

## MATHEMATICS – GRADE 2

**Grade:** 2

**Academic Standard:** 2.1

**Academic Standard Indicator:** 2.1.5

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Compare whole numbers up to 100 and arrange them in numerical order.

**Suggestion for Integrating International Content:** Have students choose different pairs of cities on a world map and calculate the miles between them (rounded to whole numbers). Then have the students put the distances in order from the largest number to the smallest. The teacher may want to guide the students to choose cities less than 100 miles apart.

**Grade:** 2

**Academic Standard:** 2.1

**Academic Standard Indicator:** 2.1.5

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Compare whole numbers up to 100 and arrange numbers in numerical order.

**Suggestion for Integrating International Content:** Teacher should research the number of different countries in each continent. Have students discuss that continents are made up of different countries, compare the numbers, and put those numbers in numerical order to identify the continents with largest and smallest numbers of countries.

**Grade:** 2

**Academic Standard:** 2.1

**Academic Standard Indicator:** 2.1.7

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Identify odd and even numbers up to 100.

**Suggestion for Integrating International Content:** Have students locate different countries on a world map or globe. Then have them identify an odd or even number of cities in that country. *Example:* Have the class locate

Brazil. Now locate three (odd number) or four (even number) cities in Brazil. Then have students work in small groups to locate other countries of their choice and identify odd or even number of cities. *Extension:* Have students work in small groups and identify 10 countries around the world. Then have each group make a chart and categorize the country names by even or odd number of letters in it and share with the class. Then, as a class, add up all of the different countries identified by the groups and see whether that number is even or odd.

**Grade:** 2

**Academic Standard:** 2.1

**Academic Standard Indicator:** 2.1.8

**Core Standard:** No

**Standard Description (Academic or Indicator):** Recognize fractions as parts of a whole or parts of a group (up to 12 parts).

**Suggestion for Integrating International Content:** Have students locate major land masses (or continents) and bodies of water (or oceans) on a globe or world map. Have them identify what fraction a specific land mass or body of water is to the whole set. *Example:* Students can determine what fraction Africa is of the total number of continents or what fraction the Atlantic Ocean is of the total number of ocean bodies.

**Differentiated Instruction- Special Needs Accommodations:** Provide helpful hints to assist students in identifying what information is the numerator and what information is the denominator.

**Differentiated Instruction- Highly Able Accommodations:** Have students apply their understanding of fractions by applying this concept to other problems involving international or global data and create their own problems. *Example:* Have them determine what fraction of a set France is to Europe.

**Grade:** 2

**Academic Standard:** 2.1

**Academic Standard Indicator:** 2.1.12

**Core Standard:** No

**Standard Description (Academic or Indicator):** Represent, compare, and interpret data using tables, tally sheets, and bar graphs.

**Suggestion for Integrating International**

**Content:** Have students pose questions about international items and interview class- or schoolmates for favorites, asking questions like "What is your favorite international food? What country does that come from?" Then have students tally favorites, analyze data, and complete a graph with symbols from that country showing favorite foods.

**Grade:** 2

**Academic Standard:** 2.3

**Academic Standard Indicator:** 2.3.4

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Create, describe, and extend number patterns using addition and subtraction.

**Suggestion for Integrating International**

**Content:** Have students compare and contrast what is happening in Indiana versus Australia at one-hour intervals through an entire day, based on Indiana time. Then have them create a chart with pictures to accompany times, inspired by *Alexander and the Terrible, Horrible, No Good, Very Bad Day* by Judith Viorst (Atheneum, 2009).

**Grade:** 2

**Academic Standard:** 2.4

**Academic Standard Indicator:** 2.4.1

**Core Standard:** No

**Standard Description (Academic or Indicator):** Construct squares, rectangles, triangles, cubes, and rectangular prisms with appropriate materials.

**Suggestion for Integrating International**

**Content:** Cut out objects and people from around the world in a variety of shapes and label

where these are from. Mix the shapes up and pass them out to students. Have students identify the countries and shapes. Have students trade pictures by playing "I have a (shape) from (country). Who has a (shape) from (country)?", indicating the picture shapes everytime, along with the countries/continents. Then have students put the pictures together in a collage.

**Grade:** 2

**Academic Standard:** 2.4

**Academic Standard Indicator:** 2.4.2

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Describe, classify, and sort plane and solid geometric shapes (triangle, square, rectangle, cube, rectangular prism) according to the number and shape of faces, and the number of edges and vertices.

**Suggestion for Integrating International**

**Content:** Teacher should cut up a number of pictures of the world into a variety of rectangles, triangles, squares, and circles. Have students recreate the original pictures using the shapes. **Extension:** Have students color in the countries of origin of their pictures on an outline map of the world. **Extension:** Have students make a bulletin board display with the world map in the middle. Have students post their completed pictures around the map and attach them to the corresponding countries with string.

**Grade:** 2

**Academic Standard:** 2.4

**Academic Standard Indicator:** 2.4.5

**Core Standard:** Yes

**Standard Description (Academic or Indicator):** Recognize geometric shapes and structures in the environment and specify their locations.

**Suggestion for Integrating International**

**Content:** On a world map, have students locate countries that are similar in size and shape. **Extension:** Have students use a globe of the world and identify various shapes. Then have students try to explain why a particular country

or continent has different shapes on the map and the globe.

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**Grade:** 2

**Academic Standard:** 2.5

**Academic Standard Indicator:** 2.5.10

**Core Standard:** No

**Standard Description (Academic or Indicator):** Know relationships of time: seconds in a minute, minutes in an hour; hours in a day; days in a week; and days in a week, and days, weeks, and months in a year.

**Suggestion for Integrating International**

**Content:** Have students describe the relationships of time, by comparing and contrasting what is happening in Indiana versus Australia at one hour intervals through an entire day, based on Indiana time. Then have them create a chart with pictures to accompany times, inspired by *Alexander and the Terrible, Horrible, No Good, Very Bad Day* by Judith Viorst (Atheneum, 2009). **Extension:** Have students locate different points on a world map and determine the time zones of those locations using a chart. Students can compare what might be going on in those locations versus what is going on in Indiana at the same moment.

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