

# Outdoor Learning Lesson Plan

## by Nature Play QLD

### Measurement and Geometry - Geometric Reasoning

- Investigate, with and without digital technologies, angles on a straight line, angles at a point and vertically opposite angles. Use results to find unknown angles (ACMMG141)



**Class:** .....

**Date:** .....

**Time:** .....

**Weather:** .....

#### Resources:

- Sticks
- Counters or natural materials in 3 different colours or shapes.

#### Introduction: (15 mins)

Angles are not only found in textbooks, you can also find angles in everyday objects, outdoors and in nature.

As a class, discuss how to identify a right angle, an obtuse angle and an acute angle. Allow your students to explore the area around your classroom or an appropriate area in your school grounds. How many right angles, how many obtuse angles and how many acute angles can they find? Ask the students to share what examples of angles they found with the class.

#### Main Activity: (20 mins)

Ask your students to find up to 10 sticks to make a simple picture or pattern.

Once the students have created their picture or pattern, ask them find right angles, obtuse angles and acute angles and mark them with different coloured counters. For example, red counters for right angles, green counters for obtuse angles and yellow counters for acute angles. Instead of using different coloured counters you can also use different natural materials such as pebbles or different coloured seeds to identify different types of angles.

Ask the children to observe whether they can find any vertically opposite angles in their design and discuss what this means for these angles.

#### Bonus Activity: (15 mins)

Challenge the group to make a new design that uses as many right angles as possible using 10 sticks.

