Assessment

Introduction

This guide discusses the Interactive Science assessment tools. These tools ensure content mastery beyond what students need to know for high-stakes tests.

The examples of assessments in this guide are from the Ecology and the Environment module, but they are applicable to any module.

This guide covers assessments found in the write-in student text, Teacher's Edition and Resource, and online digital assessment. Lastly, it explores assessments for preassessment, progress monitoring assessment, self-assessment, and online assessment.

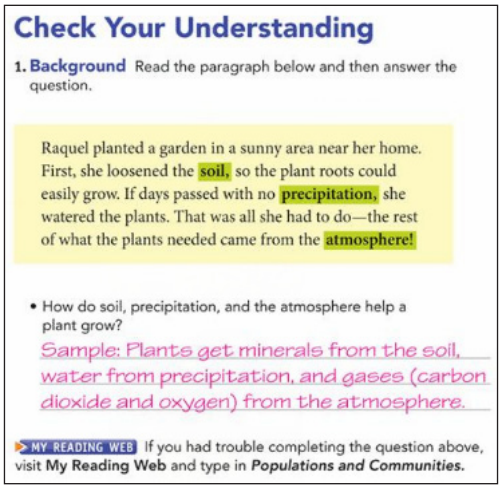
Big Ideas

The fundamental goal of Interactive Science is for students to develop enduring understandings of the Big Ideas of science. These Big Ideas are what students should understand and retain long after middle school. To gain an enduring understanding, students must internalize the knowledge and skills that they have learned from the program and apply what they have learned to the larger concepts of science.

Teachers can help their students activate prior knowledge and build essential background knowledge to successfully grasp the concepts of the chapter.

Getting Started

Each chapter contains a Getting Started feature. Here, students assess their own background knowledge in the Check for Understanding section. Students read a short paragraph that contains prerequisite vocabulary words, and then they respond to a question about the paragraph. If they struggle with the content, they are directed to an online digital activity at MyScienceOnline.com called *My Reading Web,* which allows them to build additional background by providing passages for them to read at varied reading levels.



Check Your Understanding

1. **Background** Read the paragraph below and then answer the question.

Raquel planted a garden in a sunny area near her home. First, she loosened the **soil,** so the plant roots could easily grow. If days passed with no **precipitation,** she watered the plants. That was all she had to do—the rest of what the plants needed came from the **atmosphere!**

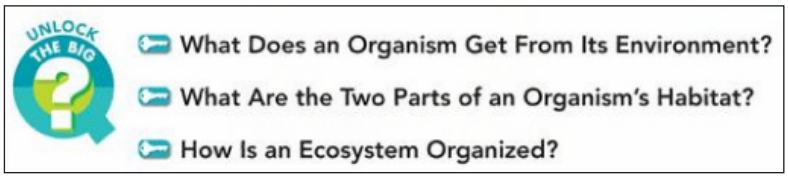
- How do soil, precipitation, and the atmosphere help a plant grow?

Sample: Plants get minerals from the soil, water from precipitation, and gases (carbon dioxide and oxygen) from the atmosphere.

MY READING WEB If you had trouble completing the question above, visit **My Reading Web** and type in ***Populations and Communities.***

Key Concept Questions

Each lesson begins by introducing the Key Concept questions in the Unlock the Big Question section. Students answer these Key Concept questions as a way to collect information to eventually answer the unit's Big Question.



As students complete Key Concept sections, they have an opportunity to assess their own understanding. Each Key Concept question is accompanied by Assess Your Understanding. Teachers may have students complete this self-assessment activity in a variety of ways. They may complete Assess Your Understanding in their write-in student edition. For easy collection, teachers may prefer to assign the Assess Your Understanding blackline master that is available at the end of the lesson in the Teacher's Edition and Resource. Teachers may also opt to direct students to MyScienceOnline.com to complete the online assessment, which is available in the lesson's Evaluate tab.

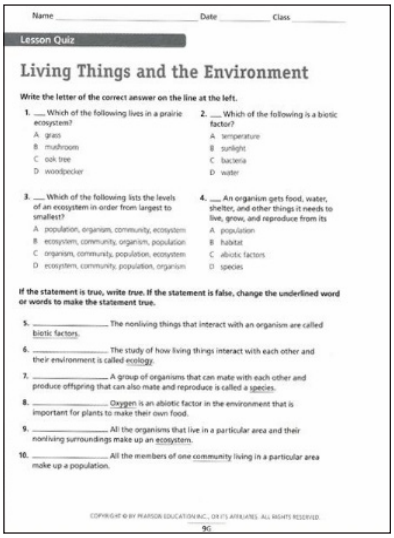
In some activities, students complete a sentence that pertains to the concept, and then they communicate any concerns they are having understanding the key concepts. Students that are having trouble are directed to another online resource, called *My Science Coach.* This online resource provides additional help and practice.

Lesson Wrap-Up

At the conclusion of each lesson, there are activities to help students review and reinforce the content. The Review and Reinforce blackline master is located at the end of the lesson in the Teacher's Edition and Resource.

Lesson Quiz

Each Lesson Quiz is available as a blackline master in the Teacher's Edition and Resource. The assessment items are presented as multiple-choice, true or false, and fill-in-the-blank quiz items.



