**Unit 2: The Number System**

**Key Concept:** Relationships

**Related Concept:** Representation, Systems

**Global Context:** Globalization and Sustainability *(explored through connections to mathematics in the real world)*

**Common Core:**

6.NS.1

6.NS.2

6.NS.3

6.RP.3

**Statement of Inquiry:**

We use relationships in the number system to represent real world situations.

**Inquiry questions:**

*Factual: How are fractions and decimals added, subtracted, multiplied, and divided?*

*Conceptual:* *How do mathematical operations relate to one another in the*

*number system?*

*Debatable:* *Do we need to know how to perform mathematical operations when*

*have calculators available?*

**Main Content:**

* Adding and subtracting decimals
* Estimating products
* Multiplying and dividing decimals
* Multiplying and dividing multi-digit numbers
* Multiplying by powers of 10
* Multiplying and dividing fractions

**Resources:**

Glencoe Math: Built to the Common Core, Math Antics

**Summative Assessment:**

**Criterion A** (knowing and understanding)

i. Select appropriate mathematics when solving problems in both familiar and

 unfamiliar situations.

ii. Apply the selected mathematics successfully when solving problems

iii. Solve problems correctly in a variety of contexts.

**Criterion D** (applying mathematics in real-life contexts)

i. Identify relevant elements of authentic real-life situations.

ii. Select appropriate mathematical strategies when solving authentic real-life

 situations.

iii. Apply the selected mathematical strategies successfully to reach a solution.

iv. Explain the degree of accuracy of the solution.

v. Describe whether the solution makes sense in the context of the authentic

 real-life situation.

**ATLs** *(goal is see the value of having computational math skills and complete each part of the summative task independently)*

**Category:** Self-Management **Cluster:** Affective **Skill Indicator:** Perseverance

**Category:** Thinking **Cluster:** Critical Thinking **Skill Indicator:**  Use models and simulations

**Category:** Self-Management **Cluster:** Reflection **Skill Indicator:** Demonstrate flexibility in the selection and use of learning strategies.