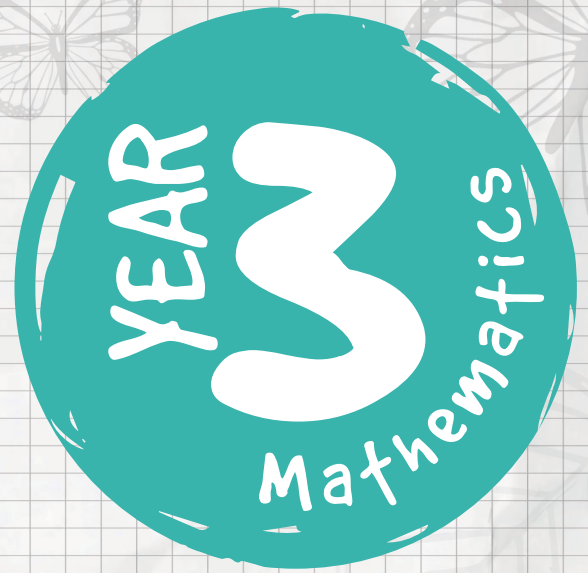


# Outdoor Learning Lesson Plan by Nature Play QLD

## Measurement and Geometry - Location and Transformation

Identify symmetry in the environment (ACMMG066)

Cross Curricular Links: English: Language – Language for social interactions (ACELA1476), Literacy – Listening and speaking interactions (ACELY1676) The Arts: Visual Arts – (ACAVAM111), (ACAVAM112)



**Class:** .....

**Date:** .....

**Time:** .....

**Weather:** .....

### Resources:

- Mirrors (min 1 per 3 children)
- Variety of objects found outside (small stones, leaves, sticks, seedpods, flowers)
- String (optional for Bonus Activity)
- Camera(s)/tablet(s) (optional for documenting introduction and main activity)
- Clipboards, paper and crayons (optional for introduction)

### Introduction: Symmetry Hunt (20 mins)

Discuss with the class what makes an object or thing symmetrical. Ask the children if they can think of any symmetrical things in the outdoor environment. Use a natural symmetrical object to demonstrate how they can use a mirror along the centre 'mirror line' to check whether something is symmetrical.

Tell the children they are going to be 'Nature Symmetry Detectives' and instruct them to find as many symmetrical objects inside a designated outdoor space as they can in 10 minutes (optional to take photographs, collect objects, produce crayon rubbings or sketches of what they find). The children may wish to use small mirrors to check if an object is symmetrical.

### Main Activity: Symmetrical Artwork (20-30 mins)

Ask the children to work in groups and collect loose natural material in the designated outdoor space (preferably not still growing) to create symmetrical art on the ground.

Encourage children to work collaboratively and to regularly check that their work is symmetrical by using their mirrors along their chosen centre 'mirror line'.

### Discussion: (5-10 mins)

Invite each group to share their symmetrical artworks with the class. Encourage the children to describe the materials they have used, their reasoning behind their choices and where the mirror line belongs.

### Bonus Activity: (15 mins)

This is a little like symmetrical 'Simon Says'. Explain that in front of the group there is a mirror line (this can be a rope tied horizontally between 2 trees or a goal post). Invite a child to volunteer to be the 'real-life' person and to stand 2 steps back from the string or goal post.

An educator demonstrates how to become a symmetrical 'reflection' by standing 2 steps back from the string on the 'reflection' side. Ask the 'real-life' child to make moves that are then mirrored by the Educator (for example raise an arm and the educator does the same...) Invite children to find a partner and take it in turns to be the 'real-life' person and the 'reflection'.