

Century 21 *Jr.*

Input Technologies &
Computer Applications

KEYBOARDING

Review Chapter 16 – Database

Database Objects

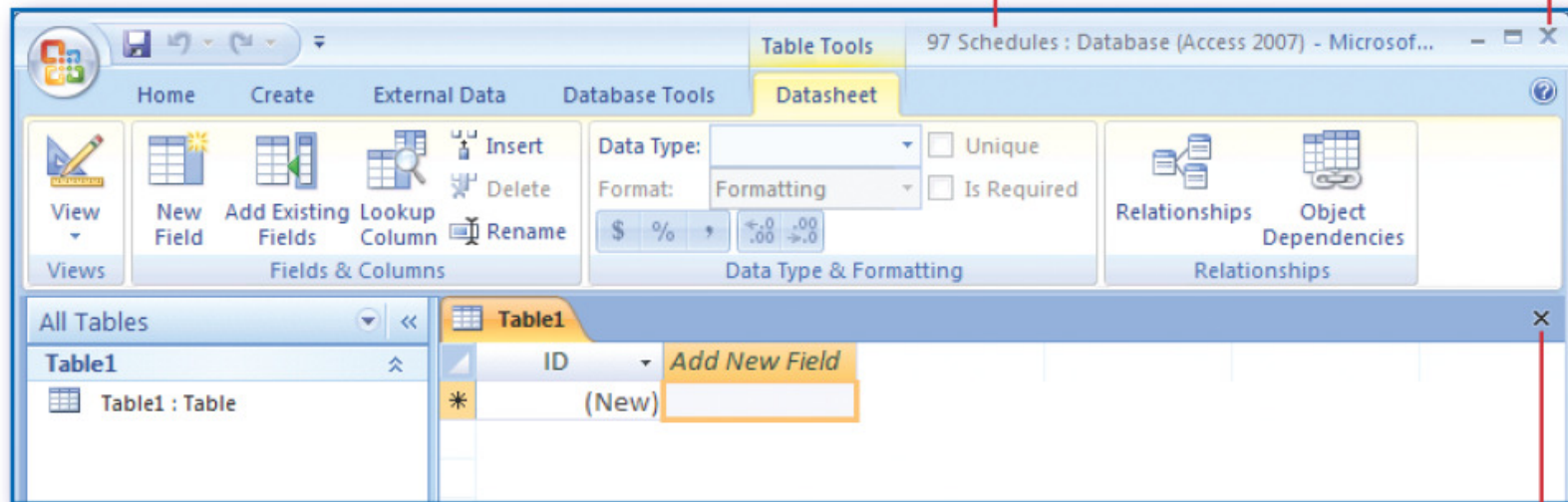
The image shows a screenshot of the Microsoft Access interface for a database named "Eastwick School of Dance : Databas". The ribbon includes "Home", "Create", "External Data", and "Database Tools". The "All Access Objects" pane is open, displaying a list of database objects categorized into Tables, Queries, Forms, and Reports. Four blue arrows with red text labels point to these categories from the left side of the screen.

- Tables:** Eastwick Fees (Lesson 111A&B), Eastwick Fees (Lesson 112C), Eastwick Fees (Lesson 113D), Eastwick Fees (Lesson 114C), Eastwick School of Dance - Address, Eastwick School of Dance - Address (Lesson 114D), September Delinquent Fees
- Queries:** 147A-Activity 2-1, 147A-Activity 2-2, 147A-Activity 2-3, 147B-Activity 2, September Delinquent Fees Merge
- Forms:** Eastwick Student Enrollment (148A-Activity 3)
- Reports:** Student Address List (149A-Activity 3), Student Telephone List (149A-Activity 4)

Database Window

97 Schedules
database window

Close button for
Access window



Close button for
Access table window

Database Table

- Database object used for organizing and storing data

Record (row)

ID	Class	Teacher
1	History	Mr. Chan
2	Math	Mr. Boston
3	Chorus	Mr. Fields
4	English	Ms. Ramirez
5	Keyboarding Applications	Mr. Dexter
6	Physical Education	Ms. Gomez
* (AutoNumber)		

Field (column)

Data Types

Data Type	Description
Text	For letters or numbers that do not require calculations
Number	For numbers to be used in calculations
Date / Time	For dates and times
Currency	For dollar values
AutoNumber	Numbers assigned in order by <i>Access</i>
Yes / No	For data that can only be Yes or No

