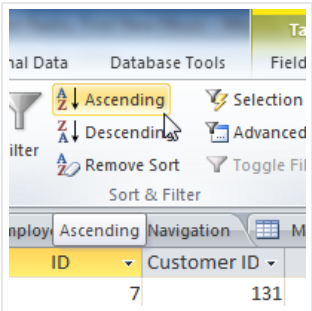
Access 2010

Sorting and Filtering Records

Page 1

Introduction



Access 2010 gives you the ability to work with enormous amounts of data, which means it can be difficult to learn anything about your database just by glancing at it. **Sorting** and **filtering** are two tools that let you customize how you organize and view your data, making it more convenient to work with.

In this lesson, you'll learn how to **sort** and **filter** records.

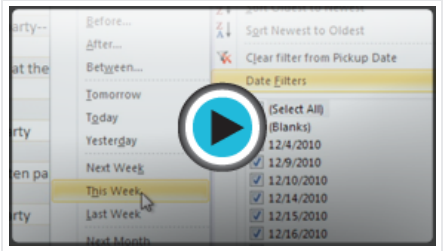
We will be showing you how to sort and filter records with examples from our sample database. If you would like to follow along, **download our example** and use it to follow the procedures demonstrated in this lesson.

Page 2

About sorting and filtering

Essentially, sorting and filtering are tools that let you **organize** your data. When you sort data, you are **putting it in order**. Filtering data lets you **hide** unimportant data and **focus** only on the data you're interested in.

Video: Sorting and Filtering in Access 2010



Sorting records

When you **sort** records, you are putting them into a **logical order**, with **similar data grouped together**. As a result, sorted data is often simpler to read and understand than unsorted data. By default, Access sorts records by their **ID numbers**. However, there are many other ways records can be sorted. For example, the information in a database belonging to a bakery could be sorted in several ways:

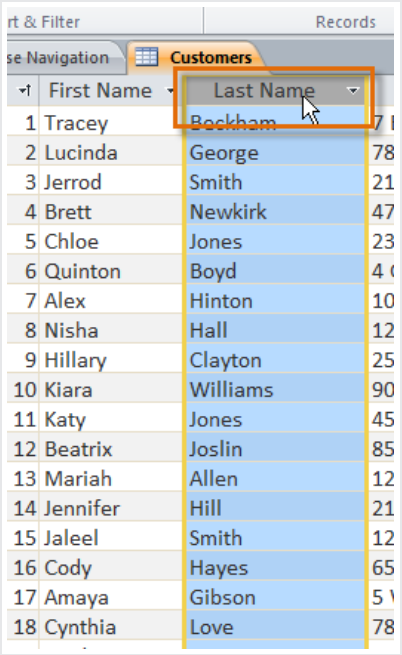
- Orders could be sorted by **order date** or by the **last name** of the customers who placed the orders.
- Customers could be sorted by **name** or by the **city** or **zip code** where customers live.
- Products could be sorted by **name**, **category** (pies, cakes, cupcakes, etc.), or **price**.

You can sort both **text** and **numbers** in two ways: in **ascending** order or **descending** order. "Ascending" means "going up," so an ascending sort will arrange numbers from **smallest to largest** and text from **A to Z**. "Descending" means "going down," or **largest to smallest** for numbers and **Z to A** for text. The default ID number sort that appears in your tables is an ascending sort, which is why the lowest ID numbers appear first.

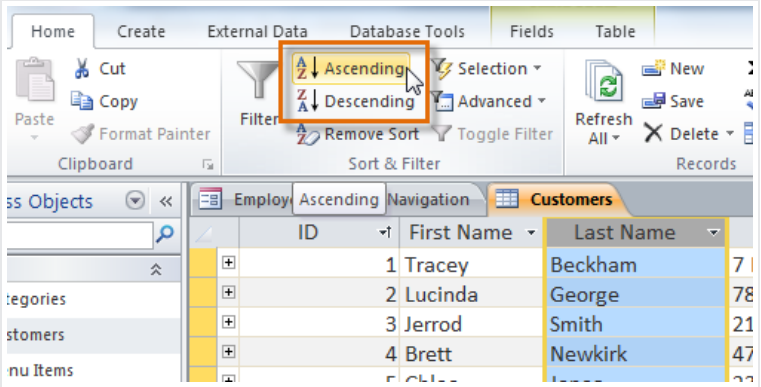
In our example, we will be performing a sort on a table. However, you can sort records in any Access object. The procedure is largely the same.

