

Introduction


While there are four types of database objects in Access, **tables** are arguably the most important. Even when you're using forms, queries, and reports, you're still working with tables because that's where all of your **data** is stored. Tables are at the heart of any database, so it's important to understand how to use them.

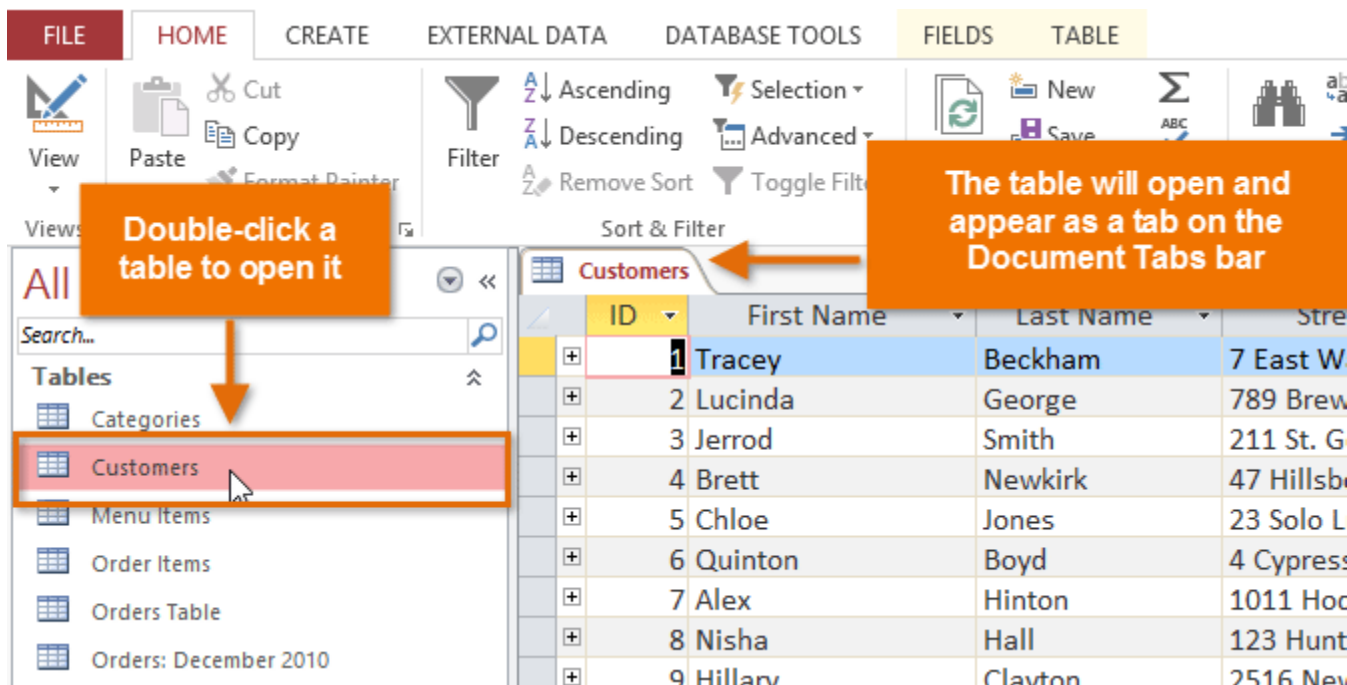
In this lesson, you will learn how to **open tables**, **create** and **edit records**, and **modify the appearance** of your table to make it easier to view and work with.

Throughout this tutorial, we will be using a sample database. If you would like to follow along, you'll need to download our “Tables.accdb”. You will need to have Access 2013 installed on your computer in order to open the example.

Table basics

To open an existing table:

1. Open your database, and locate the **Navigation pane**.
2. In the Navigation pane, locate the table you want to open. Tables are marked with the  icon.
3. Double-click the desired table. It will open and appear as a **tab** in the **Document Tabs bar**.



Understanding tables

All tables are composed of horizontal **rows** and vertical **columns**, with small rectangles called **cells** in the places where rows and columns intersect. In Access, rows and columns are referred to as **records** and **fields**.

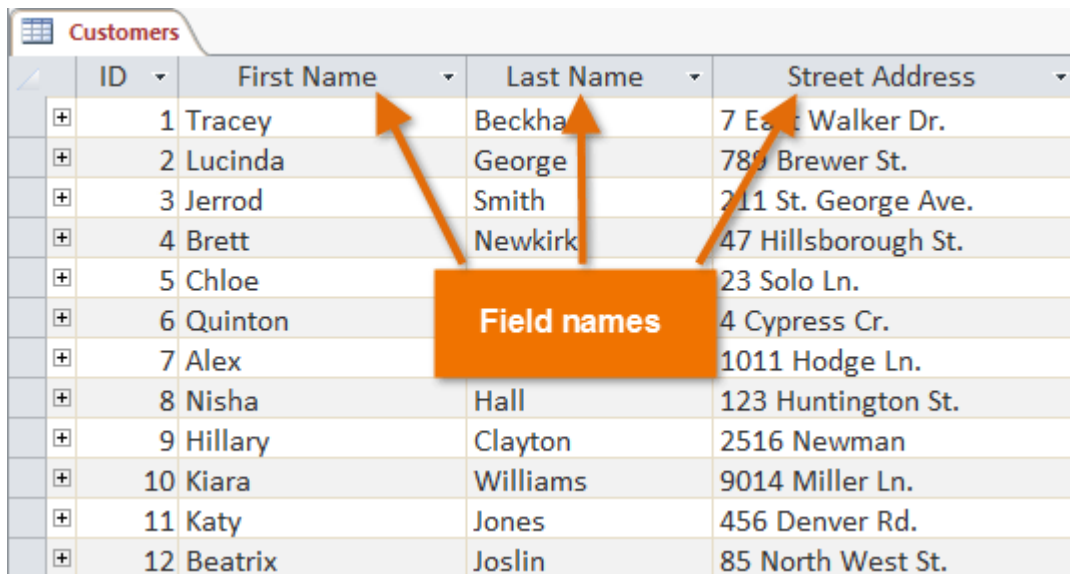
Customers						
	ID	First Name	Last Name	Street Address	City	State
+	52	Denver	Emerson	856 Cook St.	Raleigh	NC
+	53	John	Emory	99 Hillsborough St.	Garner	NC
+	54	Ebony	Farmer	872 W. Morgan St.	Raleigh	NC
+	55	Kim	Doe	553 Wayne St.	Raleigh	NC
+	56	Coretta	Diaz	781 Bloodsworth St.	Raleigh	NC
+	57	Victor	Denver	31 St. Mary's St.	Raleigh	NC
+	58	Hamish	David	21 Cameron Ct.	Raleigh	NC
+	59	Erin	Counts	763 E. West St.	Raleigh	NC
+	60	Harris	Collman	455 E. Edenton St.	Raleigh	NC
+	61	Melissa	Chantay	3201 Glenwood Ave.	Raleigh	NC
+	62	Emmanual	Colin	11 Sassafra Way	Raleigh	NC
+	63	Illa	Carlson	563 Oberlin Rd.	Raleigh	NC
+	64	Tyrone	Rodgers	453 Pine St.	Raleigh	NC