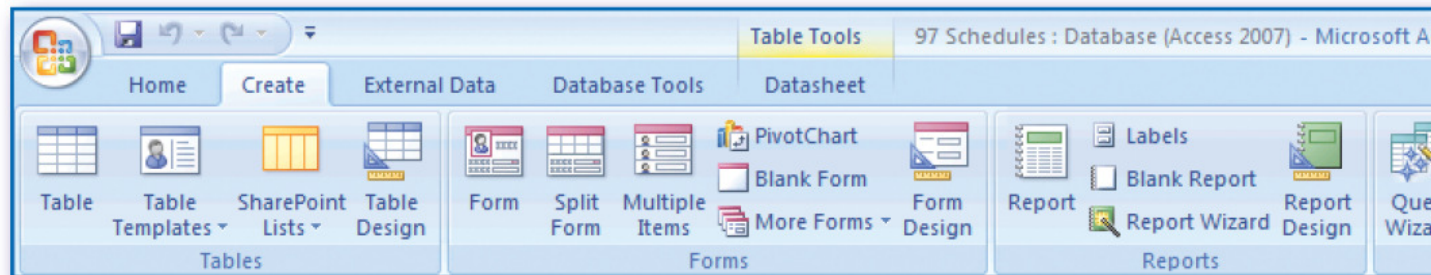
Primary Key

- Field chosen to identify each record in a table
 - Duplicate data cannot be entered
 - The value in the primary key must be unique for every record
- Access can create a primary key for you

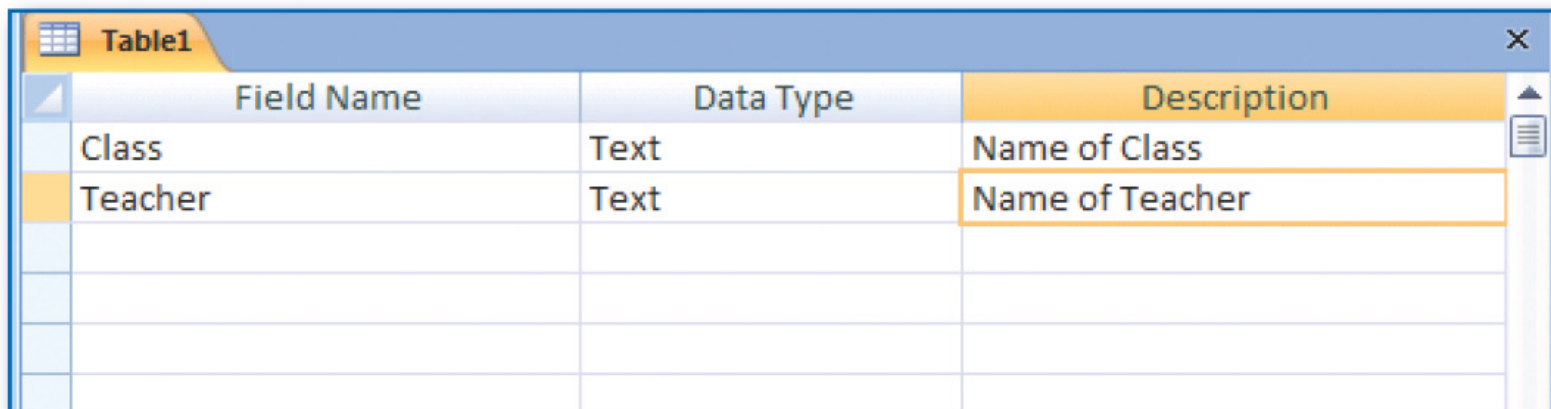


Create a Table

- Click Table Design on the Create tab:



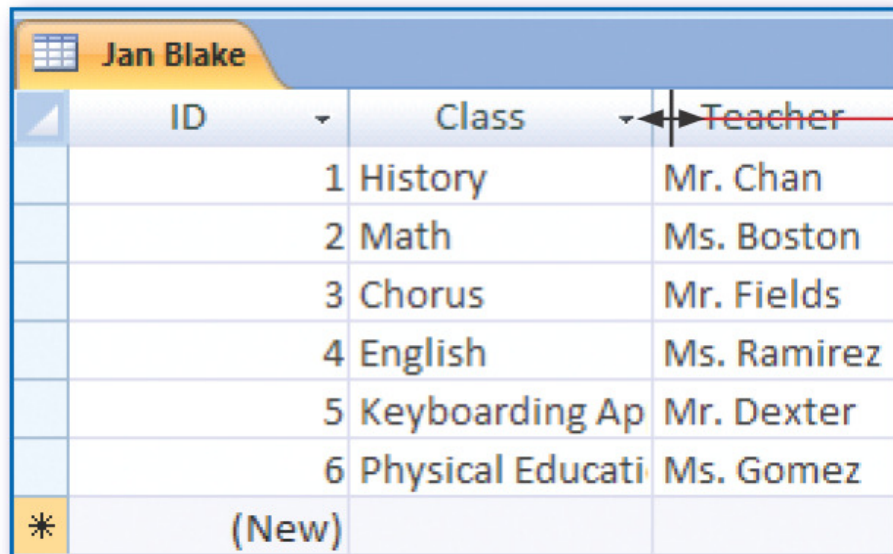
- Enter table fields



Field Name	Data Type	Description
Class	Text	Name of Class
Teacher	Text	Name of Teacher