To sort records:

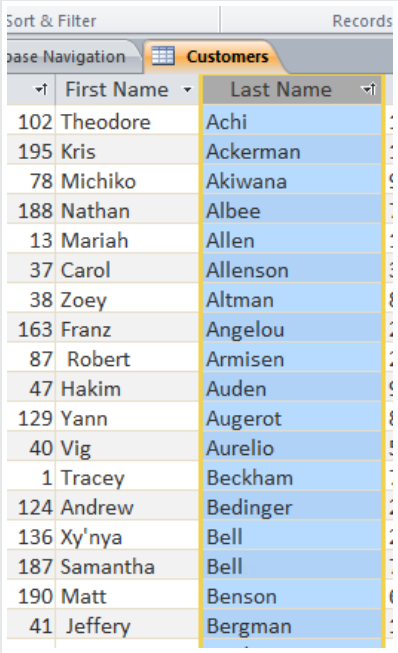
1. Select a field in the cell you wish to sort by. In this example, we will sort by customers' last names.



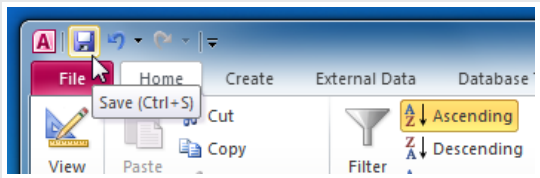
2. Click the **Home** tab on the Ribbon, and locate the **Sort & Filter** group.
3. **Sort** the field by selecting the **Ascending** or **Descending** command.
   - Select **Ascending** to sort text A to Z or to sort numbers from smallest to largest. We will select this in our example, since we want the last names to be in A to Z order.
   - Select **Descending** to sort text Z to A or to sort numbers from largest to smallest.



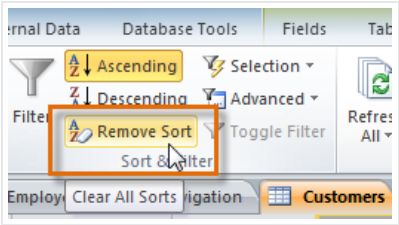
4. The table will now be sorted by the selected field.



5. To save the new sort, click the **Save** command on the Quick Access toolbar.



After you save the sort, the records will stay sorted that way until you perform another sort or remove the current one. To remove a sort, simply click the **Remove Sort** command.



Filtering records

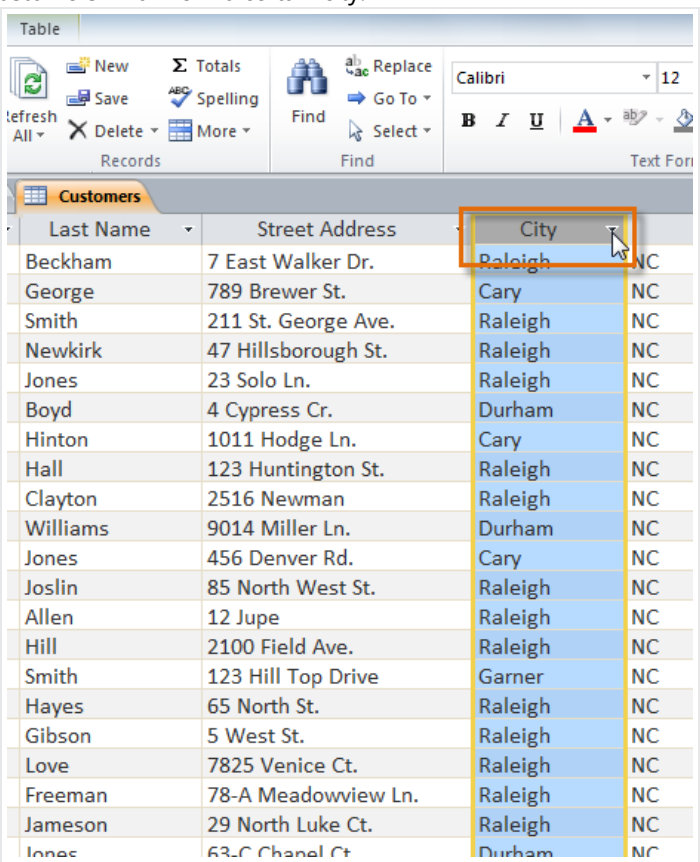
Filters allow you to view **only the data you want to see**. When you create a filter, you set **criteria** for the data you want to display. The filter then **searches** all of the records in the table, **finds** the ones that meet your search criteria, and **temporarily hides** the ones that don't.

Filters are useful because they allow you to **focus in** on specific records without being distracted by the data you're uninterested in. For instance, if you had a database that included customer and order information, you could create a filter to display only customers living within a certain city, or only orders that contain a certain product. Viewing this data with a filter would be far more convenient than searching for it in a large table.

