K-12 IYS Activity



Summary

Soil is a living entity made up of a diversity of organisms living in a complex three dimensional habitat. Soil organisms and their habitats vary in size, from easy to see to microscopic, and some soil bacteria are able to degrade harmful chemicals that pollute our environment. In this activity, students play the Soil Safari game at http://school.discoveryeducation.com/schooladventures/soil/soil_safari.html traveling into the soil and "shrinking" down to see differently sized organisms.

Go on a Soil Safari

Learning Objectives/Outcomes

- 1. Students will be able to describe that soil is a living entity made up of a diversity of organisms living in a complex three dimensional habitat.
- 2. Students will be able to contrast the variety of soil organisms and their habitats.
- 3. Students will be able to explain that some soil bacteria are able to degrade harmful chemicals that pollute our environment.

Materials (per student, group etc.)

- Computers, desks, and chairs

Ages of Audience

K-12

Recommended group size?

Less than 20

Where could you offer this?

Local school, classroom, library

What type of room do you need?

Classroom seating with computers and internet access

Type of Lesson (may be more than one)

Indoor, small group exercise/discussion critical thinking, computer game

Time Needed

- 1. Scientist prep time + clean up time: Minimal, and no clean up
- 2. Participant/class time: 30 minutes

Methods/Procedure

Students will go to the website <u>http://school.discoveryeducation.com/schooladventures/</u> soil/soil_safari.html and explore the soil at different sizes and spatial scales.

Discussion Question

1. What soil organisms are the largest and smallest in size, and where do they live in soil?