Add Records to a Table

- Click to open a table
- Press TAB to move from field to field

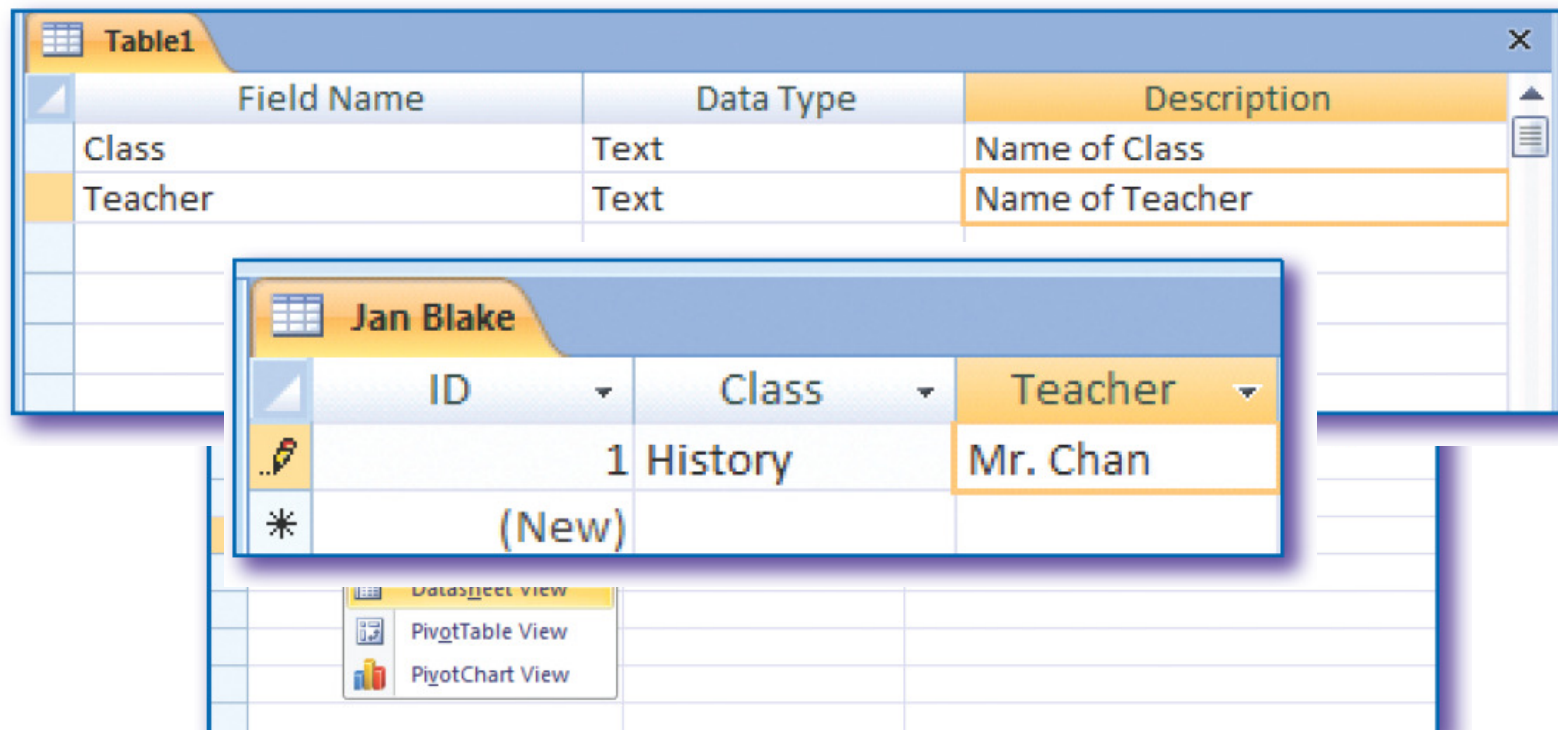


ID	Class	Teacher
1	History	Mr. Chan
2	Math	Ms. Boston
3	Chorus	Mr. Fields
4	English	Ms. Ramirez
5	Keyboarding Ap	Mr. Dexter
6	Physical Educati	Ms. Gomez
*	(New)	

Double-click the column head border or drag it to the right to increase the column width.

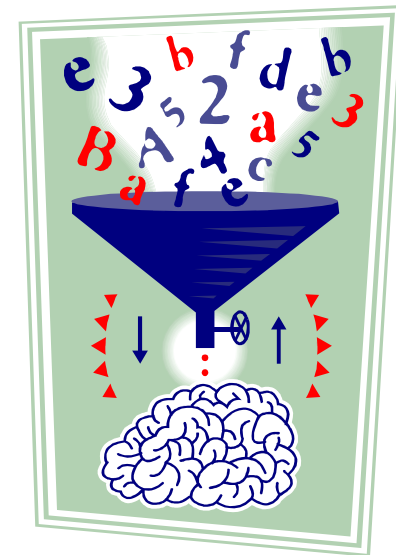
Database Views

- Design view
 - To set up a table



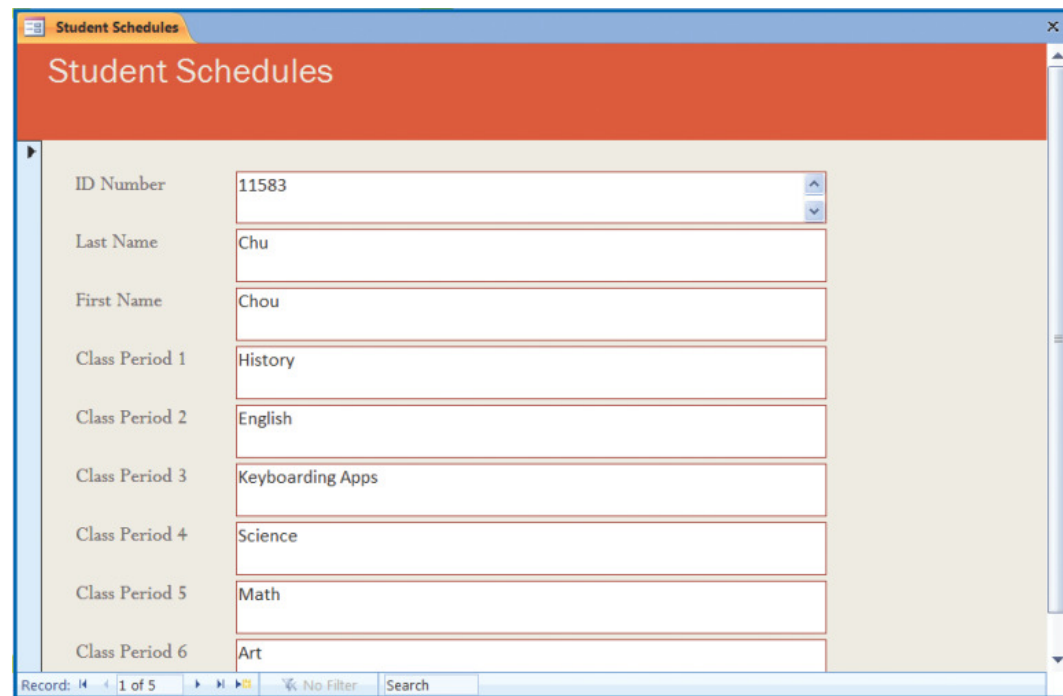
Database Design

- Very important to make the collected data easy to use
- Consider types of data and how data will be used
 - What reports will be needed
 - What searches and sorts will be required
 - What tables should be created
 - What fields are in a table



