

Math Lesson 1: What are Data? (numbers in context)

Hawaii DOE Content Standards:

Math standard: [Data Analysis, Statistics, and Probability]-Pose questions and collect, organize, and represent data to answer those questions.

Key concept:

Lists of numbers convey information

Performance indicator:

After completing this lesson, students will recognize numbers in context

Vocabulary:

Data, context

Time:

One class period

Materials:

DDM-Mathematics in a World of Data
Lesson 1, "Numbers in Context," pp. 3-6.

Discussion

Everywhere we turn it seems we are bombarded with information in the form of data. Data are numbers, but not just "any numbers." Lists of numbers are meaningless unless they have a **context**. Without a context, we wouldn't know what the numbers represent. So, **data are a collection of numbers in a context**, and we study data sets in order to make decisions. For example, before you form an opinion on the acceptance of the "Akaka Bill" within the Hawaiian community, you might want to find out how Native Hawaiians in general feel about the overthrow of the Hawaiian Kingdom and/or its subsequent annexation by the government of the United States. You could set up and carry out an opinion poll. Or perhaps you are interested in knowing if the "Hawaiian Diet" does in fact offer a healthier food alternative in comparison to "fast food" establishments. To find that out, you would gather information about the number of calories and fat grams contained in various menu items. This information, in the form of numbers, is called **data**. Often it is essential to attach the unit to a number in order for the data to make sense. In the following lesson, you will learn how important context is in determining what numbers represent.

Activity

Use *Data-Driven Mathematics (DDM) - Mathematics in a World of Data*
Lesson 1: "Numbers in Context", pp. 3-6

