



INTRODUCTION

Blue Sky, Brown Sky...It's Up to You!

Welcome to *Blue Sky, Brown Sky...It's Up to You!* This curriculum is designed to introduce students to the causes and effects of air pollution in the San Joaquin Valley and to teach them behaviors that promote cleaner air.

Many of the habits that help protect our environment are easiest to establish in childhood. Through age-appropriate investigations and activities, students will understand the importance of clean air and learn that each person's individual efforts can make a difference.

ORGANIZATION

The curriculum procedures in this Teacher's Manual are divided into two sections:

- Procedures for Grades K-2
- Procedures for Grades 3-5

Each section contains three Lessons with Investigations and Activities that address the following objectives.

STUDENT OBJECTIVES

Grades K-2: *The Air We Breathe*

Students will be able to identify that:

- Air is invisible but all around us.
- All living things need air to survive.
- Air pollution comes from many sources.
- Air pollution harms living things.
- We can all help keep our air clean.

Grades 3-5: *Pollution Problems and Solutions*

Students will be able to identify:

- Sources of air pollution
- Effects of air pollution on both living and non-living things
- Solutions to air pollution problems

MATERIALS

Along with this Teacher's Manual, the curriculum includes:

- Student Booklets for Grades K-2
- Student Booklets for Grades 3-5
- Home Leaflets for Grades K-2
- Home Leaflets for Grades 3-5
- *Tracking the AQI* Poster for Grades 3-5

Materials needed to conduct each Investigation are listed at the beginning of the procedures for that Investigation. Most all the required materials are common items; however, some Investigations do require a number of materials, so be sure to check the list before conducting that Investigation.

TEACHING STRATEGIES

Each Lesson begins with a Summary and Brief Background of the topics covered in that Lesson. For more detailed background, refer to the following section on *Pollution Problems in the Valley*.

Each Lesson contains two or three Investigations that involve students in demonstrations, experiments, explorations, surveys, and/or reading and writing activities. Most all make use of Activities within the Student Booklets, as noted by a ★ in the Materials list. The Investigations are organized sequentially; however, not all Investigations must be completed. Choose those Investigations that are appropriate for your students, timeframe, and curriculum plan.

Though the Investigations have been developed to be appropriate for the indicated grade levels (K-2 or 3-5), several can be easily adapted to accommodate students at varying grade levels.

GLOSSARY AND RESOURCES

A glossary of all the air quality terms is provided at the back of this manual. You might use the words to conduct spelling or vocabulary bees as appropriate for your grade level.

Also provided are websites and phone numbers for various organizations that serve as resources for air quality information.

CORRELATIONS WITH CONTENT STANDARDS

Many of the Investigations and Activities can be used to support some of the California Content Standards. The introduction to each Investigation lists the standards addressed by that Investigation. A complete chart at the back of this manual shows correlations with standards in Science, Math, Language Arts, and History for kindergarten through grade 5.