Database Forms

- AutoForm feature automatically creates a form based on an open table



The screenshot shows a Microsoft Access form titled "Student Schedules". The form is displayed in a window with a blue title bar and a red header bar. The form contains several text boxes for data entry, each with a label to its left. The labels and their corresponding values are:

Field Name	Value
ID Number	11583
Last Name	Chu
First Name	Chou
Class Period 1	History
Class Period 2	English
Class Period 3	Keyboarding Apps
Class Period 4	Science
Class Period 5	Math
Class Period 6	Art

At the bottom of the form, there is a status bar with the following information: "Record: 1 of 5", "No Filter", and a "Search" button.

Form Wizard

Form Wizard

Which fields do you want on your form?
You can choose from more than one table or query.

Tables/Queries
Table: Student Schedules

Available Fields:
ID Number
Last Name
First Name
Class Period 1
Class Period 2
Class Period 3
Class Period 4
Class Period 5

Selected Fields:

Cancel < Back Next > Finish

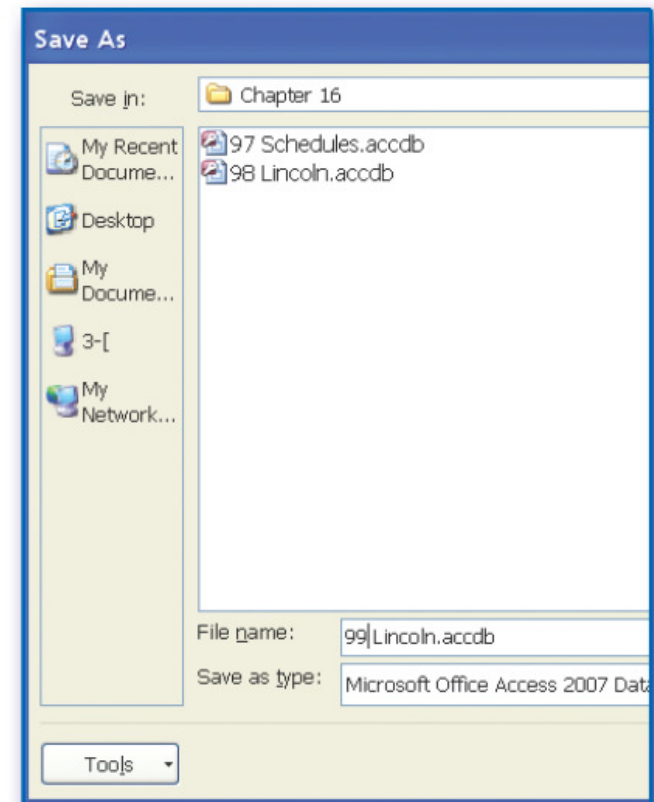
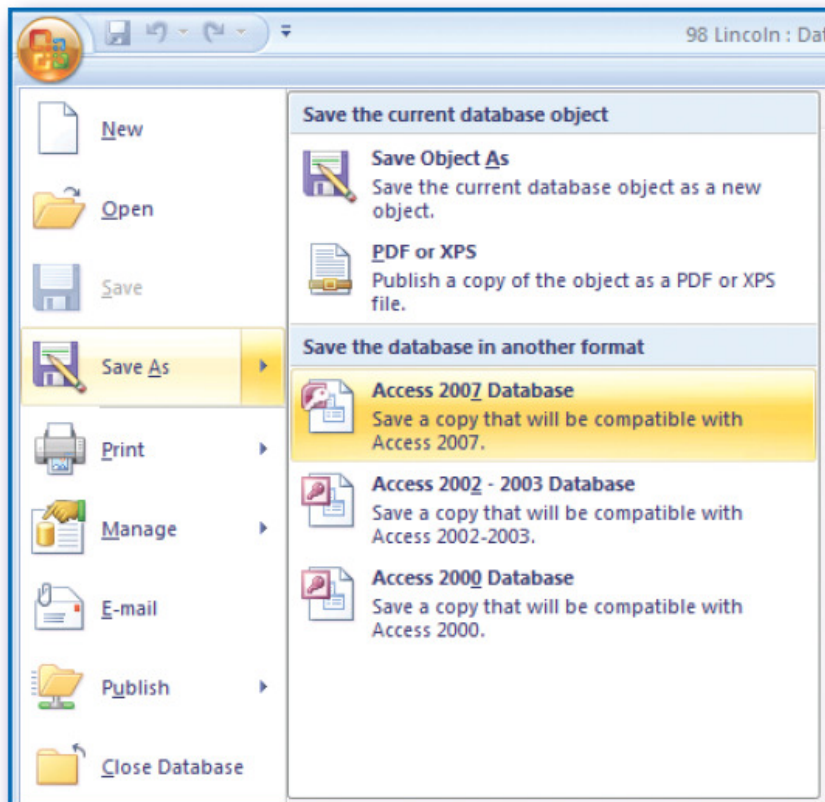
Click to select a table.