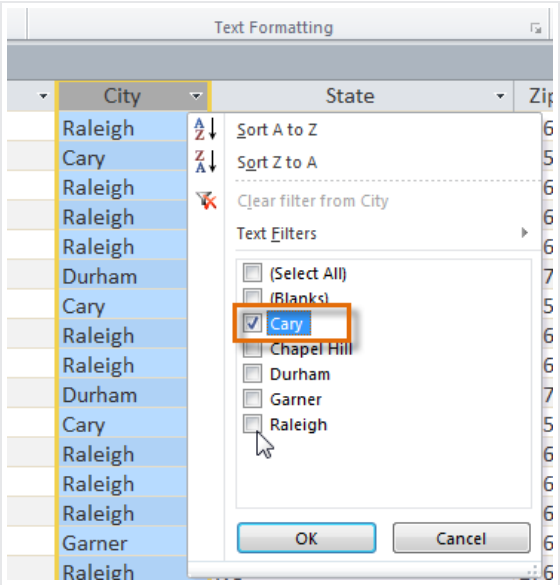
In our examples and explanations, we will be applying filters to tables. However, you can apply filters to any Access object. The procedure is largely the same.

To create a simple filter:

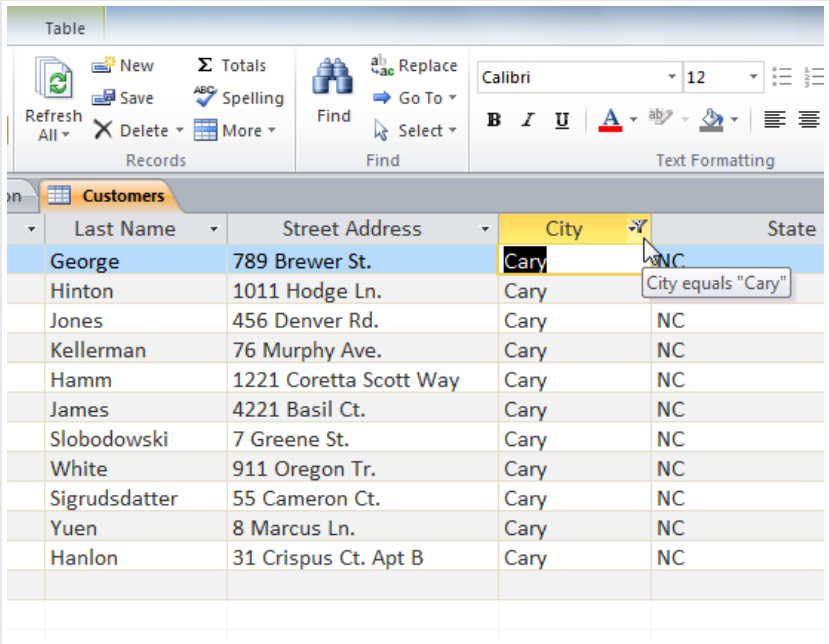
1. Click the **drop-down arrow** next to the field you would like to filter by. We will filter by city, as we want to see a list of customers who live in a certain city.



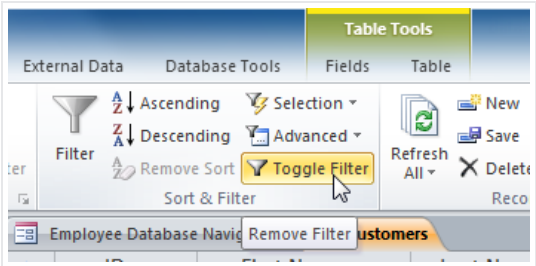
2. A drop-down menu with a checklist will appear. Only checked items will be included in the filtered results. Use the following options to determine which items will be included in your filter:
   - **Select** and **deselect** items one at a time by clicking their check boxes. Here, we will deselect all of the options except for **Cary**.
   - Click **Select All** to include every item in the filter. Clicking **Select All** a second time will deselect all items.
   - Click **Blank** to set the filter to find only the records with no data in the selected field.



3. Click **OK**. The filter will be applied. Our customers table now displays only customers who live in Cary.



Toggling your filter allows you to turn it on and off. To view records without the filter, simply click the **Toggle Filter** command. To restore the filter, simply click it again.