Field

Record

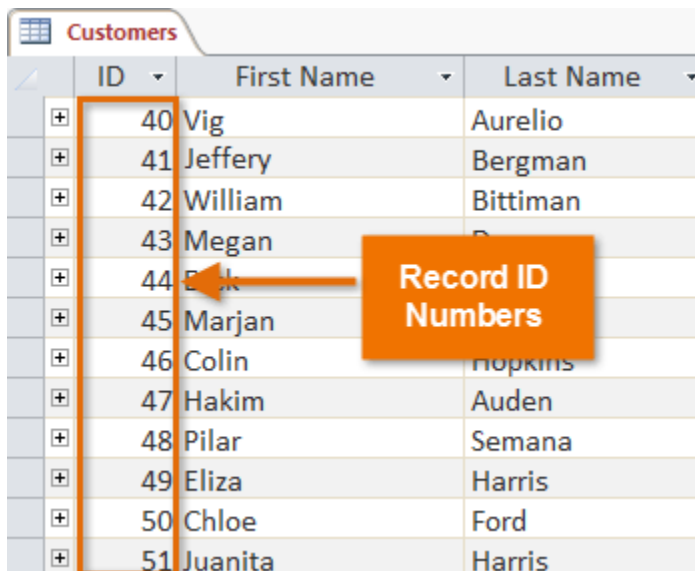
Cell

A **field** is a way of organizing information by type. Think of the **field name** as a question and every cell within that field as a response to that question.



ID	First Name	Last Name	Street Address
1	Tracey	Beckha	7 East Walker Dr.
2	Lucinda	George	789 Brewer St.
3	Jerrod	Smith	211 St. George Ave.
4	Brett	Newkirk	47 Hillsborough St.
5	Chloe		23 Solo Ln.
6	Quinton		4 Cypress Cr.
7	Alex		1011 Hodge Ln.
8	Nisha	Hall	123 Huntington St.
9	Hillary	Clayton	2516 Newman
10	Kiara	Williams	9014 Miller Ln.
11	Katy	Jones	456 Denver Rd.
12	Beatrix	Joslin	85 North West St.

A **record** is one unit of information. Every cell on a given row is part of that row's record. Each record has its own **ID number**. Within a table, each ID number is unique to its record and refers to all of the information within that record. The ID number for a record cannot be changed.



ID	First Name	Last Name
40	Vig	Aurelio
41	Jeffery	Bergman
42	William	Bittiman
43	Megan	
44	Elk	
45	Marjan	
46	Colin	Hopkins
47	Hakim	Auden
48	Pilar	Semana
49	Eliza	Harris
50	Chloe	Ford
51	Juanita	Harris

Each cell of data in your table is part of both a **field** and a **record**. For instance, if you had a table of names and contact information, each person would be

represented by a record, and each piece of information about each person—name, phone number, address, and so on—would be contained within a distinct field on that record's row.

Click the buttons in the interactive below to learn how to navigate a table.

The screenshot shows the Microsoft Access interface for a database named 'Songbird Bakery : Database'. The ribbon includes FILE, HOME, CREATE, EXTERNAL DATA, DATABASE TOOLS, and TABLE TOOLS. The TABLE TOOLS ribbon has tabs for FIELDS and TABLE. The left pane shows 'All Access Objects' with a list of tables including Customers. The main area displays the 'Customers' table in Datasheet View. The table has columns: ID, First Name, Last Name, and Street Address. The first record is Tracey Beckham at 7 East Walker Dr. The bottom status bar shows 'Record: 1 of 202' and a search box.

ID	First Name	Last Name	Street Address
1	Tracey	Beckham	7 East Walker Dr.
2	Lucinda	George	789 Brewer St.
3	Jerrold	Smith	211 St. George Ave.
4	Brett	Newkirk	47 Hillsborough St.
5	Chloe	Jones	23 Solo Ln.
6	Quinton	Boyd	4 Cypress Cr.
7	Alex	Hinton	1011 Hodge Ln.
8	Nisha	Hall	123 Huntington St.
9	Hillary	Clayton	2516 Newman
10	Kiara	Williams	9014 Miller Ln.
11	Katy	Jones	456 Denver Rd.
12	Beatrix	Joslin	85 North West St.
13	Mariah	Allen	12 Jupe
14	Jennifer	Hill	2100 Field Ave.

Navigating within tables

To navigate through records in a table, you can use the **up and down arrow keys**, **scroll up and down**, or use the arrows in the **Record Navigation bar** located at the bottom of your table. You can also find any record in the currently open table by **searching** for it using the **record search box**. Simply place your cursor in the search box, type any word that appears in the record

you want to find, and press the **Enter** key. To view additional records that match your search, press Enter again.

ID	First Name	Last Name	Street Address
52	Denver	Ferguson	856 Cook St.
53	John	Emory	99 Hillsborough St.
54	Ebony	Farmer	872 W. Morgan St.
55	Kim	Doe	553 Wayne St.
56	Coretta	Diaz	781 Bloodsworth St.
57	Victor	Denver	31 St. Mary's St.
58	Hamish	David	21 Cameron Ct.

Record: 52 of 200

Next record

No Filter

Search

Click the arrows to navigate through the records

Click here to create a new record

Use the search box to search for records in the current object

To navigate between fields, you can use the **left and right arrow** keys or **scroll left and right**.

