Outdoor Learning **Year 5**

Activity 1: Measure the fixed man-made features

LO: Use standard units of measurement

Context: In the courtyard focusing on metres, centimetres and millimetres

PoS: Ma1,
Ma2 – 1c, d, 2i, j, 3a, k, 4b,
Ma3 – 1a, b, c, d, h, 2c, d, 4a, e,
Ma4 – 1a, c, d, e, 2

Vocabulary: Millimetres, centimetres, metres, inches, feet, square feet, length, width, height, depth, perimeter, 2-D, 3-D, corners, vertices, curved, straight, vertical, horizontal

Resources: Tape measures, trundle wheels, 5m long pieces of string, recording sheet, pencils, clipboards

Activity: Can be done in pairs or as individuals

Challenge the children to measure as many fixed man-made structures in the garden during the specified time (eg 20 minutes). Stress the importance of accurate measurement. Ask them how they might measure curved lines. Discuss briefly then show them the string. Demonstrate how to measure the perimeter of the sun dial top using the string. How could they measure around the pond if their string is only 5m long?

Draw the children's attention to a vegetable patch and a raised flower bed – what is different about these two features of the garden? 2D and 3D

Give each child/pair a clipboard, string, pencil, tape measure and recording sheet.

Discuss the children's measurements as a group, compare some of the children's results eg – did they get the same measurements for the flower beds? Those that have different measurements could measure the feature together as a group and discuss the results.

Extension:

The children can identify: Which have corners? Which have vertices? Which have horizontal lines? Which have vertical lines?

Follow up in the classroom:

Draw the features on graph paper using a key to show the different representations of the outside measurements. For example:

Real measurement	Represented measurement
1m	10cm
1/2m	5cm
10cm	1cm
1cm	1mm

Why would these representations be appropriate?