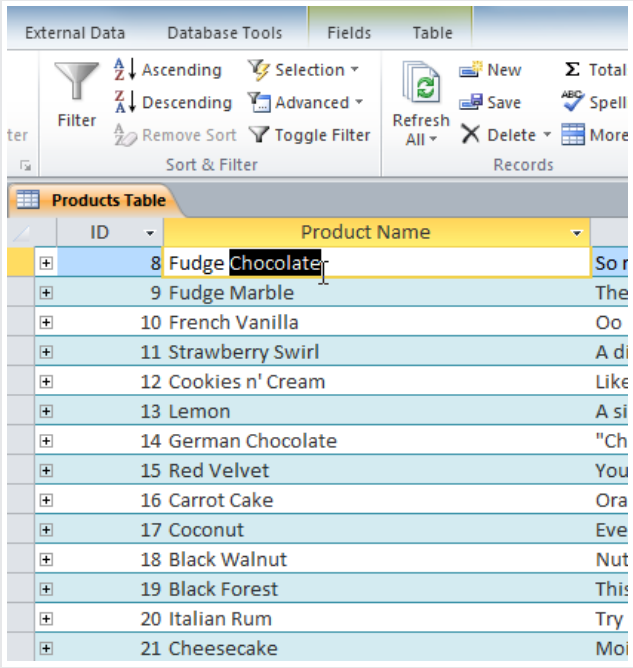


Creating a filter from a selection

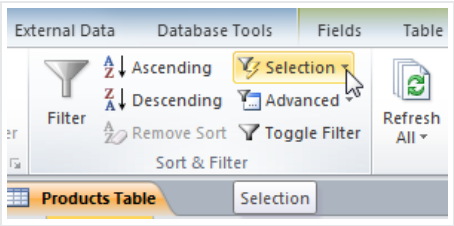
Filtering by selection allows you to **select specific data** from your table and find data that is **similar** or **dissimilar** to it. For instance, if you were working with a bakery's database and wanted to search for all products whose names contained the word "chocolate", you could select that word in one product name and create a filter with that selection. Creating a filter with a selection can be more convenient than setting up a simple filter if the field you're working with contains many items.

To create a filter from a selection:

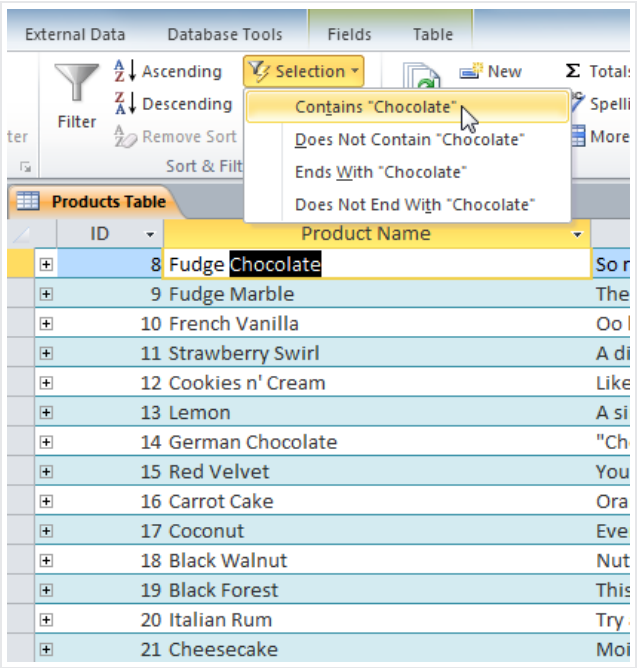
1. **Select** the cell or data you would like to create a filter with. We want to see a list of all of our products that contain the word "chocolate" in their names, so we'll select the word "chocolate" in the **Product Name** field.



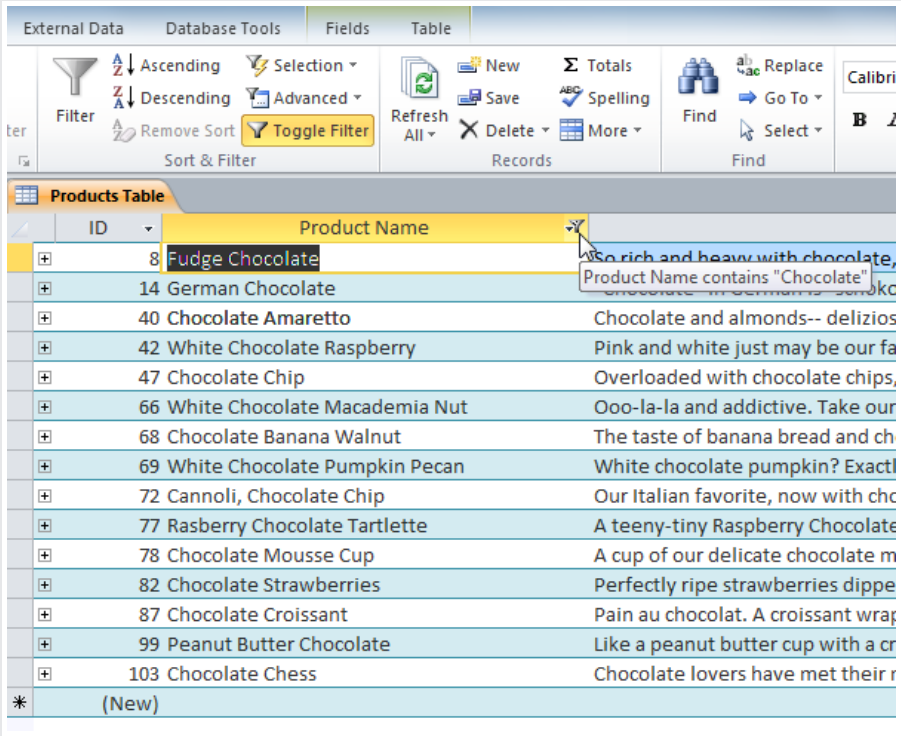
2. Select the **Home** tab on the Ribbon, and locate the **Sort & Filter** group.
3. Click the **Selection** drop-down arrow.



