

## Activity #1: Stream Sense

### Introduction

This field trip activity helps students discover how their senses provide them with details about stream ecosystems. By making careful observations, students experience how their other senses (besides sight) provide them with additional information about the environment.

Safety rules **MUST** be followed when students explore a stream.

**Time:** 1hr. on-stream, plus discussion

**Ages:** all ages

### Materials

- Pencil and stiff-backed notepad or journal for each student
- Optional materials:
  - Camera
  - Tape recorder
  - Binoculars
  - Magnifying lenses
  - Sample foods (edible plants and seeds) that could be found near a stream
  - Spray bottle

**Prep Work:** instructor should visit field trip site prior to activity. (See **Stream Walk Safety Rules** below.)

### Stream Walk Safety Rules

#### Teacher Responsibilities

1. Visit the stream first to determine if it is safe for students to visit. Check stream depth, velocity, and temperature. Also look for walking conditions, potentially dangerous wildlife, poisonous plants, etc.
2. Bring along a first-aid kit.
3. Define stream walk boundaries; make sure students understand that staying within the boundaries protects wildlife and students.
4. Locate a place where students can wash hands after the visit.

#### Rules for Students

1. Students should stay with their assigned buddies.
2. Students should wear old athletic shoes or boots because they will likely get wet and muddy.
3. Students should not enter the stream without supervision.
4. Students should not touch wildlife or taste anything (plants or water) unless permitted by teacher.

### Procedure

1. Tell students they will be visiting a stream and will be recording how they use their senses to observe the stream. Discuss the *Stream Walk Safety Rules*.
2. Ask students to record their observations. Students should write things down or draw things as they perceive them.
3. Throughout the trip, remind students about using multiple senses. Ask students to find a quiet spot near the stream and have them sit very still to look, smell, listen, and feel. Older students may want to sit for 15 minutes or more, while for younger children, 2 or 3 minutes is probably enough. Students may want to take photographs or tape record sounds in addition to writing and drawing.
4. Other sensory activities that students could do at the stream include the following:
  - Have them block one or more of their senses (e.g., close their eyes, cover their ears, plug their noses). How does this affect their other senses? Did students hear better when they could not see?
  - Have students guide a blindfolded partner to his or her quiet site. Have the blindfolded partner recall sounds, smells, and feelings he or she experienced along the way.
  - Supply students with ways to improve the ability of their senses (e.g., use binoculars, spray water on their noses [moisture traps scent particles], cup their hands behind their ears).

### Discussion

Questions to ask during or after the stream visit.

**Sight:** What plants and animals do they see? Does the appearance of the stream vary with location? Is the stream fast or slow moving? How can they determine its speed?

**Sound:** What sounds does the stream make? Can they hear animals? What does the wind sound like?

**Smell:** How do smells near the stream compare to those on a road or in a home? Does the water smell the same as tap water?

**Touch:** What does the stream water feel like? How does soil near the stream feel compared to soil in the woods or schoolyard? Are the rocks in the stream smooth or rough?

### Extensions

This activity might be used as an introduction to a stream or watershed that students would later work with in greater depth. Later visits might involve **Activity #8, Stream Safari (p. 35)** and **Activity #9, Water Quality Bioassessment (p. 39)** or using the *Water Quality Conditions, Land Use Conditions, and Physical Conditions* worksheets (pp. 87-92) to investigate the water quality.

Adapted from Project WET *Curriculum & Activity Guide*, "Stream Sense," pp. 191-3