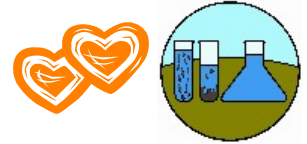

Rate of Flow



curriculum links

Grade 4:

- Mathematics:

*Number Sense and Numeration
Measurement*

overview



This activity is an in-stream demonstration on water velocity with linkages to the concepts of hydropower and storm water management.

grade 4 expectations

Mathematics

Number Sense and Numeration

Overall Expectations

- solve problems involving the addition, subtraction, multiplication, and division of single and multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to tenths and monetary amounts, using a variety of strategies.

Specific Expectations

Operational Sense

- add and subtract two-digit numbers, using a variety of mental strategies
- multiply and divide whole numbers by 10 and 100, using mental strategies.
- divide two-digit whole number by one digit whole numbers, using a variety of tools and student generated algorithms.
- use estimation when solving problems involving the addition, subtraction, and multiplication of whole numbers, to help judge the reasonableness of a solution.

Mathematics

Measurement

Overall Expectations

- estimate, measure, and record length, perimeter, area, mass, capacity, volume, and elapsed time, using a variety of strategies;
- determine the relationships among units and measurable attributes, including the area and perimeter of rectangles.



Rate of Flow



Specific Expectations

Attributes, Units and Measurement Sense

- estimate, measure, and record length, height, and distance, using standard units;
- estimate, measure, and represent time intervals to the nearest minute.

Measurement Relationships

- estimate, measure, and record length, height, and distance, using standard units
- describe, through investigation, the relationship between various units of length

key terms

Current: The movement of water in a river.

Rate of Flow: The speed at which the water in a stream or river is moving in a certain amount of time.