4. Select the type of filter you would like to set up:
   - **Contains** includes only records with cells that contain the selected data. We'll select this, since we want to see records that contain the word "chocolate" anywhere in the title.
   - **Does Not Contain** includes all records **except** those with cells that contain the selected data.
   - **Ends With** includes only records whose data for the selected field **ends** with the search term.
   - **Does Not End With** includes all records **except** those whose data for the selected field ends with the search term.



5. The filter will be applied. Our table now displays only products with the word "chocolate" in their names.



Creating a filter from a search term

You can also create a filter by entering a **search term** and specifying the way Access should match data to that term. Creating a filter from a search term is similar to creating a filter from a selection.

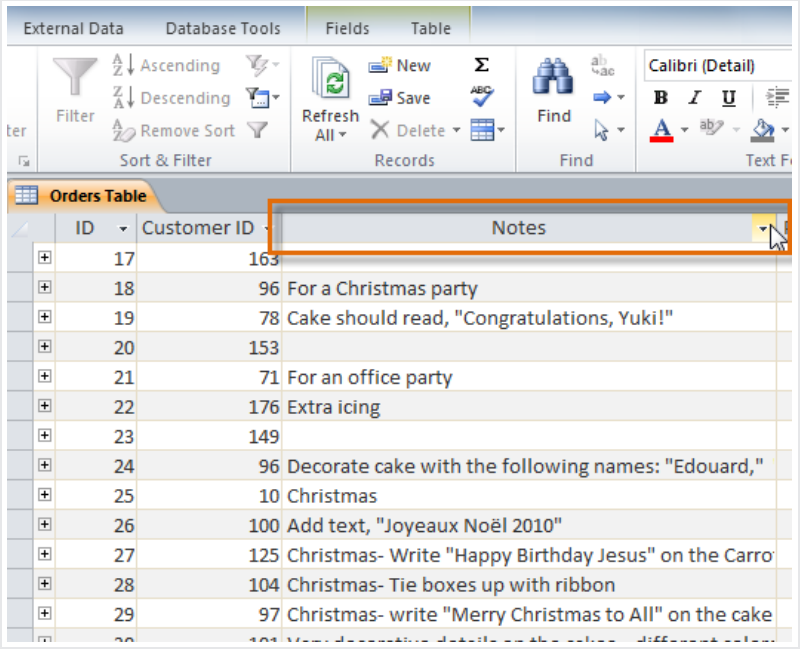
Filtering text by a search term

When filtering text by entering a search term, you can use some of the same options you use when filtering by a selection, like **Contains**, **Does Not Contain**, **Ends With**, and **Does Not End With**. You can also choose from the following options:

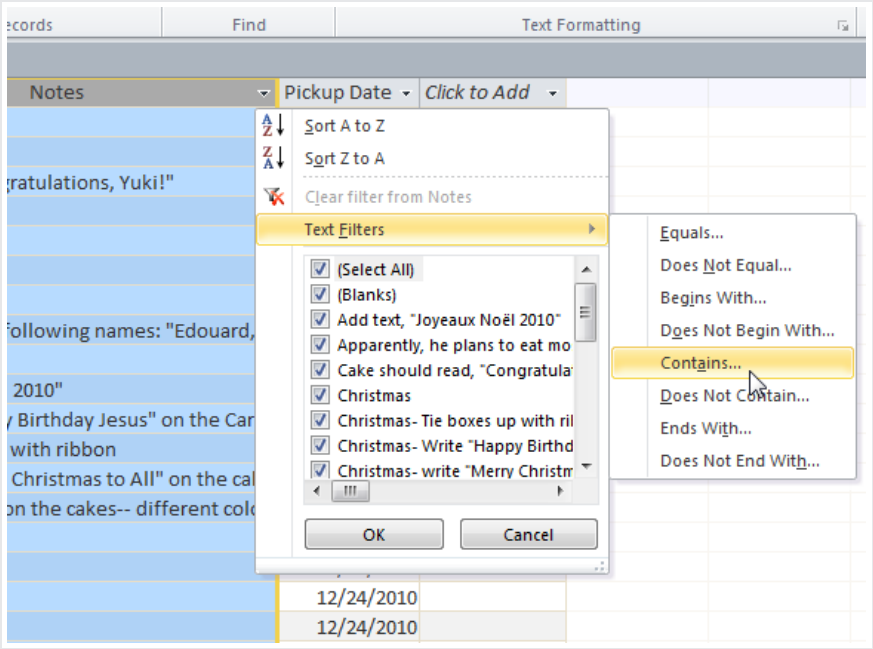
- **Equals**, which includes only records with data that is identical to the selected data
- **Does Not Equal**, which includes all records except the data that is identical to the selection
- **Begins With**, which includes only records whose data for the selected field **begins** with the search term
- **Does Not Begin With**, which includes all records **except** those whose data for the selected field begins with the search term

