# Standard 7—Interdisciplinary Problem Solving Elementary

# Connections

## Strategies

1. The knowledge and skills of mathematics, science, and technology are used together to make informed decisions and solve problems, especially those relating to issues of science/technology/society, consumer decision making, design, and inquiry into phenomena.

#### Students:

- analyze science/technology/society problems and issues that affect their home, school, orcommunity, and carry out a remedial course of action.
- make informed consumer decisions by applying knowledge about the attributes of particular products and making cost/benefit tradeoffs to arrive at an optimal choice.
- design solutions to problems involving a familiar and real context, investigate related science concepts to inform the solution, and use mathematics to model, quantify, measure, and compute.
- observe phenomena and evaluate them scientifically and mathematically by conducting a fair test of the effect of variables and using mathematical knowledge and technological tools to collect, analyze, and present data and conclusions.

This is evident, for examplMC iID 4 >c1,sts:

Students will apply the knowledge and thinking skills of mathematics, science, and technology to address real-life problems and make informed decisions.

### Skills and Strategies for Interdisciplinary Problem Solving

Working Effectively: Contributing to the work of a brainst orming group, laboratory part nership, cooperative learning group, or project team; planning procedures; identify and managing responsibilities of team members; and staying on task, whether working alone or as part of a group.

Gathering and Processing Information: Accessing informat ion from print ed media, elect ronic dat a bases, and community resources and using the informat ion to develop a definition of the problem and to research possible solutions.

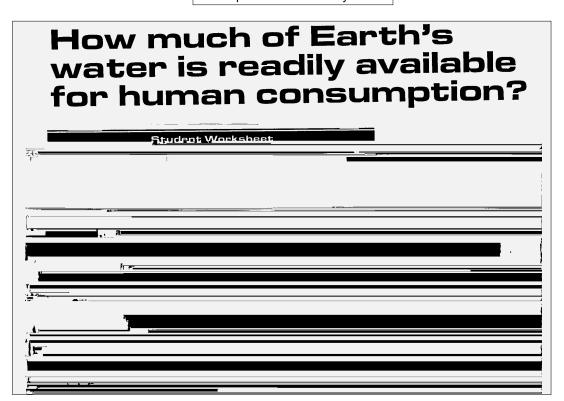
Generating and Analyzing Ideas: Developing ideas for proposed solutions, investigating ideas, collecting data, and showing relationships and patterns in the data.

Common Themes: Observing examples of common unifying themes, applying them to the problem, and using them to bet ter understand the dimensions of the problem.

Realizing Ideas: Constructing components or models, arriving at a solution, and evaluating the result.

Presenting Results: Using a variety of media to present the solution and to communicate the results.

Sample Problem/Activity



# Standard 7ÑInterdisciplinary Problem Solving Commencement

## Connections

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