

## Table of Contents

Table of Contents.....	pg. 1
Neighborhood Water Quality Acknowledgements.....	pg. 3
Neighborhood Water Quality Packet Contents.....	pg. 3
How to Use This Packet.....	pg. 4

### Unit 1. Neighborhood Water Quality

#### Lesson 1- Aquatic Ecosystems .....

Aquatic Ecosystems and Watersheds.....	pg. 5
Today's Water.....	pg. 6
The Hydrologic Cycle.....	pg. 7
How Does Water Get Underground?.....	pg. 8
Underground Water and Aquifers.....	pg. 9
How Does Underground Water Get to the Surface?.....	pg. 9
Pond Cycles.....	pg. 9
Role of Aquatic Plants.....	pg. 10
Wildlife.....	pg. 10
The Pond Watershed.....	pg. 11
Water Facts.....	pg. 13

#### Activities

Activity 1-1. Create Your Own Watershed.....	pg. 14
Activity 1-2. Edible Groundwater Model.....	pg. 14

<b>Student Information Sheet Lesson 1</b> .....	pg. 16
---	--------

#### Lesson 2- Pollution and Water Quality .....

Pollution Sources.....	pg. 17
Types of Pollution.....	pg. 18
The Nitrogen Cycle.....	pg. 20
Water Quality.....	pg. 21
pH.....	pg. 21
Dissolved Oxygen.....	pg. 23
Temperature.....	pg. 24
Salinity.....	pg. 25

#### Activities

Activity 2-1. What's in the Water?.....	pg. 26
Activity 2-2. Testing Products for Phosphate and Nitrates.....	pg. 26
Activity 2-1. The pH of Water.....	pg. 28

<b>Student Information Sheet Lesson 2</b> .....	pg. 29
---	--------

**Lesson 3- Solutions to Pollution** .....  
    Aquatic Plant Discussion..... pg. 30  
    Common Exotic Plants..... pg. 31  
    Who Protects Our freshwater?..... pg. 33  
    How Can You Help Protect Your Drinking Water? ..... pg. 33

**Activities**  
    Activity 3-1. The Role of Plants in Water Filtration..... pg. 35

**Student Information Sheet Lesson 3**..... pg. 37

**Vocabulary**..... pg. 38

**References**..... pg. 41