materials. * Adults model language whilst playing big, little, empty, full etc. * Learning environment encourages children to explore enclosures and open ended materials particular in the outdoor environment. |
| **Rising Three End Point** | |  |  |  | | --- | --- | --- | |  |  | * I am beginning to select shapes for a creating purpose, when constructing, creating or mark making. * I am able to name some simple shapes. * I can copy AB pattern and see an error * I can talk about properties that are the same and different with simple objects. * I know when something is full or empty, tall or short, heavy or light. | | * Introduction of more **adult led** activities that focus on mathematical development |
| **Pre-School End Point** | |  |  |  | | --- | --- | --- | |  |  | * I can name some solid 3D shapes and describe their properties. * I understand how shapes can fit and balance together as I explore making enclosures, patterns and new ideas * I can make my own AB patterns and continue a pattern shown to me. * I can order objects by length, height and weight | | * **Differentiated group times** that focus on mathematical development * **Interventions** |