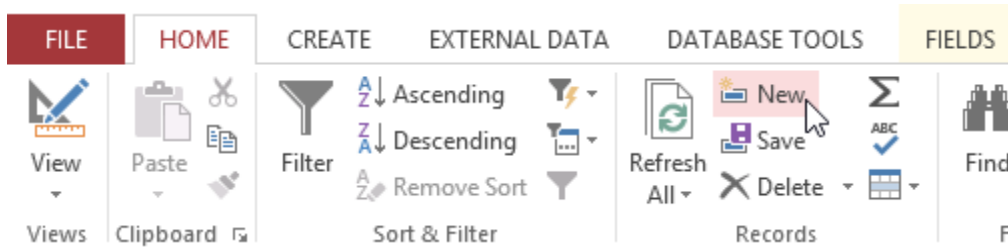
Adding records and entering data

Entering data into tables in Access is similar to entering data in Excel. To work with records, you'll have to enter data into **cells**. If you need help entering data into records, you might want to review our [Cell Basics](#) lesson from our [Excel 2013](#) tutorial.

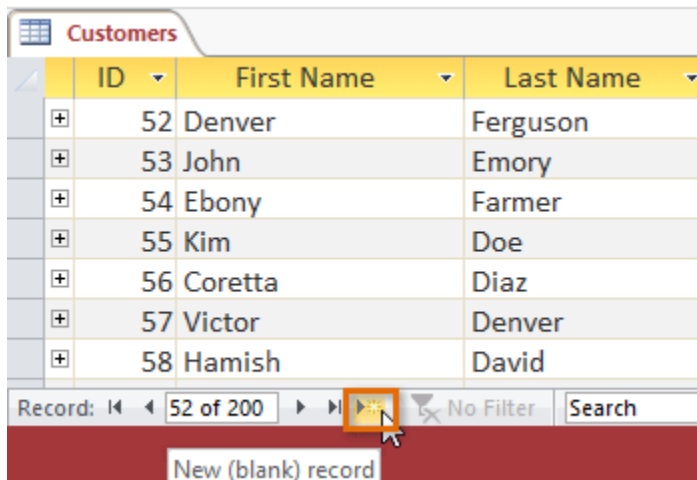
To add a new record:

There are three ways to add a new record to a table:

- In the **Records** group on the **Home** tab, click the **New** command.



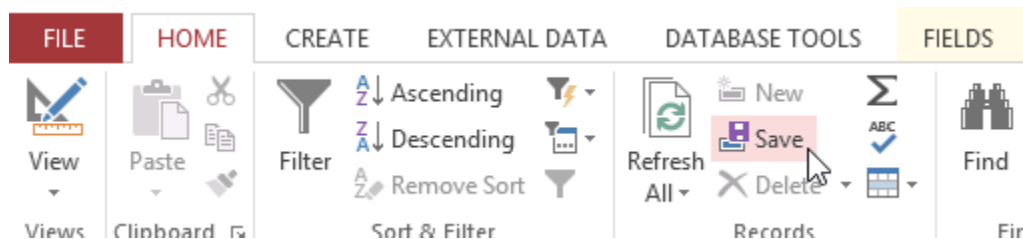
- On the **Record Navigation bar** at the bottom of the window, click the **New record** button.



- Begin typing in the row below your last added record.

Access is designed to save records automatically. After you enter a record, you can either select a different record or close the object, and Access will save the record. However, in certain situations you may want to save a record manually. For example, if you needed to edit an existing record, you could save the record to ensure your changes are saved.

1. Select the **Home** tab, and locate the **Records** group.
2. Click the **Save** command. The record will be saved.



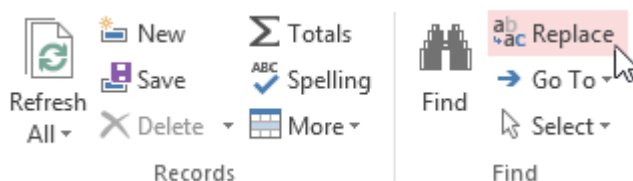
Editing records

To quickly edit any record within a table, you can click it and type your changes. However, Access offers you the ability to **find and replace** a word within multiple records and **delete** records entirely.

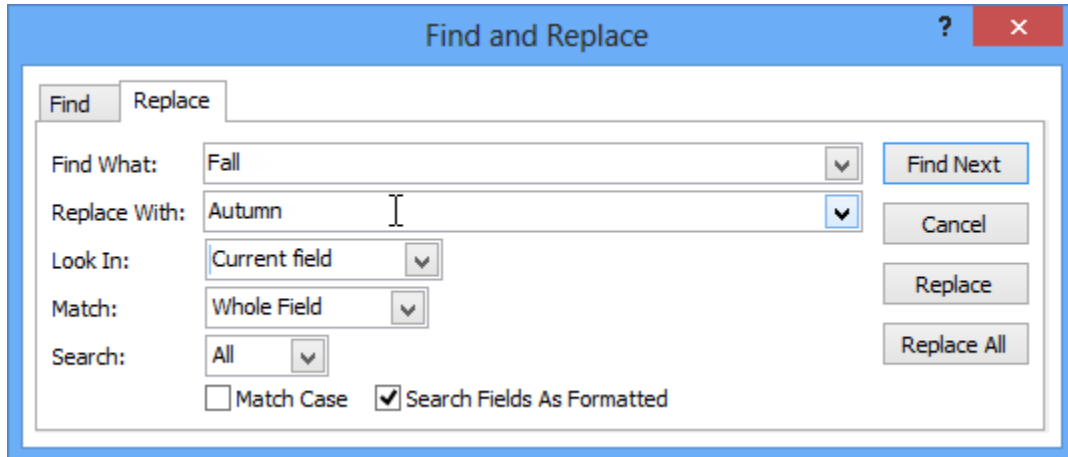
To replace a word within a record:

You can edit multiple occurrences of the same word by using **Find and Replace**, which searches for a term and replaces it with another term.