Click to select a field.

Click to select all fields.

Save As Feature

- Make a copy of any database



Add Fields to a Table

- Open the table in Design view

Right-click the row.

Field Name	Data Type
ID Number	Text
Last Name	Text
First Name	Text
Class Period 1	Text
Class Period 2	Text

Choose **Insert Rows**.

Delete Fields in a Table

- Open the table in Design view

Right-click the field to delete.

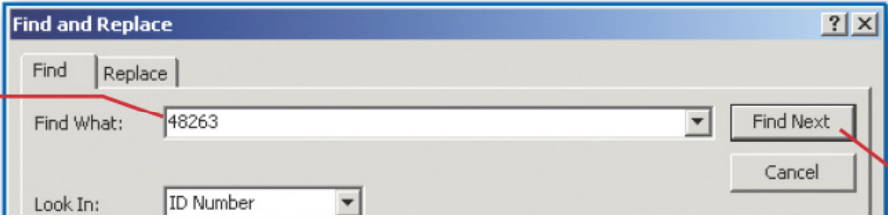
Field Name	Data Type
Last Name	Text
First Name	Text
Middle Name	Text
Life	Text
Birthplace	Text
Work Completed	Text
Teachers	Text

Select Delete Rows.

Editing Records

- Delete entire records or edit field data
- Use Find to quickly locate a record

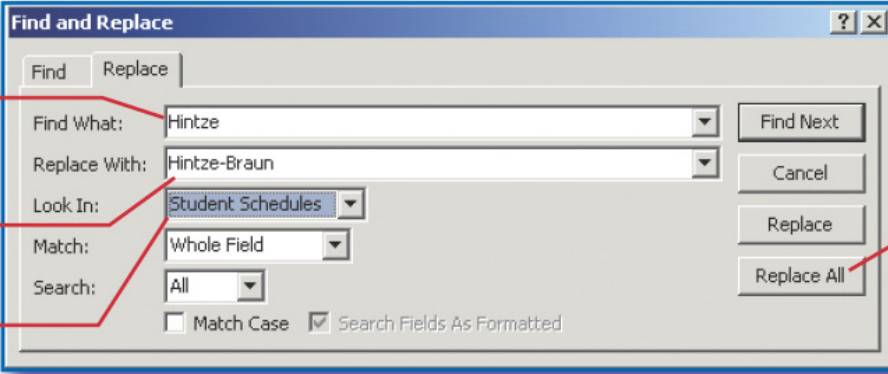
- Key the data you want to find.



Click Find
- Key the data to be found.

Key the new data.

Select a location.



Click Replace All.

Database Queries

- A database object that displays data that meet criteria that you enter
 - Field name with or without data
 - Specific data
- You may include all or only some of the fields in a table



Create a Query

Step 2: Select the table name.

