

Title: Africa in Abundance

Link to Outcomes:

- **Number Relationships** Students will demonstrate their ability to describe and apply number relationships using concrete and abstract materials. They will choose appropriate operations and describe effects of operations on numbers.
- **Statistics** Students will demonstrate their ability to collect, organize and display data, and will interpret information obtained from displays. They will write reports based on statistical information.
- **Problem Solving** Students will demonstrate their ability to solve problems in mathematics including problems with open-ended answers, problems which are solved in a cooperative atmosphere, and problems which are solved with the use of technology.
- **Reasoning** Students will demonstrate their ability to reason mathematically. They will make conjectures, gather evidence, and build arguments.
- **Cooperation** Students will demonstrate the ability to work in groups to collect and organize data. They will develop an end product based on their interpretation of fractions, decimals, and percents.
- **Communications** Students will demonstrate their ability to communicate mathematically. They will read, write, and discuss mathematics with language and the signs, symbols, and terms of the discipline.
- **Technology** Students will demonstrate the ability to perform mathematical calculations using calculators.
- **Connections** Students will draw on their knowledge of Africa and the scientific method to collect and analyze data.
- **Probability** Students will determine probabilities based on data from examples and investigation.
- **Habits of Mind** Students will make decisions using data collected.

Brief Overview:

These activities integrate Maryland Functional Mathematics, Maryland School Performance skills, and the middle school World Culture curriculum. Students will use the given information on Africa to represent the area and population of the country as a specific fraction, decimal and percent of the continent's total. They will then complete a variety of activities that will allow them to expand and relate their knowledge of Africa and mathematics.

Grade/Level:

Grade 7 (World Culture students)