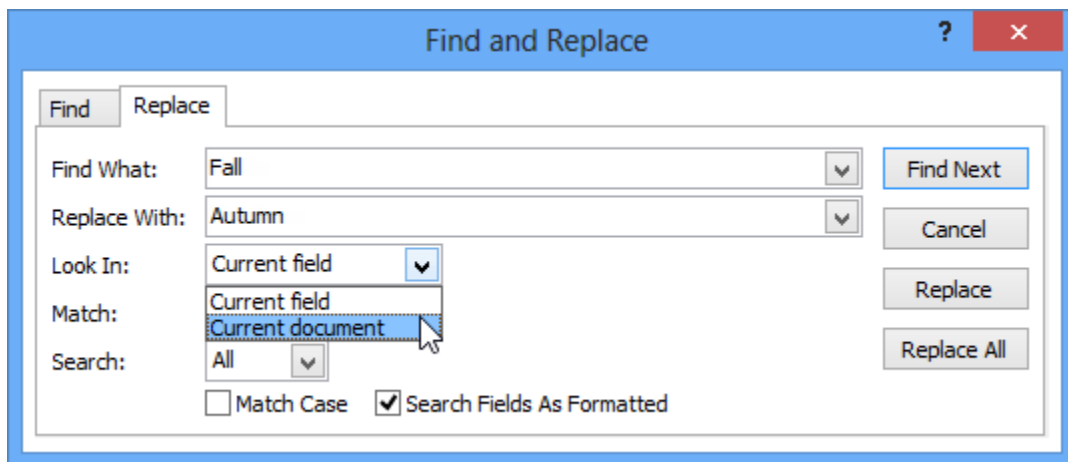
1. Select the **Home** tab, and locate the **Find** group.
2. Select the **Replace** command. The **Find and Replace** dialog box will appear.



3. In the **Find What:** field, type the word you want to find, then in the **Replace With:** field type the word you would like to replace the original word. In our example, we'll find instances of the word **Fall** and replace it with **Autumn**.

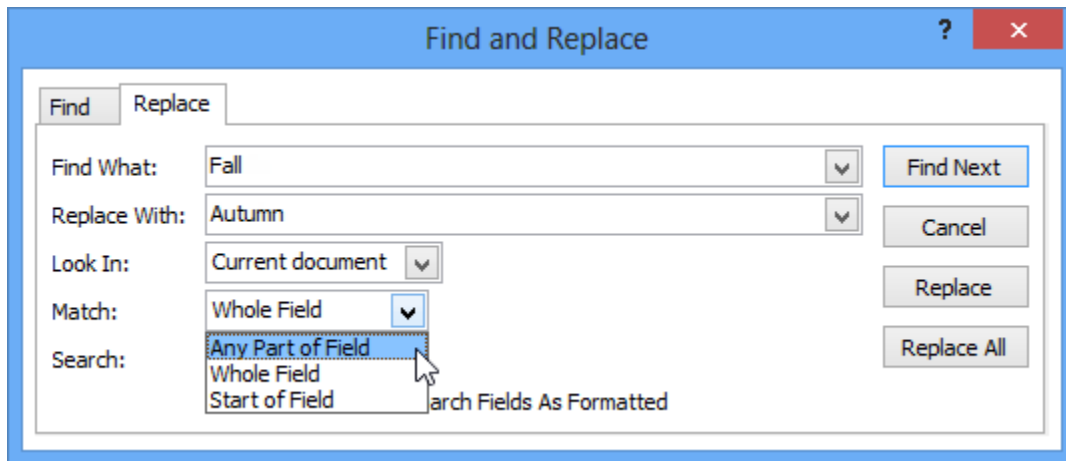


4. Click the **Look In:** drop-down arrow to select the area you want to search.
 - Select **Current Field** to limit your search to the currently selected field.
 - Select **Current Document** to search within the entire table.

