

Step-by-Step

Creating and Using an Excel Database

A database is a tool to organize a collection of data. Although Excel is primarily a spreadsheet tool, it can function as a database in which you can enter, filter, sort, and search for information. In this Step-by-Step Card, you will create and then work with a database for a school play.

Note: These instructions are based on Microsoft Office 97. If you're using a different version of the software, some of the steps may vary slightly.

Opening an Excel document

- 1 Click the Start button, point to Programs, and click Microsoft Excel to open the program. A new workbook appears.
- 2 Choose Save from the File menu. Name the document "Spring Folktale Play." Select a location where you want to save the file; then click Save.

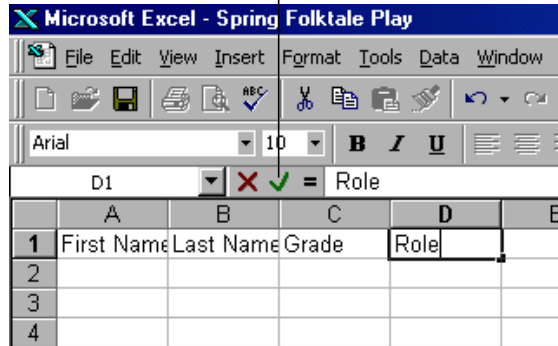
Entering data

First you'll enter the headings in row 1 for the database fields or categories.

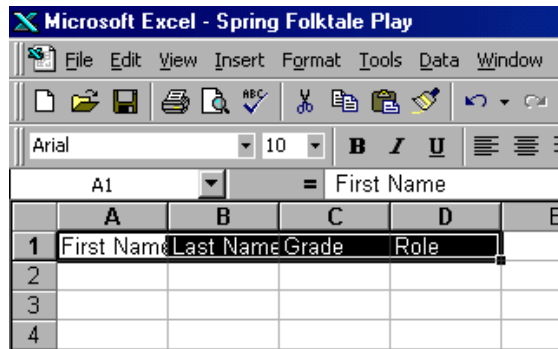
- 1 Click in cell A1 if it's not already selected. Type "First Name" in cell A1 and press Tab.
- 2 Type "Last Name" in cell B1 and press Tab. Type "Grade" in cell C1 and press Tab. Type "Role" in cell D1 and click the green checkmark to the left of the Formula Bar.

Note: The key you press to record the text determines the next cell you move to. To move to the cell directly to the right, click Tab. To move to the cell directly below, click Return. You can also use the arrow keys on the keyboard. To remain in a cell after you record text in that cell, click the green checkmark to the left of the Formula Bar.

Click this checkmark to record your entry without leaving the cell.



- 3 Drag to select cells A1 through D1; then click the B button  on the Formatting toolbar to make the headings bold.



The text in the first two columns is a bit too long for the cell width, so select cells A1 through D1 again, and choose 8 from the Font Size pop-up menu on the Formatting toolbar.

Now you're ready to enter the student information. The information for each student makes up a database "record."

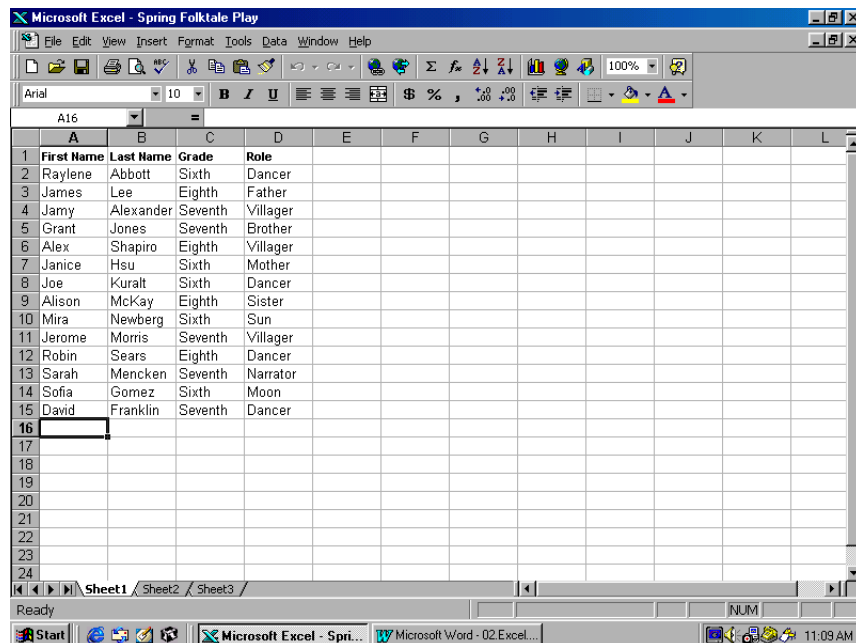
- 4 Click in cell A2 and enter "Raylene," the first name of the first student on the list. Press Tab to move to the Last Name field for this student.
- 5 Type "Abbott." Press the Tab key.
- 6 Type "Sixth." Press the Tab key.
- 7 Type "Dancer." Press Enter.

- 8 Make sure cell A3 is selected and repeat this process until all the data on the chart has been entered. (You can make up different names for the students if you want, but use the grades and roles that are provided in the chart.)

Tip: If you make a mistake typing, make sure the cell is selected and then correct the mistake in the Formula Bar.

