

Introduction

How to use this book

In this guide, each chapter is divided into two lessons. The first lesson includes objectives for the chapter, an assignment to be completed for the next day, glossary words, and review questions. The second lesson includes a list of materials needed for any experiments or activities, the *For You to Do* questions with answers, directions and answers for experiments and activities, and some Chapter Stretchers.

Objectives

These are the goals of each chapter. When your students have completed the chapter they should be able to do what the objectives state.

Assignment

In the first lesson of each chapter you will assign reading the chapter and answering the questions following the text. Decide how you will require your students to answer the questions. You may require them to use a spiral-bound (or similar) notebook to keep science assignments in. Do you want them to write questions and answers or only answers? Writing both questions and answers makes review from the notebook easier. If you allow (or require) science assignments on notebook paper, be sure students keep all their papers in a notebook or folder.

Glossary

The boldfaced words in the text are glossary words; an alphabetical listing of these words and their definitions is in the back of the textbook. To save your looking them up each day, a sequential list of these words is included in your lesson plans. Make use of these words. Part of the reading assignment with each chapter will include copying each glossary word into a notebook and copying the definition from the glossary. Some of these words have definitions in the text; insist that students copy the glossary definition. In oral review, they may use their own wording, but they all need to learn the same meaning initially—and it will be easier for you to grade.

Review Questions

You want to review previous chapters each day, but you cannot remember what you reviewed yesterday. Maybe you're asking the same questions over and over and missing some important concepts. Or you need a fresh way of asking the same question.

These are some reasons for using the review questions in the first lesson of each chapter. Add your own review questions in specific areas according to your class's needs.

Materials Needed

Check this list the day before you teach the lesson. It includes items for experiments, activities, and extra projects.

For You to Do Questions and Answers

You assigned the *For You to Do* questions in the first lesson. Go over them, with the answers, in the second lesson. Read the question and call on students for answers; discuss the answers. Require students to change any wrong answers. Grade neatness, thoroughness, and timeliness, but not answer content.

Experiments and Activities

Instructions and/or explanations for each experiment and activity are written in this guide. It may not be possible or necessary to do all of them. Decide which experiments and activities you will do in each chapter.

Chapter Stretchers

Use, alter, or ignore these ideas to fit your class needs. Some of the Chapter Stretchers are additional tidbits of facts that you will simply read to your class and possibly discuss. Other Chapter Stretchers are experiments or activities to help reinforce a concept. These ideas are more meat on the bones of the chapter. You may have time for some or all of the extra information; use it as you decide is best.

Material preceded by large quotation marks (“”) indicates material that you may read to the class. Other material is teacher explanation. Answers to questions are italicized.

A review lesson precedes each test. It includes a list of topics to review in preparation for the test and an alphabetical list of the glossary words to be reviewed.

An optional final test that covers material from the entire textbook. If you give this test to your class, you will need to spend several days reviewing all of the review lessons. You may also want students to review the 12 regular tests.