MATHEMATICS STANDARD:

② Communication

"All students will understand, form and convey clear and appropriate representations of mathematical ideas, concepts, information, data, and relationships."

Rationale:

When students see that one representation can describe several situations, they begin to understand the power of mathematics; when they realize that some ways of representing a problem are more helpful than others, they begin to understand the flexibility and usefulness of mathematics. Mathematical terms and notations enable students to represent and communicate these ideas.

Key Elements: All students will:

* Decode and understand mathematical symbols and expressions.

* Reflect upon and clarify their thinking about mathematical ideas and relationships.

* Express and represent mathematical ideas using oral and written presentations, physical materials, pictures, graphs, charts, and algebraic expressions.

* Formulate definitions and express generalizations developed through investigations to develop common understanding of mathematical ideas.

* Generate questions, and make conjectures and convincing arguments.

* Clarify mathematical ideas through dialogue with peers.