First Name	Last Name	Grade	Role
Raylene	Abbott	Sixth	Dancer
James	Lee	Eighth	Father
Jamy	Alexander	Seventh	Villager
Grant	Jones	Seventh	Brother
Alex	Shapiro	Eighth	Villager
Janice	Hsu	Sixth	Mother
Joe	Kuralt	Sixth	Dancer
Alison	McKay	Eighth	Sister
Mira	Newberg	Sixth	Sun
Jerome	Morris	Seventh	Villager
Robin	Sears	Eighth	Dancer
Sarah	Mencken	Seventh	Narrator
Sofia	Gomez	Sixth	Moon
David	Franklin	Seventh	Dancer

- 9 Choose Save from the File menu to save the changes.



Note: You can take advantage of the AutoComplete feature as you enter text. When AutoComplete is enabled, the computer tries to anticipate your entry as you're typing, based on previous information. For example, the second time you begin to type "Dancer," the rest of the word is automatically entered. You can turn this feature on and off by choosing Options from the Tools menu. Click the Edit tab; then select or deselect the option "Enable AutoComplete for cell values."

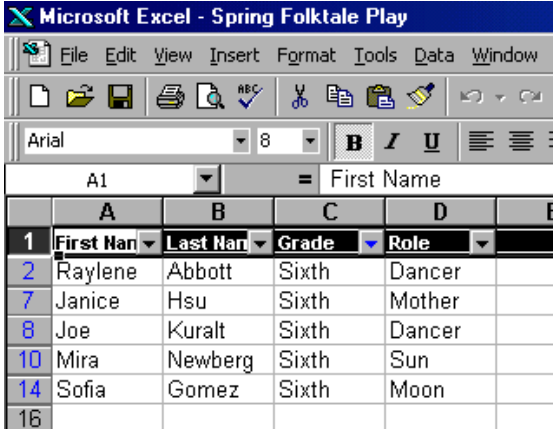
Using the AutoFilter feature

As a database grows, you may need to find and work with a specific group of records. The AutoFilter feature allows you to search for information based on a specific set of criteria. To use this feature, you first need to turn it on. In these steps, you will turn on the AutoFilter feature and then use it to find information.

- 1 Select row 1.
- 2 Choose Filter from the Data menu; then choose AutoFilter from the submenu. AutoFilter arrows appear next to each field name. Clicking these arrows opens a pop-up menu from which you can choose a filter for sorting the database.

Now you'll use this feature to find which students are in the sixth grade.

- 3 Open the AutoFilter pop-up menu for the Grade field and choose Sixth. The records are filtered. You should see a list of five students who are in the play and in the sixth grade.



The screenshot shows the Microsoft Excel interface with a spreadsheet titled "Spring Folktale Play". The spreadsheet has columns for First Name, Last Name, Grade, and Role. The Grade column is filtered to show only "Sixth" grade students. The visible records are:

	A	B	C	D	E
1	First Name	Last Name	Grade	Role	
2	Raylene	Abbott	Sixth	Dancer	
7	Janice	Hsu	Sixth	Mother	
8	Joe	Kuralt	Sixth	Dancer	
10	Mira	Newberg	Sixth	Sun	
14	Sofia	Gomez	Sixth	Moon	
16					

Note: The pop-up menu arrow for the Grade field is blue, as are the row numbers at the left, to indicate that there are records that are not visible.

- 4 Open the AutoFilter pop-up menu for the Grade field and choose (All). All of the records reappear and the blue disappears.

You can see which students are dancers by using another AutoFilter pop-up menu.

- 5 Open the AutoFilter pop-up menu for the Role field and choose Dancer. Four student records appear.
- 6 Open the AutoFilter pop-up menu for the Role field again and choose (All). The records all appear again.

Note: You can use this feature to filter records based on more than one category. For example, to see all of the dancers from sixth grade, you would choose Sixth from the AutoFilter pop-up menu for the Grade field and Dancer from the AutoFilter pop-up menu for the Role field. Because the database you're working with in this Step-by-Step Card is small, you can see all of the information without filtering records, but this feature is especially useful when you're working with large amounts of information.

Sorting the database

Right now, the student names are in no particular order. You can sort the database so it is organized alphabetically by last name.

- 1 Click in any cell that contains data.
- 2 Choose Sort from the Data menu. The Sort dialog box appears.
- 3 Open the "Sort by" pop-up menu, and choose Last Name.



Make sure Ascending is selected. "Header row" should also be selected. Click OK. The student names are organized alphabetically by last name.

- 4 Save your changes.

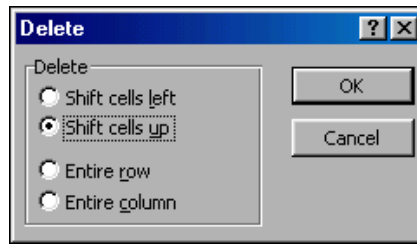
Adding and deleting records

You can easily add and delete records from the database. To add a record, click in the first cell in the first empty row and enter the data as you did to create the database. You then need to sort by Last Name again.

In these steps, you will delete the record for a student who has decided not to be in the play.

- 1 Click in cell A8 and drag to the right to select cells A8 through D8. The record for Joe Kuralt is selected.

- 2** Choose Delete from the Edit menu.
- 3** In the dialog box that appears, make sure “Shift cells up” is selected and click OK. The student record is deleted and the other rows adjust to take its place.



- 4** Save your changes.

If you have time, you can use these techniques to add, modify, or delete student records, practice using the AutoFilter feature, or sort information. To learn more, refer to the Excel electronic help system.