



Virtual Field Trip Components

Video Introduction

This video introduces the virtual field trip and Bizzy the Bee, an animated character created by the MUN Botanical Garden for our virtual field trips.

Section 1: Know Your Soil

In this section, students will learn about the different sizes of rock particles that can be found in soil. Students will play a virtual game that quizzes them on the sizes of rock particles found in different environments and objects, and then will make observations about their own soil samples and determine what size the rock particles are in these samples.

- Educational Video: Different Types of Soil
- Virtual Game: Soil Particle Sizes Quiz
- In-class Activity: Exploring Soils

Section 2: Slip Slidin' Away

In this section, students will learn about how different soils absorb water.

Students can watch a video experiment about which soils absorb the most and least water, or you can run this experiment in class with the detailed instructions provided. Then they will play along with a virtual game about which soils can hold the most water, and will play at being water droplets and soil particles themselves in Peeking Through the Pores.

- Educational Video: Water Absorption at Oxen Pond
- In-class Activity: Funnel Fun (Video or In-class Demonstration)
- Virtual Game: Water, Water, Everywhere, But How Much Can You Hold?
- In-Class Physical Activity: Peeking Through the Pores



Section 3: Living Soil

In this section, students will learn about how organisms live in and interact with soils. Students will go on a virtual tour of the MUN Botanical Garden, where we will take a deep dive into some soils in our Garden and our surrounding trails. Students will then have fun acting out different examples of soil-dwelling living things, and then play a virtual memory game about those creatures. The section concludes with a creative writing exercise where students put themselves in the place of a worm wiggling down through its soil home.

- Educational Video: Home Sweet Soil
- Virtual Tour of the MUN Botanical Garden
- In-class Game: Soil Creatures
- Virtual Game: Find Me If You Can!
- In-class Activity: Write Like A Worm

Video Conclusion

This video reviews all the material covered in the virtual field trip.

Supplemental Virtual Game: Soil Horizons

This game quizzes students on the different layers of the soil: the O, A, B, C and R Horizons.

Supplemental Educational Video: Composting

This video explains the basics of composting: why we should compost, and how it happens.

This is a great additional resource if students want to know more about organic material in soil, if you want to start composting in your classroom, or if you want to encourage students to start composting at home.



Curriculum Links

- 1.0 Pose questions that lead to exploration and investigation.
- 2.0 Communicate using scientific terminology.
- 3.0 Investigate a variety of soils and find similarities and differences among them.
- 4.0 Communicate while investigating and exploring.
- 5.0 Investigate and describe soil components.
- 7.0 Describe the effect of moisture on the characteristics of soil.
- 8.0 Sequence or group materials and objects.
- 9.0 Compare the absorption of water by different soils.
- 10.0 Make and record observations and measurements.
- 13.0 Investigate and describe how living things affect and are affected by soils.
- 14.0 Propose an answer to an initial question or problem and draw a simple conclusion.
- 16.0 Predict based on an observed pattern.
- 17.0 Communicate procedures and results.