

## MATHEMATICS – GRADE 4

**Grade:** 4

**Academic Standard:** 4.1

**Academic Standard Indicator:** 4.1.1

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Read and write whole numbers up to 1,000,000.

**Suggestion for Integrating International Content:**

Have students read *One Grain of Rice* by Demi (Scholastic Press, 1997) and write the number of grains of rice the raja has given to Rani and the villagers after each day. **Extension:** Over a week (or any period of time), have students play the word games on the [www.freerice.com](http://www.freerice.com) website. Have them keep a record of the grains of rice that they contribute as a class, until they reach 1,000,000 (or less). They could challenge other classes in the same grade or school.

**Differentiated Instruction- Highly Able**

**Accommodations:** Using their knowledge of whole numbers beyond 1,000,000, have students examine data regarding gross domestic product, gross domestic imports, and gross domestic exports in the U.S., Brazil, China, and Russia. Have them determine the significance of these three economic terms. Then have the students compare the economic data among these four major economic countries.

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**Grade:** 4

**Academic Standard:** 4.1

**Academic Standard Indicator:** 4.1.2

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Identify and write whole numbers up to 1,000,000, given a place-value model.

**Suggestion for Integrating International Content:**

Have students compare the population of Indianapolis to other city populations around the world and write the numbers on a place value chart. Numbers can be written in standard form, word form, and expanded form. **Suggested resource:** <http://www.citymayors.com>.

**Differentiated Instruction- Highly Able**

**Accommodations:** Using their knowledge of place value, have students create their own place value problems which must involve information of a global or international nature. **Example:** Students might plan an around-the-world trip and track the number of miles they would travel each day as well as an ongoing cumulative total.

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**Grade:** 4

**Academic Standard:** 4.1

**Academic Standard Indicator:** 4.1.4

**Core Standard:** Yes

**Standard Description (Academic or Indicator):**

Order and compare whole numbers using symbols for "less than" (<), "equal to" (=), and "greater than" (>).

**Suggestion for Integrating International Content:**

Have students compare corn production in the U.S. to other corn-producing nations, such as Chile and Brazil, contrasting corn exports and imports. **Suggested resource:** <http://www.grains.org>.

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**Grade:** 4

**Academic Standard:** 4.2

**Academic Standard Indicator:** 4.2.1

**Core Standard:** Yes

**Standard Description (Academic or Indicator):**

Understand and use standard algorithms for addition and subtraction.

**Suggestion for Integrating International Content:**

Have students explore the amount of rice they would have after 30 days if they double the amount of rice each day, drawing on folktales or stories. Have students keep a running total by creating a table. **Suggested resource:** *One Grain of Rice* by Demi (Scholastic Press, 1997).

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