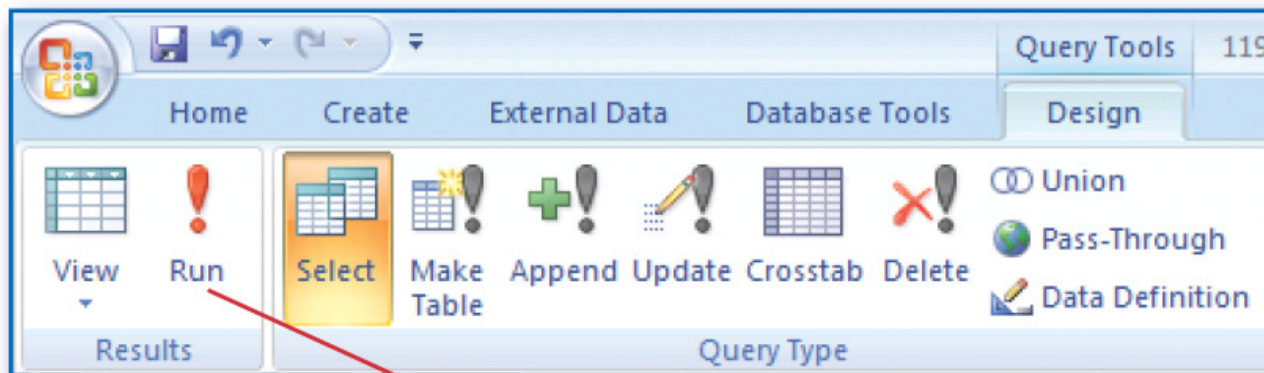
Step 3: Click **Add**. The table field list appears in the Query window.

Step 4: Click the down arrow and select **ID Number**.

Query design grid

Run a Query

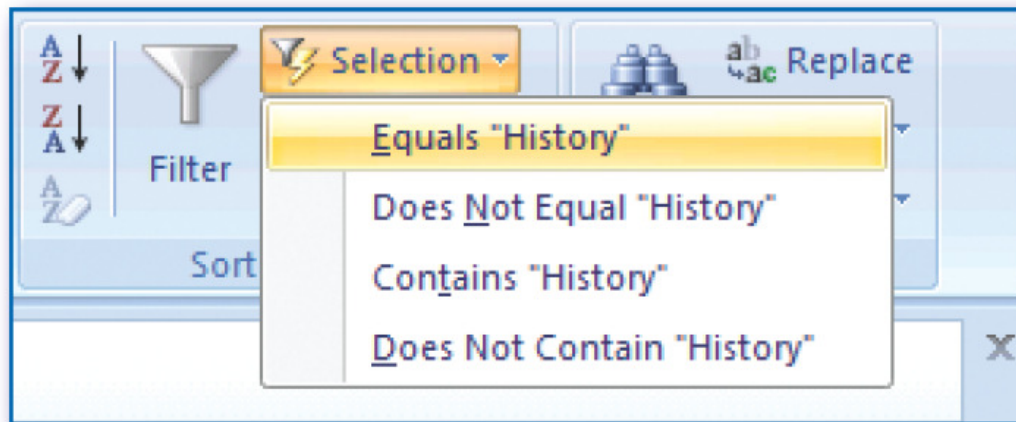
- Click Run in the Results group on the Query Tools Design tab



- Query results display as a table

Database Filters

- A filter temporarily *hides* records that do not meet your criteria
- Choose filter options in the Sort & Filter group on the Home tab:



