

UNIT 4

SOIL AND ROCKS

SCIENCE OBJECTIVES

By the end of this unit, students will be able to:

- State that there are different kinds of soil.
- State that stones and rocks have different colours and textures.
- Conduct a fair test to find out which material drains water best.

LANGUAGE OBJECTIVES

In this unit, students will have opportunities to use:

- Words relating to soil, stones and rocks.
- The sentence structures:
 - “I can see (plant material/sand).” to describe the composition of soil.
 - “These stones are (round/sharp).” to describe the common features of some stones.
 - “(Stones) drain water (best).” to describe the drainage properties of materials.

UNIT OVERVIEW

In this unit, we want students to develop an interest in the earth and its natural features. They learn about different types of soil, and stones and rocks with different qualities.

The unit cover page shows rocky material in the form of a mountain and tiny pieces of rock that form the soil. The riddle introduces stones and rocks. Stones are small rocks, usually with edges that have been rounded by water or wind. Lesson 1 introduces students to soil and its different components, including sand, stones and living material. Lesson 2 encourages students to describe and classify stones and rocks from their own observations. In Lesson 3, we take a look at how water drains through different materials, leading students to appreciate that particle size is an important feature of drainage.

第四单元 土壤和岩石

科学目标

通过本单元的学习，学生将能够：

- 说出土壤有不同的类型。
- 说出石头和岩石有不同的颜色和质地。
- 进行公平实验，找出哪种材料排水最快。

语言目标

在本单元中，学生将有机会使用：

- 与土壤、石头和岩石相关的词汇。
- 句型：
“I can see (plant material/sand).” 来描述土壤的组成。
“These stones are (round/sharp).” 来描述一些石头的共同特征。
“(Stones) drain water (best).” 来描述材料的排水性。

单元概述

在本单元中，我们希望培养学生对地球及其自然特征的兴趣。学生将会学习具有不同性质的各类土壤、石头和岩石。

篇章页展示了形成山脉的岩石和形成土壤的细小的岩石颗粒。谜语引入了石头和岩石。石头是较小的岩石，通常是水或风的作用磨圆了它们的棱角。第一课向学生介绍了土壤及其组成成分，包括沙子、石头和生物。第二课鼓励学生根据自己的观察对石头和岩石进行描述和分类。在第三课中，我们将探究不同材料的排水性，引导学生理解颗粒大小是影响材料排水性的重要因素。