Early Years Maths Audit

The purpose of this audit is to help practitioners to develop their understanding and practice for the Specific Area of Maths.

For environments to be mathematically rich and to impact on children’s learning, they must be interactive, inclusive, usable, organised and changeable.

To achieve this, practitioners need to look at the environment through ‘a child’s eyes’.

Name of setting…………………………………………………

Person completing audit………………………………………

Date started……………………………………………………..

Date revisited…………………………………………………..



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|  | In place | Evidence | Actions |
| **Staff knowledge and attitudes** |  |  |  |
| There is a shared understanding of how children develop mathematically amongst the staff – knowledge, concepts, values, importance |  |  |  |
| Mathematical development and the skills required for children to develop mathematically are communicated to parents through newsletters, displays, workshops and meetings |  |  |  |
| Everyone has a chance to be mathematical (children, parents/carers and staff) |  |  |  |
| Staff are aware of their training needs for maths and CPD opportunities are provided |  |  |  |
| Staff use every opportunity to support, model and develop mathematical language |  |  |  |
| Staff recognise mathematical opportunities in all areas of the provision |  |  |  |
| Staff model and encourage problem solving and critical thinking |  |  |  |
| Staff ensure that pictorial recording and mark making are encouraged as part of the learning process for Maths as well as for Literacy |  |  |  |
| **Observation, Assessment and Planning** |  |  |  |
| Staff use observation to identify *what* children know and show in maths |  |  |  |
| Staff use observation to note *how* children use their mathematical knowledge |  |  |  |
| Staff use assessments to track children’s mathematical development |  |  |  |
| Staff use assessments to inform planning for mathematical development |  |  |  |
| Staff plan focused maths experiences to deepen mathematical understanding |  |  |  |
| Staff plan for an environment which supports children in making decisions about their own mathematical development |  |  |  |
| Staff plan for STEM activities and experiences (Science, Technology, Engineering and Maths) which encourage children to ask questions, investigate, make predictions and test ideas. |  |  |  |
| Staff motivate children to use maths throughout their play |  |  |  |
| Staff use every day routines to support children’s mathematical understanding and vocabulary |  |  |  |
| **Inclusive practice** |  |  |  |
| Staff understand cultural perspectives on maths relevant to all children currently in the setting |  |  |  |
| Staff make adaptations to ensure all children are included in mathematical experiences |  |  |  |
| Resources and interest areas are labelled, with words, pictures, numbers and/or real objects |  |  |  |
| Open ended results are acknowledged and the chance to be wrong, make mistakes and test out theories is valued |  |  |  |
| Children are actively encouraged and given time to explain their mathematical thinking to adults and children |  |  |  |
| Children’s mathematical ideas, interests and fascinations are followed up |  |  |  |
| **Enabling Environments - Displays** |  |  |  |
| Displays include numbers that have been typed and handwritten by both adults and children |  |  |  |
| Displays celebrate children’s achievements in mathematics |  |  |  |
| Children have opportunities to display their own mathematical mark making |  |  |  |
| Displays include numerals in the environment and in everyday life |  |  |  |
| Displays are interactive and are used to promote children’s exploration and curiosity of mathematics |  |  |  |
| Visual aids such as timetables are used effectively |  |  |  |
| Numbers are displayed in English and other languages and scripts |  |  |  |
| Numerals, words and number patterns are displayed in a meaningful way (inside and outside) |  |  |  |
| **Enabling Environments - Resources** |  |  |  |
| Investigation of maths is encouraged through a diverse range of resources and experiences |  |  |  |
| Mathematical resources are accessible throughout the environment, as well as within the mathematics area |  |  |  |
| Children’s ways of recording measuring (capacity, length, mass, time) using standard and non-standard methods is evident |  |  |  |
| The outdoor environment complements and extends the indoor environment regarding maths |  |  |  |
| All environments are well organised, inviting and challenging |  |  |  |
| There are resources and opportunities for maths to take place on a large and small scale |  |  |  |
| Adults encourage children to sort and match including at tidy up time |  |  |  |
| Children access resources and return them independently |  |  |  |
| Children can explore mathematics through movement, e.g. dance, obstacle courses, den-making, travelling games, construction on a large scale |  |  |  |
| Resources to encourage ordering and pattern making are available e.g. a washing line at child height so that children can peg numerals in the correct order or objects to make repeating patterns |  |  |  |
| Opportunities for mathematical mark making are available on a large and small scale both inside and outside. |  |  |  |
| Playground markings or chalked markings support mathematics e.g. shapes, numerals, tracks |  |  |  |
| Number tracks, number squares and a height chart are accessible and used. |  |  |  |
| A variety of resources and ‘targets’ to support scoring and the use of tallies, e.g. basket-ball hoops, beanbags, quoits, skittles are easily available |  |  |  |
| Story and information texts that support understanding are accessible and attention is drawn to the mathematical content in an appropriate age-related way |  |  |  |
| There is a balance between natural and  commercially produced resources to support mathematical exploration |  |  |  |
| Children access games supporting mathematical development independently e.g. lotto, snap, dominoes, track games |  |  |  |
| There are ‘collections’ of objects for children to investigate, sort, sequence, count and make patterns with, e.g. age appropriate resources, boxes, buttons, socks, coins, beads, keys. |  |  |  |