

# 3-4 years

# Spatial Reasoning Toolkit

At this age children are developing understanding of aspects of shape and space including composition (how shapes fit together), movements like turning and flipping, symmetry and scale. Children are beginning to recognise and predict familiar routes (e.g. to the park).



next to,  
turn, corner,  
pointy, curved,  
straight

## Puzzles

Moving, turning and predicting how pieces will fit



under, up,  
down, over,  
upside down

## Books

Using spatial language



through,  
over, around,  
under

## Obstacle courses

Experiencing and talking about directions



in front of,  
sideways,  
bigger,  
smaller

## Small world play

Understanding position and direction



straight, bend,  
corner, across,  
in front of,  
after, long way,  
smaller

## Out and about

Remembering and predicting routes, landmarks and directions, discussing perspectives and distance



same on  
both sides,  
reflection,  
pattern

## Pattern making and spotting

Arranging objects to make spatial patterns (position), noticing spatial patterns including symmetry in everyday objects



together, next  
to, slanting,  
pointy, curved,  
corner

## Block play

Using size and shape relationships as well as parts and whole to select blocks for specific purposes/structures

EARLY CHILDHOOD  
MATHS GROUP

<https://doi.org/10.31234/osf.io/jnwpu>  
<https://earlymaths.org/spatial-reasoning/>  
@EChildhoodMaths

