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| **Mathematics: Shape, Space and Measures: Spatial Awareness - Developing Knowledge and Skills Sequentially** | | | |
| **Range/Knowledge** | | **Positive Relationships** | **Enabling Environments** |
| 1. | • Explores space when they are free to move, roll and stretch  • Developing an awareness of their own bodies, that their body has different parts and where these are in relation to each other | • Support babies’ developing awareness of their own bodies e.g. through baby massage and singing songs • During floor play sometimes place objects that are just in or just out of reach, including small objects on cloths that babies can pull towards themselves. | •Provide opportunities for babies to move freely  on carpets, grass etc. Observe and sensitively support babies’ play and give them long stretches of uninterrupted time to explore.  • Provide low mirrors to support babies to develop a  body awareness |
| 2. | • Explores space around them and engages with position and direction, such as pointing to where they would like to go | • Use spatial words during every-day play and routines. or one-word comments e.g. as you get children *in* and *out* of a highchair.  • Play hide and reveal games with objects in boxes and under cups. • Support babies’ physical experience of positions and direction, e.g. describing *up* and *down*. | • Play games that involve curling and stretching, popping *up* and bobbing *down.* • Provide boxes, cloths and bags for children to store, hide and transport items.  • Provide nested boxes, cups and toys of different sizes that fit inside each other. • Share books that provide opportunities to use spatial language and describe movement |
| 3. | • Enjoys filling and emptying containers  • Investigates fitting themselves inside and moving through spaces | • Model thinking during tidy up routines to promote reasoning and logic about where things fit/are kept • Support children’s interest in body-sized spaces -provide commentary on the child going *inside, under, over, between/squeezing through* • Look for opportunities to use spatial language during play activities. | • Designate specific places or spaces for items to be kept and fitted into for tidying • Respect children’s urge to explore spaces, to get inside and move between • Build towers *up* for the child to knock *down.* • Provide shape sorters and packaging wherechildren can hide, enclose or post items through holes. |
| 4. | • Moves their bodies and toys around objects and explores fitting into spaces  • Begins to remember their way around familiar environments  • Responds to some spatial and positional language  • Explores how things look from different viewpoints including things that are near or far away | • Encourage children to predict what they will see next on familiar route • Take everyday opportunities to use words for position and direction accompanied by gesture (e.g. *in, on, inside, under, over*) Use equivalent terms for these in home languages through liaison with families • Enjoy games involving jumping, running/hiding/make simple obstacle courses, e.g. *going up/down*.  • Model your thinking when arranging things, using some position words • Help children create simple roads/rail tracks - talk about position • Value children’s explorations of spaces and viewpoints and their interest in how things look different. | • Design outdoor spaces where children learn via a variety of spatial experiences (*going* *under, over, around, on top, through*) and hear spatial language in context • Encourage children to communicate freely their mathematical thinking through gesture, talk and graphical signs • Plan stimulating indoor/outdoor spaces where children make choices about where to go and create their own routes.  • Provide materials to create trails.  • Provide resources for transporting. |
| 5. | • Responds to and uses language of position and direction  • Predicts, moves/rotates objects to fit the space or create the shape they would like | • When children are exploring, use language of position/direction in context (*in, on, inside, under, over,* *between, beside, next to through, along*, including relative terms which depend on where you are, e.g. *behind, in front of, forwards/backwards*). Use equivalent terms for these in home languages - in liaison with families.  • On walks/in pictures/while playing, point out how things/people that are faraway look smaller • Support children’s problem solving when they are creating rail tracks/road layouts • In block play, support and challenge experienced builders to make bridges and enclosures • Encourage perseverance with jigsaws, e.g demonstrate “hovering” jigsaw pieces to check if they fit. | • Provide spaces to display children’s ongoing  mathematical thinking, e.g. their own ways of representing their thinking and scribing children’s words.  • Provide opportunities for children to explore position themselves *inside, behind, on top* etc.  • Provide picture books to stimulate discussion about position and direction • Create trails and treasure hunts with the children • Organise the indoor/outdoor environment with outlines for objects or specific places for children to tidy up items by fitting them into the designated space. |
| 6. | • Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints  • Investigates turning and flipping objects in order to make shapes fit and create models; predicting/visualising how they will look (spatial reasoning)  • May enjoy making simple maps of familiar and  imaginative environments, with landmarks | • Encourage use of relative terms (*in front of, behind, before and after, in a line, next to and between)*  • Encourage children to explore what they can see from different viewpoints  • Encourage children to describe position /give directions in play*/*in daily routines  • Encourage children to create scaled-down models such as in small world play  • When children are fitting shapes into an outline or making a modelfrom a 2D picture, help them to select more spatially challengingactivities  • Encourage children to make maps of routes they have walked ortravelled in some way. | • Play barrier games (where players have an identical set of objects which are hidden from each other; one player makes an arrangement of objects and gives instructions to the other to try to make the same arrangement).  • Plan opportunities for children to describe and recall familiar routes.  • Engage families in taking photos of familiar things  from different viewpoints |