Name _____ Date _____ Class _____

Lesson Quiz

Living Things and the Environment

Write the letter of the correct answer on the line at the left.

1. ___ Which of the following lives in a prairie ecosystem?
   A grass
   B mushroom
   C oak tree
   D woodpecker

2. ___ Which of the following is a biotic factor?
   A temperature
   B sunlight
   C bacteria
   D water

3. ___ Which of the following lists the levels of an ecosystem in order from largest to smallest?
   A population, organism, community, ecosystem
   B ecosystem, community, organism, population
   C organism, community, population, ecosystem
   D ecosystem, community, population, organism

4. ___ An organism gets food, water, shelter, and other things it needs to live, grow, and reproduce from its
   A population
   B habitat
   C abiotic factors
   D species

If the statement is true, write true. If the statement is false, change the underlined word or words to make the statement true.

5. _____ The nonliving things that interact with an organism are called biotic factors.
6. _____ The study of how living things interact with each other and their environment is called ecology.
7. _____ A group of organisms that can mate with each other and produce offspring that can also mate and reproduce is called a species.
8. _____ Oxygen is an abiotic factor in the environment that is important for plants to make their own food.
9. _____ All the organisms that live in a particular area and their nonliving surroundings make up an ecosystem.
10. _____ All the members of one community living in a particular area make up a population.

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These materials can also be accessed through MyScienceOnline.com. By going online, teachers have the ability to edit the quiz contents and customize to the needs of the class.

Study Guide

Each chapter concludes with a Study Guide and Review and Assessment pages. The Study Guide helps students review the key content objectives and chapter vocabulary.

Here is an example of a concept map class activity found at the end of a chapter. This provides a way to review and organize what students have learned in the chapter.

Class Activity: Concept Map

Have students develop a concept map to show how the information in this chapter is related. Have students brainstorm to identify the key concepts, vocabulary, details, and examples, then write each one on a self-sticking note and attach it at random on chart paper or on the board. Explain that the concept map will begin at the top with Key Concepts. Ask students to use the following questions to help them organize the information on the notes:

- What does an organism get from its habitat?
- What is the difference between a population and a community?
- What are some ways in which populations can be changed?
- Why are adaptations important?
- What is a symbiotic relationship?

Class Activities are located in the Study Guide notes in the margin of the Teacher's Edition and Resource.

Review and Assessment

The Review and Assessment pages provide a series of items, such as multiple choice, fill-in-the-blank, sequencing, applying concepts, and drawing conclusions, that relate to each chapter lesson. In addition, students have the opportunity to complete a writing assignment. In the Teacher's Edition and Resource, the Write About It question is accompanied with a scoring rubric to assess students' written responses.

Write About It Assess student's writing using this rubric.

SCORING RUBRIC	SCORE 4	SCORE 3	SCORE 2	SCORE 1
Getting food, water, and shelter from habitat	Student describes sources of all items in detail.	Student describes sources of all items.	Student describes some sources of items.	Student does not describe sources of items.
How habitat is different from others	Student clearly identifies ways in which the habitat differs from others.	Student identifies ways in which the habitat differs from others.	Student incompletely identifies ways in which the habitat differs from others.	Student does not identify ways in which the habitat differs from others.

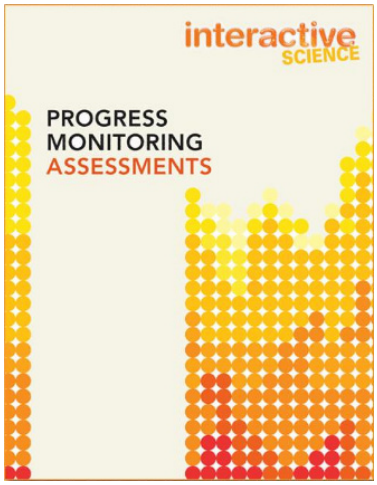
The final item in the Review and Assessment pages is the Standardized Test Prep page. Here, students practice multiple-choice and constructed response items. The Teacher's Edition and Resource provides Test-Taking Skills in the Standardized Test Prep notes.

Chapter Test

At the end of the each chapter, there is a Chapter Test. There are three versions of the chapter tests in the assessment resources. Tests A and B give students a mix of multiple-choice, fill-in-the-blank, short-answer, science application, and essay questions. Test C allows teachers to choose the test items from a bank of test questions.

Additional Assessment Options

There are also other options for assessments. Progress Monitoring Assessments allow teachers to track students' progress through several practice tests. These tests help students build valuable standardized test-taking strategies.



ExamView

The ExamView Test Bank CD-ROM offers a bank of thousands of questions. Create and print customized tests.

Success Tracker

Teachers also have access to Success Tracker, which is an online testing and reporting tool found on MyScienceOnline.com. Assign quizzes and tests online and get instant feedback and remediation help for students.

Review

This guide discussed Interactive Science assessment tools.

The write-in student edition provides many opportunities for students to self-assess, review, and remediate when necessary.

The Teacher's Edition and Resource contains lesson quizzes, group assessment activities, rubrics, and standardized test prep.

There are many opportunities for students to take quizzes and tests, receive remediation, and practice for standardized tests at MyScienceOnline.com.

For more information, please watch the other Interactive Science tutorials on this Web site.