To filter text by a search term:

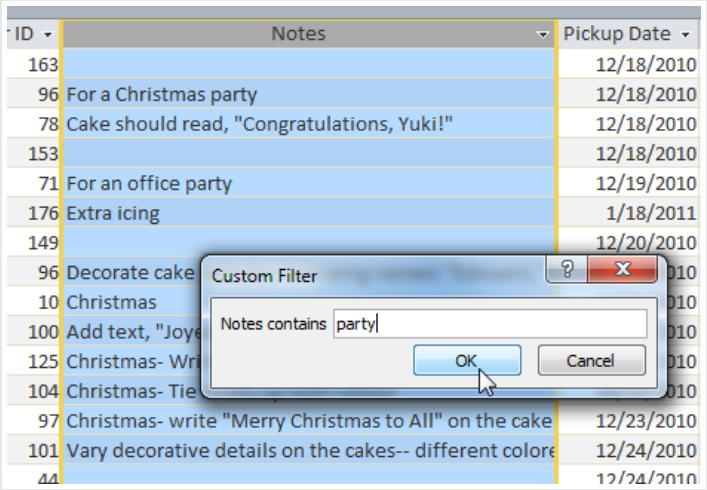
1. Click the **drop-down arrow** next to the field you would like to filter by. We want to filter the records in our orders table to display only those that contain notes with certain information, so we'll click the arrow in the **Notes** field.



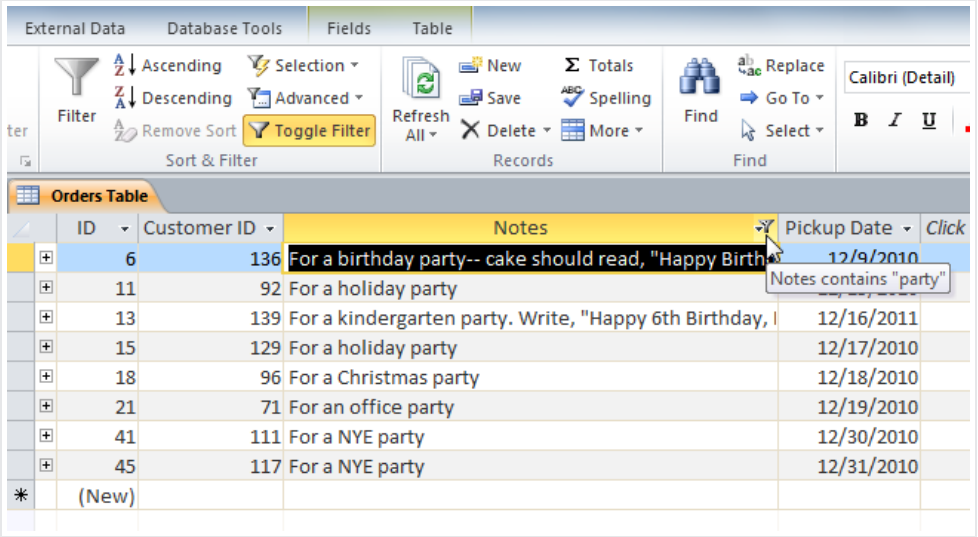
2. In the drop-down menu, hover your mouse over the words **Text Filters**. From the list that appears, select the way you would like the filter to match the term you enter. In this example, we want to view only records whose notes indicate the order was placed for a party. We'll select **Contains** so we can search for records that contain the word "party".



