

## Shape and space: Spatial awareness and location – Suggestions for children's learning

### The child has opportunities to...

#### Understand and connect

- discuss the location and movement of objects on images, interactive maps and their own drawings.
- position and locate objects in the environment, e.g., 'hide and seek' games.
- explore the movement and positions of their own bodies (turns, moving body parts at certain angles, in certain redirections etc.), e.g., *sports, dance, games such as Simon Says*.
- refer to and use cardinal directions (north, south, east, west, etc.), e.g., *orientation games*.
- describe locations on maps or grids on the full co-ordinate plane using the x-axis and y-axis.



- use appropriate language when describing the position of people or objects relative to other people or objects, e.g., *near, far, beside, to the left*.
- give and follow directions with increased accuracy, e.g., *turn right, take a half turn clockwise, take ten small steps in a north-westerly direction*.
- represent real-life or imagined locations (e.g., *story settings*) through maps, drawings or models from a range of views, e.g., *birds eye, front elevation*.
- explore and discuss location, direction, scale and distance on digital and/or conventional maps of the local area or other areas of interest.
- use knowledge of angle types (e.g., *acute, right angle*) to make conjectures about the measure of unknown angles, e.g., *this angle looks slightly less than a right angle, so maybe it is 85 degrees*.



#### Communicate

#### Reason

- deduce the location of specific places or objects on a map from explicit directions, clues or partial information.
- examine and discuss symbols on road signs that inform travel routes, e.g., *t-junctions, no left turn*.
- engage in playful tasks that require adapting routes, e.g., *describe/demonstrate the route in reverse, test different routes to determine the most efficient*.
- estimate or deduce distances between different locations on a map from partial information, e.g., *the distance from A to B is 100km and the distance from B to C is approximately twice that*.
- determine missing angles in shapes and intersecting lines by estimating, measuring, and/or calculating, e.g., *to find the missing angle in an irregular triangle, I can subtract the sum of the two known angles from 180 degrees*.



- move in response to objects in their path in their environment, e.g., *through obstacle courses*.
- apply spatial awareness in problem-solving tasks, e.g., *identify the location of an object on a treasure map, in a scavenger hunt or in 'hide and seek' games*.
- solve problems that involve creating and/or following digital and conventional maps, e.g., *imagined rescue missions, group orienteering challenges*.
- play games involving placing and locating co-ordinate points in real-life and imagined contexts, e.g., *Battleship, designing co-ordinate art*.
- engage in tasks involving spacing and position of objects on a map/co-ordinate plane, on a floor plan, etc., e.g., *designing a bedroom for the three bears, designing a theme park with a specific number of rides and amenities*.



#### Apply and problem-solve