

## 'My Outdoor Classroom' Lesson Plan

### Science

- Represent and communicate observations and ideas in a variety of ways (AC SIS029)
- Compare observations with those of others (AC SIS041)

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

# Dig a Finger Deep Hole

## Lower Primary

### Activity 4

#### Resources:

- Printed 'My Outdoor Classroom' Passport Booklets
- Notepad (Field Journal)
- Digging Implements
- Pen
- Magnifying glass (optional)
- Items for hiding (optional)

Class : .....

Date : .....

Weather : .....

### Introduction

Have your students venture on a journey of discovery, hone their observation skills and let their imagination go wild. A passion for geology starts here!

### 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).*

- Discuss geology in relation to the lesson. Explain that it is a geologist's job to understand the Earth's materials, its history, and how it has changed over time. Part of that job involves digging or "excavation"!
- As a class, talk about what you think you'll find when your group starts digging underground today.
- Talk about the importance of geologists recording their excavation. Hone into the environment and discuss the type of things you might record in your Nature Passport booklet or Field Journal as part of your excavation (eg: the weather conditions, soil type and colour, surrounding plants or wildlife).
- Let the class know that if they plan on digging holes anywhere, they should always make sure they have permission to dig. They should also fill in their holes and leave the environment the way they found it when finished (eg: raking over the ground/sand).

- Distribute magnifying glasses if available.
- Divide your class into small groups of 2-4 students and distribute items for hiding.

### Dig a Finger Deep Hole Activity Steps

- 1 Go into the schoolyard and find a suitable spot to dig holes. Make sure you're not disturbing anything living where you choose to dig.
- 2 At your "excavation site", dig a finger-deep hole.
- 3 Take a close look inside the excavated space below. If you have a magnifying glass, use it to enhance your investigation!
- 4 Draw a diagram, take photos or make notes about what you find. Record your discoveries.
- 5 Hide something in your finger-deep-hole, cover it up, then ask a school mate or teacher to excavate the area to uncover your special artefact. (You could hide: shiny gemstones, dinosaur toys, special painted rocks or a special item from nature.)
- 6 Don't forget to fill in your holes and leave the environment the way you found it when you're done.

#### Tips:

- Consider swapping digging in the ground to digging in a sand tray which already has objects buried (by the teacher) in it.
- Have half of the groups start on their dig while the remaining half work on recording the environmental conditions in their Nature Passport booklet or Field Guide , then swap.
- As well as drawing and writing, consider collecting and glueing some of the surrounding materials (eg: leaves) into the Nature Passport booklet or Field Journal.



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](http://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, reflect on what you found as part of your excavation.
- Show photos and talk about what geologists might find when they dig - dinosaur bones, fossils, gold!

- Show photos and talk about the type of tools geologists might use when they dig (anything from tiny picks and brushes to giant diggers etc).

### Elaboration/Extension Ideas

- Introduce grid referencing as part of this project.
- Discuss how a grid can be used to create coordinates to reference an area. Show examples using a map book.
- Discuss how and why you might use a grid for your excavation project (eg: so that you don't excavate the same area more than once, so you know exactly where you still need to excavate).
- Create a grid at your dig site using skipping ropes, line-marking spray paint or landscape chalk.
- Allocate each group coordinates within the grid to dig at (ensure there are some spaces within your grid remain unallocated so that groups aren't working on top of each other).

#### Note:

- *This extension idea requires skipping ropes or line marking spray paint for marking out a grid (see Elaboration for details).*

### Teacher Observations

- What worked well:
  
  
  
  
  
  
  
  
  
  
- What I would do differently next time:

An initiative of



supported by



Department of  
**Local Government, Sport  
and Cultural Industries**



Department of  
**Education**

The development of this lesson  
plan is proudly supported by  
the Department of Education.

Print the Nature Passport Booklets for  
your students to use with this lesson!

