



**mobile inquiry technology**  
**TEACHER NOTES**  
**Class Act Database Introduction**

In this activity, students will use a database to compare and sort data. Students will collect, organize, and collate data.

Students will develop a number of key concepts while working with databases:

viewing data in several different ways;

using data characteristics to identify data sets;

defining ways data can be collected.



Copyright © 1999 [Hudson Public Schools](#) and The Concord Consortium, All rights reserved.



**mobile inquiry technology**  
**Class Act Database TEACHER NOTES**  
**Discussion Guide**

Initiate a discussion with the class about collecting data. For example: Every ten years the federal government does a census to collect information about everyone in the country. One kind of information the census bureau collects is about the kind of work that people do. They might send out a survey that includes questions such as: Name, Male or Female, Occupation, and Zip Code. How many surveys do you think they would get if everyone in Massachusetts responded? What would be the easiest method to find out what occupation was the most common? How would they then find out information about the number of males and females? (The students will probably suggest sorting in piles. Discuss how long this might take.)

Introduce the idea that a computer database can be used to easily record and **sort** this information, saving a great deal of time, effort, and money. How would we find out whether there is a relationship between the kind of work that people do and whether they are male or female? Introduce the idea that a database can be used to **match** different categories of information. For example, once survey information is entered into the computer we can find the number of people that are female and who are construction workers or the number of people that live in a particular zip code and who are doctors.

Databases share many features of a little black address book. Similar to phone and address books, databases can be used to maintain names, addresses and phone numbers. In addition, databases can merge these names and addresses into form letters and personalized notes.

The power of a database is based on its ability to sort data quickly and update information. As a result, businesses can create client lists, inventory-tracking systems, and catalog entries. Students can create bibliographies for school papers and organize schedules.

A database is a collection of information, or data, that you can organize, update, sort, search through, and print as needed. A database doesn't just hold information---you use a database to organize and analyze information so that you understand its significance. So students can print their own personal phone book.

Have the students go to "Thinking About the Question". They should read and discuss the questions in their groups.





**mobile inquiry technology**  
**Class Act Database TEACHER NOTES**  
**Additional Teacher Background**

A database has the capability of finding data once all of the information is added by using the Find function. The Find function allows you to type word(s) next to a defined field and to sort all of the entries of that type. Double sorting or matching is found in the same manner by typing word(s) in more than one defined field.

While making databases, it is important for students to realize that sorting is based on the information placed in the fields. The Find function that helps you sort the data is only as good as the information that is placed into the database. Be careful to be consistent while adding data. For example, if boy is typed as Boy or boys, the database will not be able to find all of the entries.



Copyright © 1999 [Hudson Public Schools](#) and The Concord Consortium, All rights reserved.



## **mobile inquiry technology**

### **Class Act Database Suggested Timeline**

The amount of time you spend on introductory discussions, data collection, and analysis, will determine your overall timeline. The following represents a possible timeline.

- One class period - Introductory Discussion
- One class period - Investigation I: Planning a Survey
- One class period - Investigation II: Designing Your Database
- One class period - Investigation III: Collecting Data
- One class period - Analysis

Additional days can be used for further investigations.



Copyright © 1999 [Hudson Public Schools](#) and The Concord Consortium, All rights reserved.