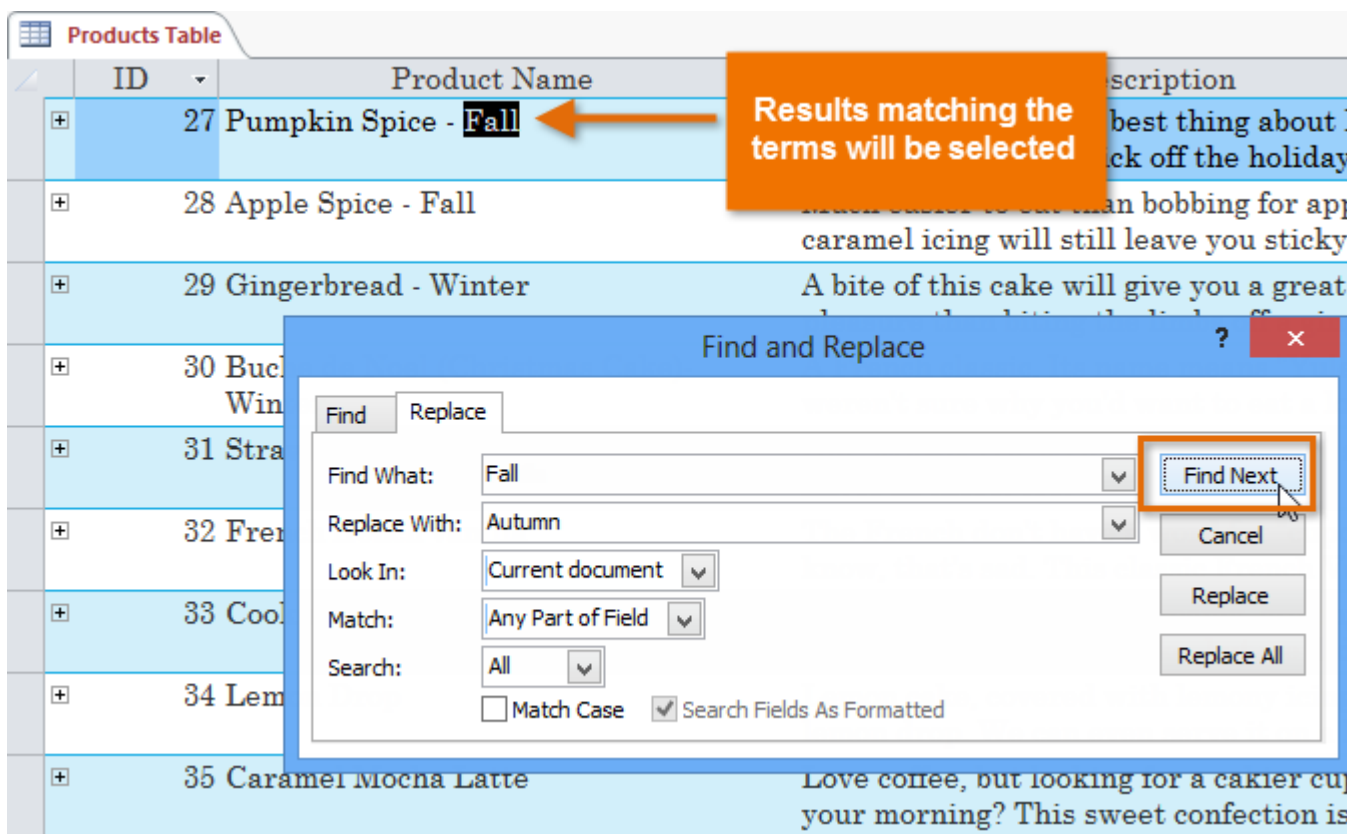


5. Click the **Match:** drop-down arrow to select how closely you'd like results to match your search.
 - Select **Any Part of Field** to search for your search term in any part of a cell.

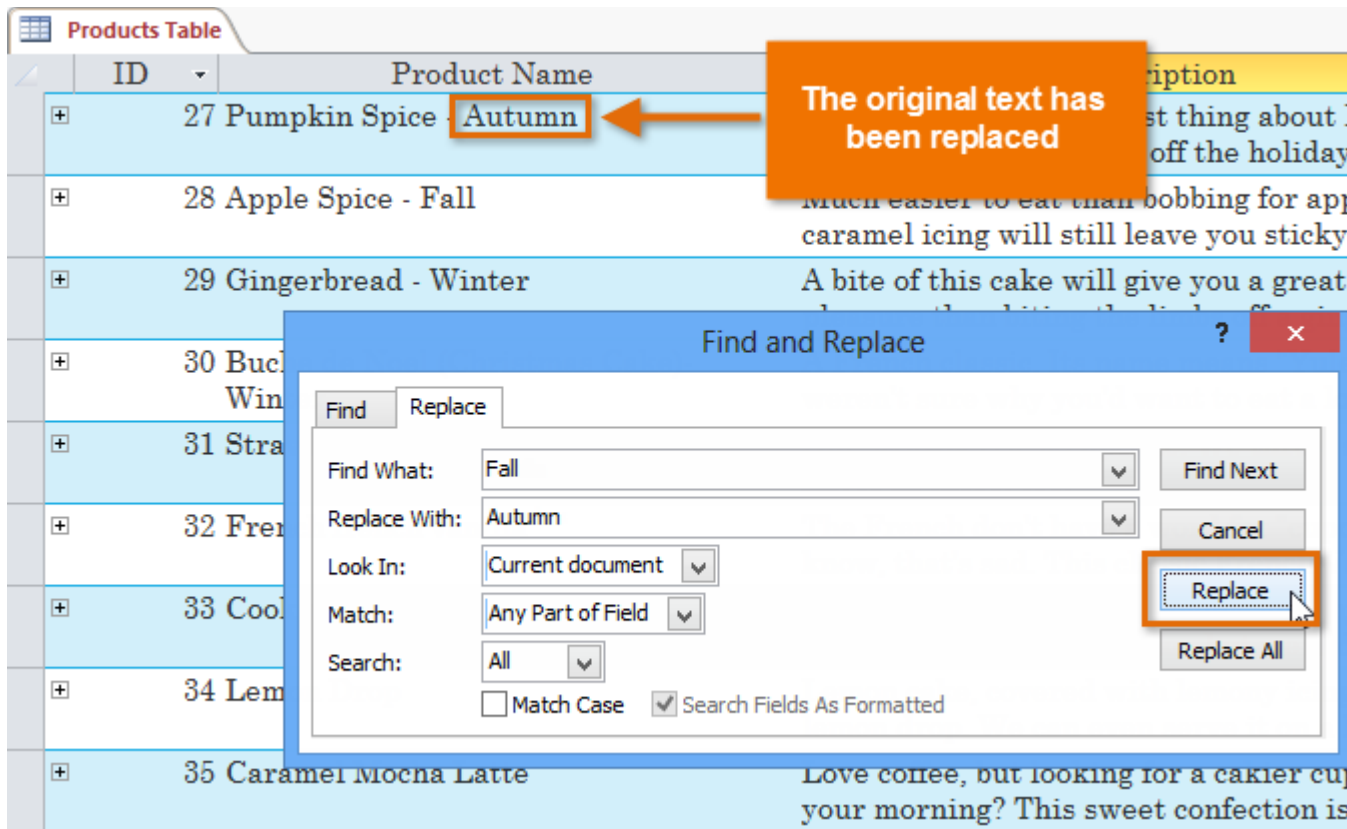
- Select **Whole Field** to search only for cells that match your search term exactly.
- Select **Beginning of Field** to search only for cells that start with your search term.



