

Food for the Soil Reflection Section Answer Guide

Note to Educator: The purpose of the Reflection Section questions is to encourage students to think critically about what they have read. The following “answers” are only suggestions to help you use these questions in the classroom.

Introduction

In the form of a question, describe what the scientists wanted to learn. *How do alluvial soils affect the role of SDN in the North Pacific coastal rainforests of southeast Alaska?*

Why are nutrients important? *Nutrients help keep people and the environment healthy. Nutrients nourish living organisms.*

Method

Why do you think the scientists took samples from the same area? *Subsampling is important to make sure the scientists gather correct information. Subsampling helps reduce the uncertainty that you are incorrect.*

As a class, look at a watershed map of your area. What watershed do you live in? Why do you think watersheds are important? *Students will have individual answers, but should realize that watersheds are important because we all live in watersheds, and the watersheds supply our drinking water and water for other animals and plants. Watersheds have many other benefits too. For more information about watersheds, check out the Web links listed at the end of this article.*

Findings

Which soil had a higher concentration of nitrogen? *Tuxekan soils.*

Why would you want to know the mean value of a range of numbers? *The mean value is the average of all numbers in the data set. The mean value provides a summary of the data and is especially useful when you are dealing with a large data set where you may not be able to look at all the numbers individually.*

Discussion

If the scientists do not take into account the amount of nitrogen in the soil, what might happen to the scientists’ estimate of how much nitrogen is available from SDN? *The estimate may be too high and not reflect what is actually happening in the environment.*

Additional Web Resources:

EPA’s Surf Your Watershed

<http://cfpub.epa.gov/surf/locate/index.cfm>

U.S. Geological Survey (USGS) Watershed Information Page

<http://ga.water.usgs.gov/edu/watershed.html>

USGS You Are What You Eat—Isotopes

<http://wwwrcamnl.wr.usgs.gov/isoig/projects/fingernails/foodweb/isotopes.html>

Gould League Interactive Food Webs

http://www.gould.edu.au/foodwebs/kids_web.htm

