

6-7 years

Spatial Reasoning Toolkit

At this age children are developing their ability to visualise what objects will look like from different viewpoints (including from above). They are beginning to use the correct relative distances to create scaled models and maps and can decompose shapes in different ways (e.g. predicting nets and cross-sections). Children are also developing their ability to visualise transformations (e.g. predicting half-turn rotations, or predicting the path and distance of travelling objects).



half-way,
corner to corner,
opposite,
cuboid

Paper folding and nets

Developing shape composition and decomposition through visualisation and prediction



diagonal,
across,
opposite,
further

Ball games

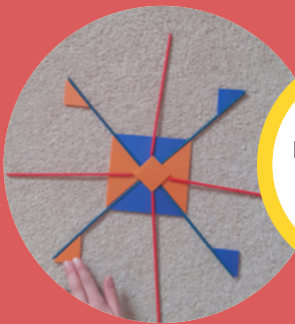
Predicting path and distance



left, right, flip
alongside
corner

Puzzles & pattern blocks

Predicting what shapes will look like after being rotated/flipped/combined



symmetry,
back to front,
opposite,
reflection

Pattern making

Understanding symmetry (rotational and reflective)



nearer, further,
between,
correct size

Small world play

Developing complex scaled environments and interpreting what characters may see



left, right,
further,
opposite,
next to

Maps

Developing navigation, and understanding of scale



opposite,
distant,
near,
above

Books

Developing navigation through acting out and discussing journeys and directions



above,
below,
overlapping,
first

Construction

Beginning to use exploded diagrams to construct models

EARLY
CHILDHOOD
MATHS GROUP

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

