

## SAMPLE ACTIVITY PLAN

# LOOKING AT WATER AND POLLUTION

## FIELD TRIP TO TREATMENT PLANT

### CONTENT OBJECTIVES

Introduce concepts of water pollution, properties of substances in water, ecosystems, using processes (settlement, filtration)

### CONTENT TEACHING STRATEGY

- Introduce** Everyone gets a glass of water, looks at it, takes a drink. Pass out dirt, mix it into the glasses. Drink? Why not? What is in water? How does water get polluted? What is in the water we drink? What happens when stuff goes down a sink drain? Toilet? Shower? Street drain?
- Discuss** What's in a drain? Get a plumber if possible to explain how drains are set up in houses, buildings, where they go, what goes in them, problems. Brainstorm lists of kinds of things that go into drains from houses, factories, farms, slaughterhouses, apartment buildings, offices, grocery stores.
- Do** Create collection of 'waste'—food garbage, paper bits, sand, pebbles, soil, ink, milk, egg, flour, (if easy access to rotted manure, include, otherwise no animal or human wastes!), etc. What happens when these things mix with water? Pass out jars, fill with water, add different ingredients, shake. What looks like in first minute? After a few minutes? After five minutes? Draw, make notes. How do different things affect the look of water? Why does the look of water matter? Can light get through? What happens if light can't get through water? Pass out simple filters (screens, mesh, paper). Pour water through filter. Now how does water look? What is left on the filter? What can be done with that? How do different processes (settling, filtration) affect the look of water? What makes water OK and not OK for people to drink?

### FIELD TRIP

Wastewater treatment plant

### WRAP-UP, ASSESSMENT DISCUSSION

How do people now think about drinking water and keeping it drinkable?

Can move from here into water ecosystems: what lives in water, why it matters, how it's affected by pollution. Also, what happens where no treatment plants are available, world issues associated with poor water, water diseases (social studies link).