3. The **Custom Filter** dialog box will appear. Type in the word you would like to use in your filter.



4. Click **OK**. The filter will be applied.



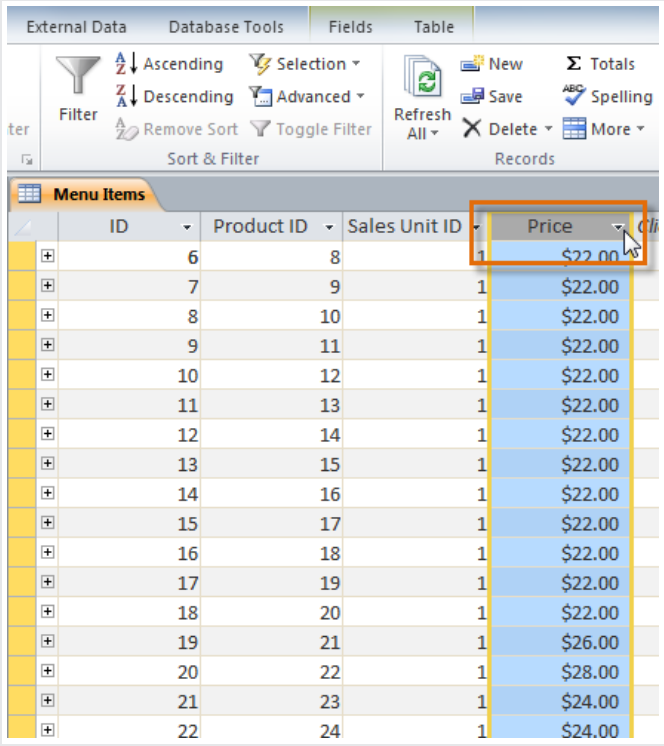
Filtering numbers with a search term

The process for filtering numbers with a search term is similar to the process for filtering text. However, different filtering options are available to you when working with numbers. In addition to the **Equals** and **Does not Equal**, you can choose:

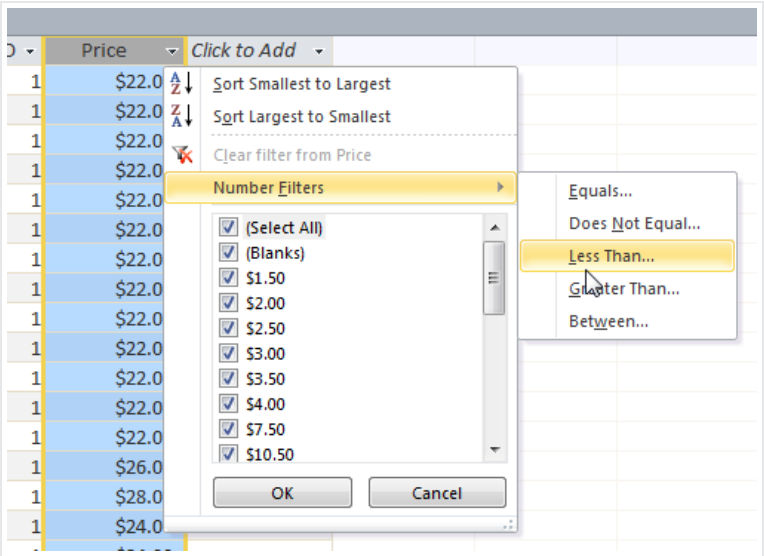
- **Greater Than** to include only records with numbers in that field **greater than or equal to** the number you enter
- **Less Than** to include only records with numbers in that field **less than or equal to** the number you enter
- **Between** to include records with numbers that fall within a certain range

To filter numbers by a search term:

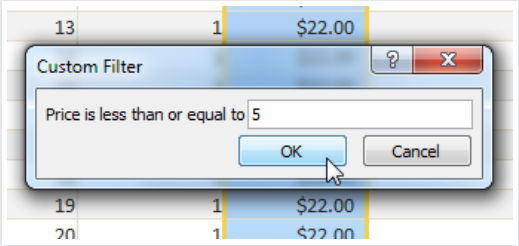
1. Click the **drop-down arrow** next to the field you would like to filter by. We want to filter the records in our menu items table by price, so we'll click the arrow in the **Price** field.



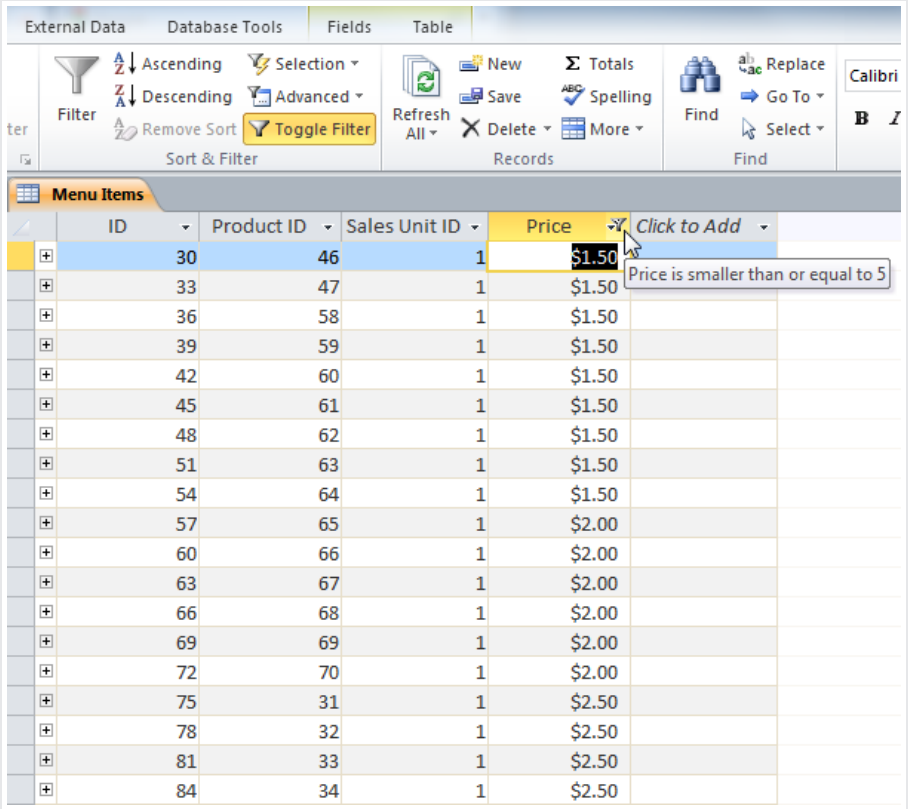
2. In the drop-down menu, hover your mouse over the words **Number Filters**. From the list that appears, select the way you would like the filter to match your search term. In this example, we want to create a filter that will show us inexpensive items only. We want to see items that are **under** a certain price, so we'll select **Less Than**.