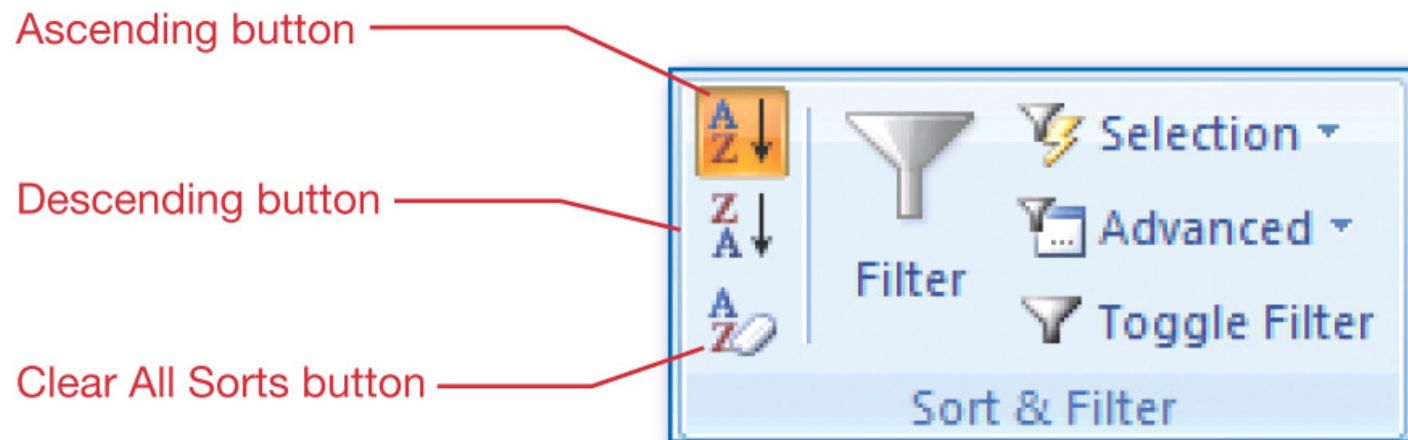
Selection filter button



Toggle Filter button

Database Sorts

- Sort information in ascending or descending order
- Choose sort type in the Sort & Filter group on the Home tab:



Database Reports

- Database object used to display data
- Reports can contain data from tables or queries
 - Create an AutoReport from an open table or query
 - Use Report Wizard

Class Period I	Last Name	First Name	Instructor I
History	Chu	Chou	Johnson
	Foster	Erika	Johnson
	Garner	Shelby	Johnson
	Hansen	Brittany	Johnson
	Hennessy	Mathew	Johnson
	Martinez	Ricardo	Johnson

Start the Report Wizard

The screenshot shows the 'Report Wizard' dialog box. It has a title bar 'Report Wizard' and a main area with a yellow icon of a report and a question: 'Which fields do you want on your report? You can choose from more than one table or query.' Below this is a 'Tables/Queries' section with a dropdown menu showing 'Table: Student Schedules'. To the right of the dropdown are four arrow buttons: '>', '>>', '<', and '<<'. Below the dropdown is an 'Available Fields:' list with items: 'ID Number', 'Class Period 1', 'Instructor 1', 'Class Period 2', 'Instructor 2', 'Class Period 3', 'Instructor 3', and 'Class Period 4'. To the right of this list are the same four arrow buttons. Further right is a 'Selected Fields:' list with items: 'First Name', 'Last Name', and 'Grade'. At the bottom are four buttons: 'Cancel', '< Back', 'Next >', and 'Finish'. Red lines with text annotations point to various elements: 'Select a table or query.' points to the 'Table: Student Schedules' dropdown; 'Select a field to include in the report.' points to the 'Available Fields:' list; 'Click to move a field to Selected Fields.' points to the '>' button between the 'Available Fields:' and 'Selected Fields:' lists; and 'Click Next.' points to the 'Next >' button.

Select a table or query.

Select a field to include in the report.

Click to move a field to Selected Fields.

Click **Next**.

Review Question

1. A database object used for organizing and storing data is a
 - a. Query
 - b. Report
 - c. Table
 - d. Form

Read the question and decide which answer you think is correct. Click the mouse to see the correct answer.

ANSWER

1. A database object used for organizing and storing data is a
 - a. Query
 - b. Report
 - c. Table
 - d. Form

Review Question

2. Tables contain

- a. Fields and records
- b. Primary keys for every record
- c. Columns and rows
- d. Forms and queries

Read the question and decide which answer you think is correct. Click the mouse to see the correct answer.

ANSWER

2. Tables contain

- a. Fields and records
- b. Primary keys for every record
- c. Columns and rows
- d. Forms and queries

Review Question

3. A primary key is
 - a. Required in a table
 - b. An automatic field of a table
 - c. Rarely duplicated
 - d. Unique for every record in a table

Read the question and decide which answer you think is correct. Click the mouse to see the correct answer.

ANSWER

3. A primary key is
 - a. Required in a table
 - b. An automatic field of a table
 - c. Rarely duplicated
 - d. Unique for every record in a table

Review Question

4. Which database feature temporarily hides records in a table?
- a. Form
 - b. Filter
 - c. Sort
 - d. Query

Read the question and decide which answer you think is correct. Click the mouse to see the correct answer.

ANSWER

4. Which database feature temporarily hides records in a table?
- a. Form
 - b. Filter
 - c. Sort
 - d. Query

Review Question

5. Reports can contain data from:
- a. Queries and forms
 - b. Fields and tables
 - c. Forms and records
 - d. Tables and queries

Read the question and decide which answer you think is correct. Click the mouse to see the correct answer.

ANSWER

5. Reports can contain data from:
- a. Queries and forms
 - b. Fields and tables
 - c. Forms and records
 - d. Tables and queries