

GETTING STARTED

AN INTRODUCTION TO WASTE WORLD

Science Alberta Foundation is pleased to make *WasteWorld*, one of our *Science-In-A-Crate* programs, available in your community!

Students are presented with a challenge from the president of a large waste company, WasteWorld. In groups, they will be competing to win a contract to find solutions to the waste problems in their community. They will be assessed at how well they complete specific tasks at each of the seven activities.

This activity guide provides all the information you need to set up and have your students successfully complete the crate activities. An introductory video sets the scene for the crate. In addition to the video an optional vocabulary activity introduces students to the words they will encounter in the crate.

Specific materials lists and set up instructions can be found for each of the seven activities in this guide. Activities are designed so they can be used as stations in your class. Activities do not need to be completed in order. The activities can be self directed by the groups.

The crate is designed for your class to be divided into seven groups, each representing a different company with their own company logo. Each company/group will complete the seven activities. A black line master of the Company Notebook is provided at the end of the activity guide so you can photocopy it for each student. An answer key is also provided for your use in assessment.

Curriculum connections to the Grade 4 Science Waste and Our World topic can be found on page 7 for each activity. Students are also indirectly exposed to many careers that work with waste and water. The activity topics are as follows.

The Incredible Plastic
Journey

Students will create a flow chart for a bottle of spring water to show how it is made from oil and explore how it can be broken down and recycled into new products.

I'm Falling Apart!

Students will help the Waste and Recycling department of a town know how long it takes for their waste to biodegrade. They need to test common wastes from homes.

Wateropoly

Students will play the Wateropoly game to help their company learn about actions to take and the products to buy that save water.

What the Poop?

The students have to inspect a Waste Treatment Plant to be sure it is working correctly.

From Glacier to Tap	Students will test water samples along a river that is used for drinking water. The river starts in the Rocky Mountains and passes a farm and a golf course. Students both decide on the tests to be completed and examine what contaminants are in the water.
Waist Deep in Waste	Students will investigate the recycling of plant and animal wastes in nature. The students will read a storybook and match producers, consumers, decomposers and wastes with those in the story.
Out of Sight, Out of Mind!	The students will investigate how to reduce the amount of waste going into landfills. They will determine the correct way of disposing of several waste items common in their homes.