

## Lesson Plan Day 8 – How Can We Clean Water?

### Level 3 Question(s) Addressed:

- How can we use our knowledge of phase changes to clean water?

**Date(s)** Day 8

### Content Standard(s):

- 5.4b - the effect of temperature on the phases of matter
- 5.4e - mixtures including solutions

### NOS Aspects

- Tenet 1 – The natural world is understandable.
- Tenet 2 – Science uses a blend of logic and imagination.
- Tenet 3 – Scientific knowledge is the product of observation and inference.

### Student Objective(s) for this lesson:

1. Objective 1 – Understand the similarities and differences between mixtures and solutions.
2. Objective 2 – Explore ways to separate solutions.

### Misconceptions to address in this lesson:

- A. Misconception 1 – A solution is a type of mixture not a compound.
- B. Misconception 2 – Solutions can be separated into their original compounds.
- C. Misconception 3 – Dissolving is a not chemical process.

### Safety Concerns in this lesson:

- Safety 1 – Spillage of water, creating a slipping hazard.