6. Click **Find Next**. If the text is found, it will be **selected**.

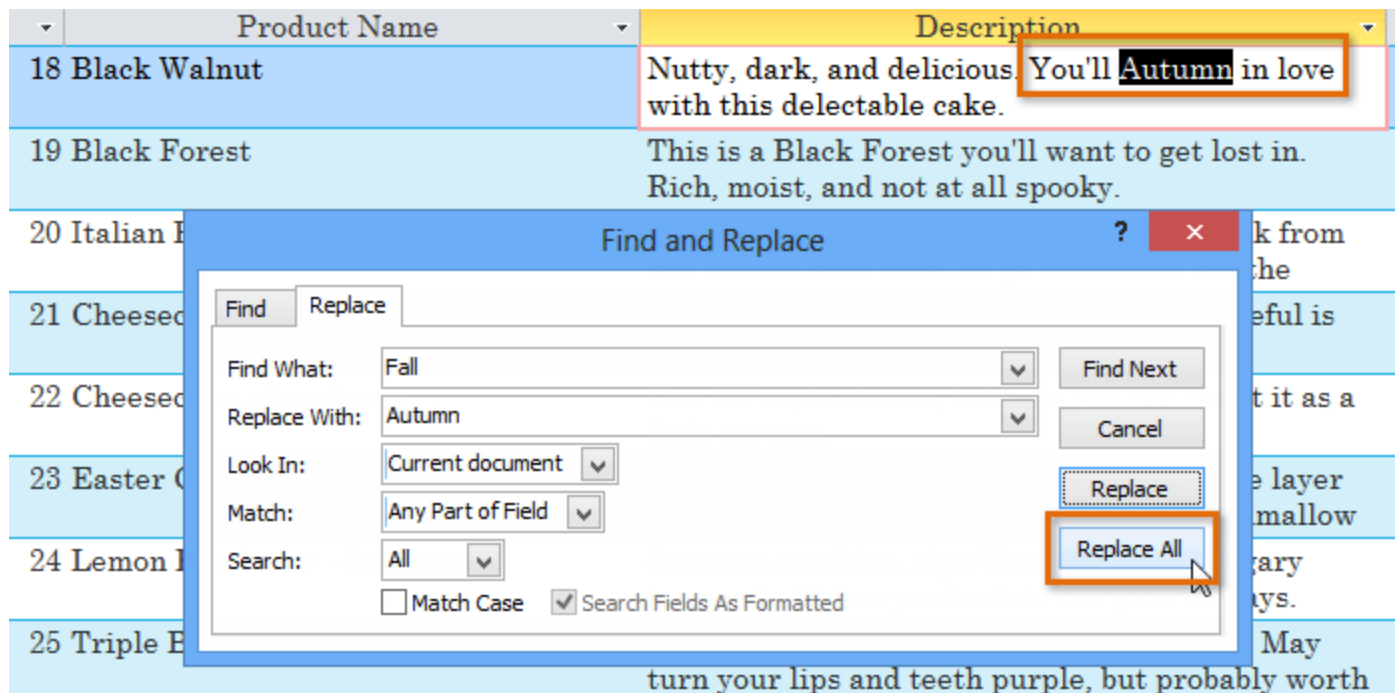


7. Review the text to make sure you want to replace it.
Click **Replace** to replace the original word with the new one.



8. Access will move to the next instance of the text in the object.
When you are finished replacing text, click **Cancel** to close the dialog box.

The **Replace All** option is powerful, and it may actually change some things you don't want to change. In the example below, the word **fall** did not refer to the season, so replacing it with **Autumn** would be incorrect. Using the normal **Replace** option allows you check each instance before replacing the text. You can click **Find Next** to skip to the next instance without replacing the text.



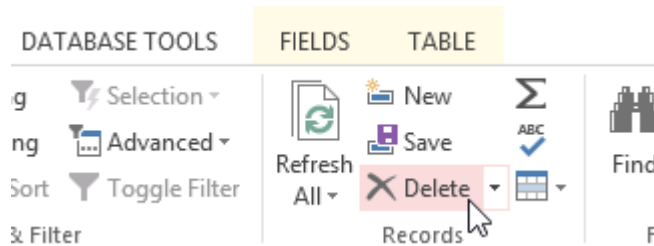
To delete a record:

1. Select the entire record by clicking the **gray border** on the left side of the record.

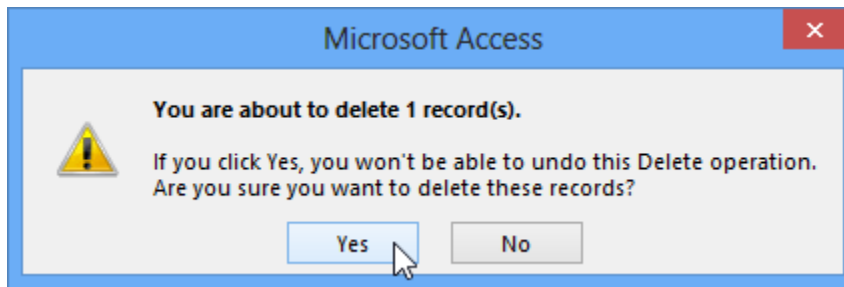
Customers						
	ID	First Name	Last Name	Street Address	City	
+	206	Gregoire	Pick	604 Hatsy Way	Charlotte	NC
+	207	Mallary	Pont	91 Julianna Way	Charlotte	NC
+	208	Rajeev	Parthasarathy	1009 Raleigh Street	Hillsborough	NC
+	209	Will	Good	38 Learnfree St.	Raleigh	NC
+	212	David	Barrett	434 Hill St.	Raleigh	NC
→ +	213	Florence	Henderson	1874 Thistledown Ave	Raleigh	NC
+	214	Abigail	Lawrence	361 West Third St	Chapel Hill	NC
+	215	Larry	Paige	71 Circle Ct	Durham	NC

Record: 201 of 203 No Filter Search

2. Select the **Home** tab and locate the **Records** group.
3. Click the **Delete** command.



4. A dialog box will appear. Click **Yes**.



5. The record will be permanently deleted.

The ID numbers assigned to records stay the same even after you delete a record. For example, if you delete the 213th record in a table the sequence of record ID numbers will read ...212, **214**, 215... rather than ...212, **213**, 214, 215...

Customers						
ID	First Name	Last Name	Street Address	City	State	
204	Tobias	Inman	34 Peace St.	Raleigh	NC	
205	Teyonah		321 Home Dr.	Raleigh	NC	
206	Gregoire		604 Hatsy Way	Charlotte	NC	
207	Mallary		91 Julianna Way	Charlotte	NC	
208	Rajeev		1009 Raleigh Street	Hillsborough	NC	
209	Walt	Good	38 Learnfree St.	Raleigh	NC	
212	David	Barrett	434 Hill St.	Raleigh	NC	
214	Abigail	Lawrence	361 West Third St	Chapel Hill	NC	
215	Larry	Paige	71 Circle Ct	Durham	NC	

