National Day Nurseries Association

*Brighter thinking for early years

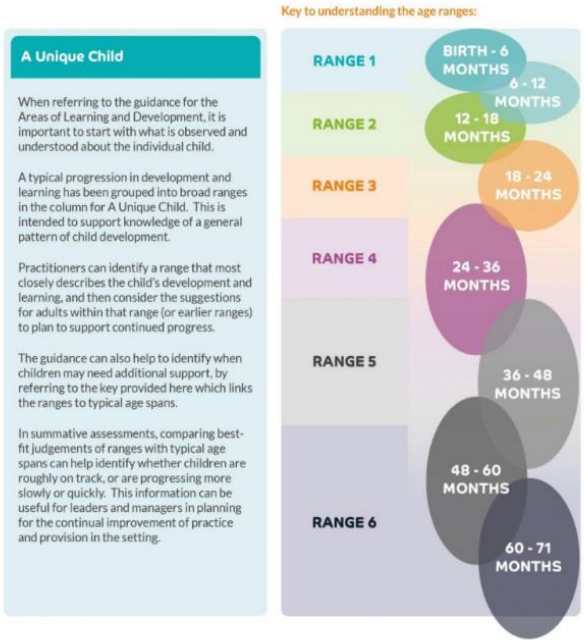
Maths Champions

Learning Trajectory
Spatial Awareness

Range	**Unique Child:** What a child might be doing	**Positive Relationships:** what adults might do	**Enabling Environments:** what adults might provide
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. - Take opportunities to 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 logic and reasoning about where things fit in or are kept. -Support children's interest in body-sized spaces and provide commentary on the child going inside, under, over, between and 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 where children 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 a familiar route. - Take everyday opportunities to use words for position and direction accompanied by gesture (e.g. in, on, inside, under, over) using equivalent terms for these in home languages through liaison with families where possible. - Enjoy games involving jumping, running and hiding and make very simple obstacle courses, e.g. going up and down. - Model your thinking when arranging things, using some position words. - Help children to create simple roads and rail tracks and talk about position. - Value children's explorations of spaces and viewpoints and their interest in how things look different.	-Design outdoor spaces where children can learn through a variety of spatial experiences (going under, over, around, on top, through) and hear spatial language in context. -Encourage children to freely communicate their mathematical thinking through gesture, talk and graphical signs. - Plan stimulating indoor and 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.	-When children are exploring, use the language of position and direction in context (*in, on, inside, under, over,* progressing to *between, beside, next to through, along*, including relative terms which depend on where you are, e.g. *behind, in front of,*	- Provide spaces to display children's ongoing mathematical thinking, e.g. their own ways of representing their thinking and scribing children's words.

Created by Sue Gifford

	Predicts, moves and rotates objects to fit the space or create the shape they would like.	*forwards, backwards*) using equivalent terms for these in home languages through liaison with families where possible. - On walks, in pictures or while playing, point out how things or people that are far away look smaller. - Support children in their problem solving when they are creating rail tracks and road layouts. - In block play, sensitively support and challenge experienced builders to make bridges and enclosures. - Encourage children to persevere with jigsaws, perhaps demonstrating "hovering" jigsaw pieces to check if they will fit.	- Provide opportunities for children to explore position themselves inside, behind, on top and so on. - Provide picture books to stimulate discussion about position and direction. - Create trails and treasure hunts with the children. - Organise the indoor and 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 and visualising how they will look (spatial reasoning). May enjoy making simple maps of familiar and imaginative environments, with landmarks.	-Encourage the use of relative terms (in front of, behind, before and after, in a line, next to and between). - Encourage children to explore what can be seen from different viewpoints. - Encourage children to describe position and give directions in play and in everyday 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 model from a 2D picture, help them to select more spatially challenging activities. - Encourage children to make maps of routes they have walked or travelled 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.



Reference: Birth to 5 Matters – Non-statutory guidance for the Early Years Foundation Stage
www.birthto5matters.org.uk