



Fine Filters: Table of Contents

Overview of Unit

Teacher Materials	O-T1
For Anyone Planning to Teach Nanoscience...Read This First!	O-T2
Fine Filters Overview, Learning Goals & Standards.....	O-T7
Unit at a Glance: Suggested Sequencing of Activities	O-T11
Alignment of Unit Activities with Learning Goals	O-T14
Alignment of Unit Activities with Curriculum Topics.....	O-T15
Fine Filters Pretest/Posttest: Teacher Answer Sheet	O-T17
Student Materials.....	O-S1
Fine Filters: Pretest.....	O-S2
Fine Filters: Posttest	O-S3

Lesson 1: The Water Crisis

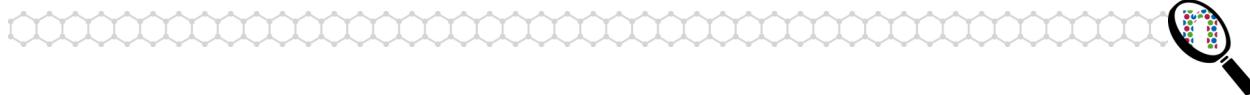
Teacher Materials	1-T1
Introduction to The Water Crisis: Teacher Lesson Plan.....	1-T2
The Water Crisis: PowerPoint Slides & Teacher Notes	1-T5
The Water Crisis Student Data Worksheet: Teacher Instructions & Answer Key.....	1-T28
Fine Filters Initial Ideas: Teacher Instructions.....	1-T35
The Water Crisis: Quiz Answer Key	1-T36
Student Materials.....	1-S1
The Water Crisis: Student Data Worksheet	1-S2
Fine Filters Initial Ideas: Student Worksheet.....	1-S9
A World-Wide Water Shortage: Student Reading	1-S10
The Water Crisis: Student Quiz.....	1-S12

Lesson 2: The Science of Water

Teacher Materials	2-T1
The Science of Water: Teacher Lesson Plan.....	2-T2
The Science of Water: PowerPoint Slides & Teacher Notes	2-T4
The Science of Water Lab Activities: Teacher Instructions	2-T28
The Science of Water: Quiz Answer Key	2-T39
Reflecting on the Guiding Questions: Teacher Instructions	2-T42
Student Materials.....	2-S1
The Science of Water Lab Activities: Student Directions	2-S2
The Science of Water Lab Activities: Student Worksheets	2-S11
The Science of Water: Student Quiz	2-S17
Reflecting on the Guiding Questions: Student Worksheet	2-S20

Lesson 3: Nanofiltration

Teacher Materials	3-T1
Nanofiltration: Teacher Lesson Plan	3-T2
Nanofiltration: Teacher Reading	3-T6



Nanofiltration: PowerPoint Slides & Teacher Notes.....	3-T11
Which Method is Best? Answer Key.....	3-T29
Comparing Nanofilters to Conventional Filters Lab Activity:	
Teacher Instructions.....	3-T30
Cleaning Jarny's Water: Teacher Instructions & Rubric	3-T36
Reflecting on the Guiding Questions: Teacher Instructions	3-T41
Student Materials.....	3-S1
The Filtration Spectrum: Student Handout	3-S2
Types of Filtration Systems and Their Traits: Student Handout.....	3-S3
Which Method is Best? Student Worksheet.....	3-S5
Comparing Nanofilters to Conventional Filters Lab Activity:	
Student Instructions & Worksheet.....	3-S6
Cleaning Jarny's Water: Student Instructions & Report	3-S15
New Nanomembranes: Student Reading	3-S20
Reflecting on the Guiding Questions: Student Worksheet	3-S24