Record: 188 of 202

NUM LOCK

Modifying table appearance

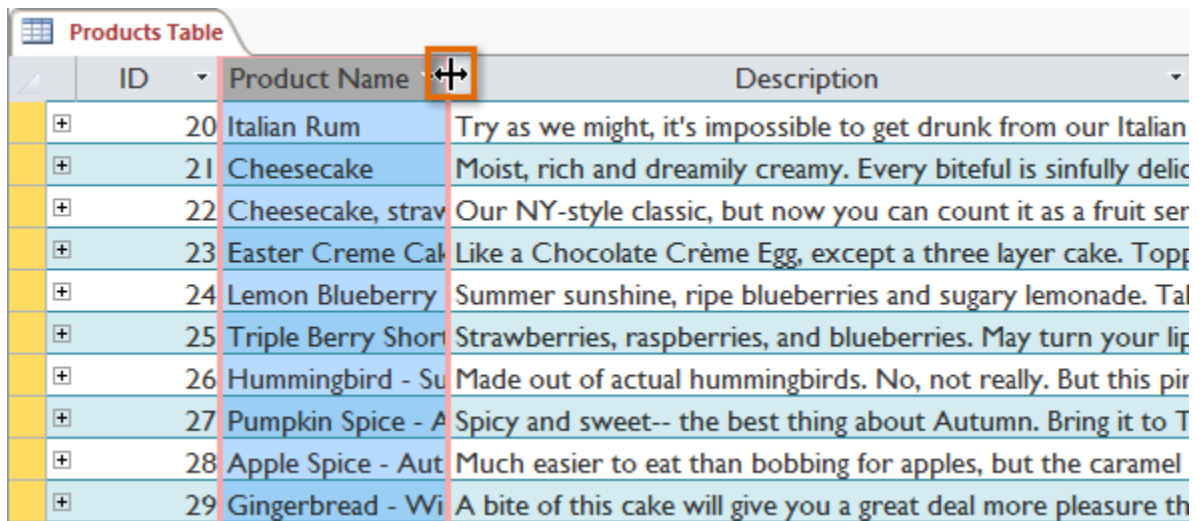
Access offers various ways to modify the appearance of tables, including resizing fields and rows and temporarily hiding information you don't need to see. These changes aren't just about making your table look good; they also can make the table easier to read.

Resizing fields and rows

If your fields and rows are too small or large for the data contained with them, you can always **resize** them so all of the text is displayed.

To resize a field:

1. Place your cursor over the **right gridline** in the **field title**. Your mouse will become a **double arrow**.



ID	Product Name	Description
20	Italian Rum	Try as we might, it's impossible to get drunk from our Italian
21	Cheesecake	Moist, rich and dreamily creamy. Every biteful is sinfully delic
22	Cheesecake, strav	Our NY-style classic, but now you can count it as a fruit ser
23	Easter Creme Cal	Like a Chocolate Crème Egg, except a three layer cake. Top
24	Lemon Blueberry	Summer sunshine, ripe blueberries and sugary lemonade. Tal
25	Triple Berry Short	Strawberries, raspberries, and blueberries. May turn your lip
26	Hummingbird - Su	Made out of actual hummingbirds. No, not really. But this pir
27	Pumpkin Spice - A	Spicy and sweet-- the best thing about Autumn. Bring it to T
28	Apple Spice - Aut	Much easier to eat than bobbing for apples, but the caramel
29	Gingerbread - Wi	A bite of this cake will give you a great deal more pleasure th

2. Click and drag the gridline to the right to increase the field width or to the left to decrease the field width, then release the mouse. The field width will be changed.

Products Table			
	ID	Product Name	Description
+	20	Italian Rum	Try as we might, it's impossible to get drunk from Italian Rum cake. So go ahead and eat the whole t
+	21	Cheesecake	Moist, rich and dreamily creamy. Every biteful is s delicious.
+	22	Cheesecake, strawberry	Our NY-style classic, but now you can count it a serving.
+	23	Easter Creme Cake- Spring	Like a Chocolate Crème Egg, except a three layer Topped with icing bunnies and marshmallow chic
+	24	Lemon Blueberry - Summer	Summer sunshine, ripe blueberries and sugary le Takes you back to the good ol' days.

Hiding fields

If you have a field you don't plan on editing or don't want other people to edit, you can **hide** it. A hidden field is invisible but is still part of your database. Data within a hidden field can still be accessed from forms, queries, reports, and any related tables.

To hide a field:

1. Right-click the **field title**, then select **Hide Fields**.

Menu Items				
	ID	Product ID	Sales Unit ID	
+	6	8		
+	7	9		
+	8	10		
+	9	11		
+	10	12		
+	11	13		
+	12	14		
+	13	15		
+	14	16		
+	15	17		
+	16	18		
+	17	19		
+	18	20		
+	19	21		
+	20	22		
+	21	23		

- Sort Smallest to Largest
- Sort Largest to Smallest
- Copy
- Paste
- Field Width
- Hide Fields
- Unhide Fields
- Freeze Fields
- Unfreeze All Fields
- Find...
- Insert Field
- Modify Lookups
- Modify Expression
- Rename Field
- Delete Field

2. The field will be hidden.

If you decide you want the field to be visible again, you can **unhide** it. Simply right-click any field title, then select **Unhide Fields**. A dialog box will appear. Click the checkboxes of any fields you want to be visible again, then click **Close**.

Unhide Columns?×

Column:

☒ ID
 ☒ Product ID
 ☐ Sales Unit ID
 ☒ Price
 ☒ Click to Add

Close

Table formatting options

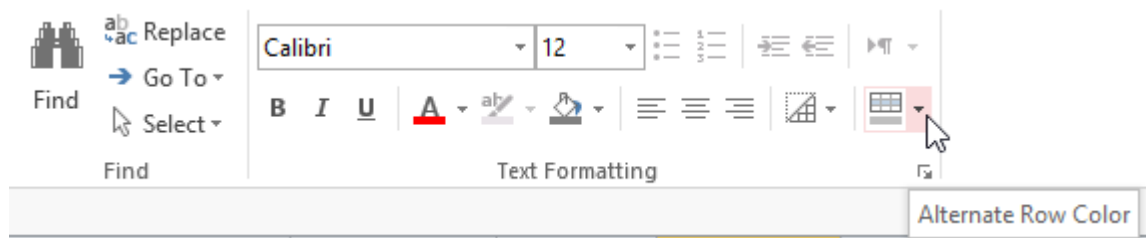
Alternate row color

By default, the background of every other row in an Access table is a few shades darker than the background of the rest of the table. This darker **alternate row color** makes your table easier to read by offering a **visual distinction** between each record and the records directly above and below it.