3. The **Custom Filter** dialog box will appear. Type in the number or numbers you would like to use in your filter. We'll type "5" so the filter will show us only menu items that cost $5 or less.

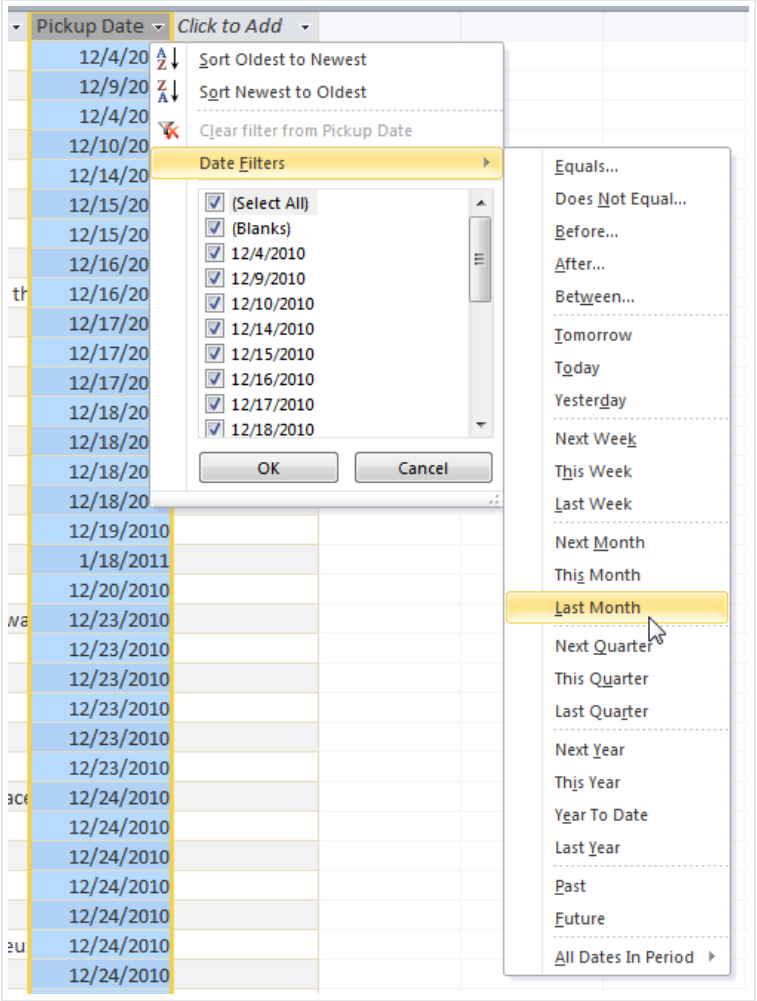


4. Click **OK**. The filter will be applied.



ID	Product ID	Sales Unit ID	Price
30	46	1	$1.50
33	47	1	$1.50
36	58	1	$1.50
39	59	1	$1.50
42	60	1	$1.50
45	61	1	$1.50
48	62	1	$1.50
51	63	1	$1.50
54	64	1	$1.50
57	65	1	$2.00
60	66	1	$2.00
63	67	1	$2.00
66	68	1	$2.00
69	69	1	$2.00
72	70	1	$2.00
75	31	1	$2.50
78	32	1	$2.50
81	33	1	$2.50
84	34	1	$2.50

Specific types of numbers may include other filtering options. For instance, **dates** stored in numerical form (mm/dd/yy—e.g., 12/01/2010) include options to filter by periods of time.



Challenge!

1. If you haven't already, download our **sample database** and **open** it.
2. Open the query called **Cakes and Pies Sold**.
3. Apply a **filter** to the **Product Types** field that shows only **Cakes**.
4. In the **Sum of Quantity** field, apply a filter that only shows numbers **greater than** five.
5. Apply an **ascending** sort to the **Sum of Quantity** field.
6. **Save** the database.