

Drawing a Maze

Upper Primary

Activity 1

'My Outdoor Classroom' Lesson Plan

Mathematics

- Create symmetrical patterns, pictures and shapes with and without digital technologies (ACMMG091)

Elaborate on, extend and integrate this activity with other learning where possible.

Resources:

- Printed 'My Outdoor Classroom' Passport Booklets
- Chalk (it helps to have a mix of colours)
- Optional: some toy maze examples purchased from the \$2 (or similar) store

Class :

Date :

Weather :

Introduction

This activity promotes problem solving, critical thinking and spatial awareness.

Instead of putting pen to paper, put chalk to playground and let students get lost drawing their own labyrinth.

Before You Head Out



Consider using a camera or the Nature Passport App to take photos and record the activity (See the Reflection/Discussion section for further details).

- As a class discuss what a maze is.
- Show some examples of mazes (picture print outs or handheld maze games) and have students have a go at solving them.
- As a class, select a maze to replicate outside on the pavement (there is an example in the 'Drawing a Maze' activity within the Nature Passport app). Discuss the scale at which you will reproduce your selected map.
- Brainstorm some problems you may encounter while drawing the big maze, and try to come up with some possible solutions before you head outside.



Drawing a Maze Activity Steps

- 1 Find an open space of playground or pavement without any markings on the ground.
- 2 Put chalk to pavement and replicate the maze you selected in class on a large scale by drawing it on the ground.
- 3 Use a timer and see how long it takes your class to solve the maze.
- 4 If you're feeling adventurous, make your maze more elaborate by adding dead ends and secret hideaways.
- 5 Make the chalk available for students to design their own mazes on the paving and challenge their classmates to complete them.



You can download the free **Nature Passport** app on both the **App Store** and **Google Play Store** to complete this activity and many more!

Visit the website at www.naturepassport.org, where you'll find lots of useful information for families and teachers on how best to use Nature Passport.

Reflection/Discussion

- As a class, discuss what makes a maze more challenging (eg: lots of dead ends and alternative paths) and what strategies could be used to overcome these challenges (eg: marking paths already tested that lead to dead ends).
- Talk about how mazes are part of our everyday life - getting from home to school for example is a type of maze - it's a network of streets that we have to navigate through to get from A to B. Ask students to think about what helps us navigate through everyday mazes (eg: street signs, Google Maps, map books, memorised knowledge).
- Ask students to think about how they would navigate everyday mazes (getting from A to B) if they didn't have these navigation clues?
- If possible, reach out to your school's Aboriginal and Islander Education Officer (AIEO) or someone from the local community to come talk to the class about how Aboriginal people used the sun, stars, animal tracks and other means to navigate. This website is also a great resource: <http://www.aboriginalastronomy.com.au/>