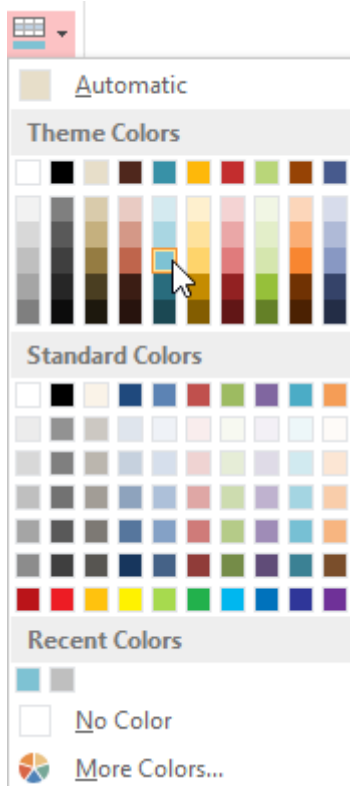
Customers						
	ID	First Name	Last Name	Street Address	City	State
+	1	Tracey	Beckham	7 East Walker Dr.	Raleigh	NC
+	2	Lucinda	George	789 Brewer St.	Cary	NC
+	3	Jerrod	Smith	211 St. George Ave.	Raleigh	NC
+	4	Brett	Newkirk	47 Hillsborough St.	Raleigh	NC
+	5	Chloe	Jones	23 Solo Ln.	Raleigh	NC
+	6	Quinton	Boyd	4 Cypress Cr.	Durham	NC
+	7	Alex	Hinton	1011 Hodge Ln.	Cary	NC
+	8	Nisha	Hall	123 Huntington St.	Raleigh	NC
+	9	Hillary	Clayton	2516 Newman	Raleigh	NC
+	10	Kiara	Williams	9014 Miller Ln.	Durham	NC

To change the alternate row color:

1. Select the **Home** tab, locate the **Text Formatting** group, and click the **Alternate Row Color** drop-down arrow.



2. Select a color from the drop-down menu, or select **No Color** to remove the alternate row color.



3. The alternate row color will be updated.

	ID	First Name	Last Name	Street Address	City	State
+	1	Tracey	Beckham	7 East Walker Dr.	Raleigh	NC
+	2	Lucinda	George	789 Brewer St.	Cary	NC
+	3	Jerrold	Smith	211 St. George Ave.	Raleigh	NC
+	4	Brett	Newkirk	47 Hillsborough St.	Raleigh	NC
+	5	Chloe	Jones	23 Solo Ln.	Raleigh	NC
+	6	Quinton	Boyd	4 Cypress Cr.	Durham	NC
+	7	Alex	Hinton	1011 Hodge Ln.	Cary	NC
+	8	Nisha	Hall	123 Huntington St.	Raleigh	NC
+	9	Hillary	Clayton	2516 Newman	Raleigh	NC
+	10	Kiara	Williams	9014 Miller Ln.	Durham	NC

Modifying gridlines

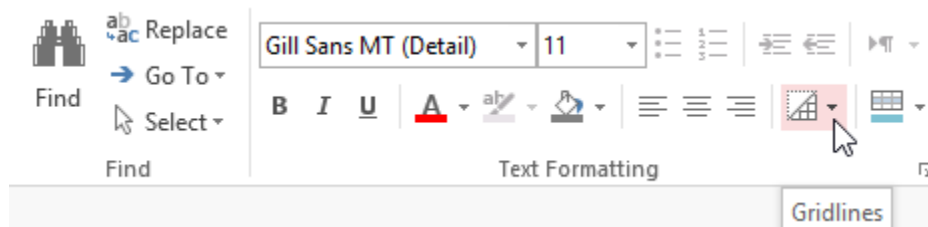
Another way Access makes your tables easier to read is by adding **gridlines** that mark the borders of each cell. Gridlines are the **thin lines** that appear between each cell, row, and column of your table. By default, gridlines are dark gray and

appear on every side of a cell, but you can change their **color** and **hide** undesired gridlines.

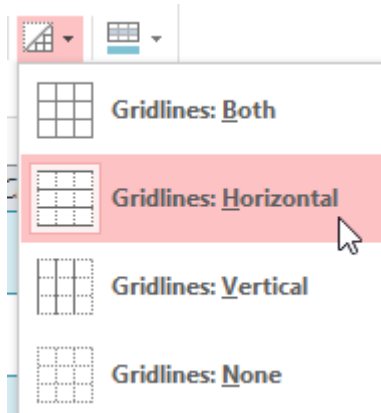
Products Table			
	ID	Product Name	Description
+	17	Coconut	Ever tried cracking a coconut? It's hard! Better stick to our moist Coconut Cake-- all you need is your favorite
+	18	Black Walnut	Nutty, dark, and delicious. You'll fall in love with this delectable cake.
+	19	Black Forest	This is a Black Forest you'll want to get lost in. Rich and not at all spooky.
+	20	Italian Rum	Try as we might, it's impossible to get drunk from Italian Rum cake. So go ahead and eat the whole thing.
+	21	Cheesecake	Moist, rich and dreamily creamy. Every biteful is simply delicious.
+	22	Cheesecake, strawberry	Our NY-style classic, but now you can count it as a healthy serving.

To customize which gridlines appear:

1. Select the **Home** tab, locate the **Text Formatting** group, and click the **Gridlines** drop-down arrow.



2. Select the gridlines you want to appear. You can choose to have **horizontal** gridlines between the rows, **vertical** gridlines between the columns, **both** types of gridlines, or **none** at all.

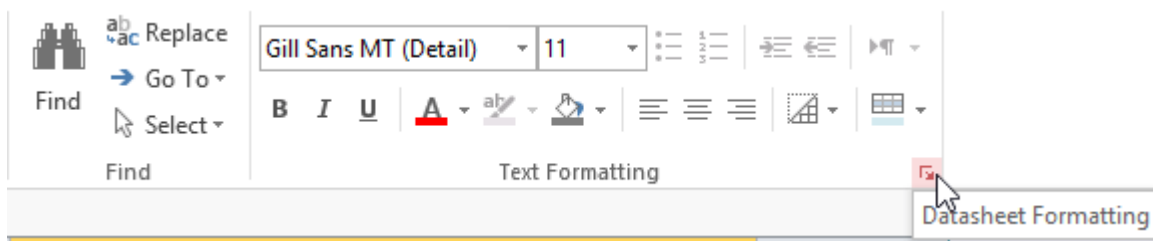


3. The gridlines on your table will be updated.

Products Table	
ID	Product Name
17	Coconut
18	Black Walnut
19	Black Forest
20	Italian Rum
21	Cheesecake
22	Cheesecake, strawberry

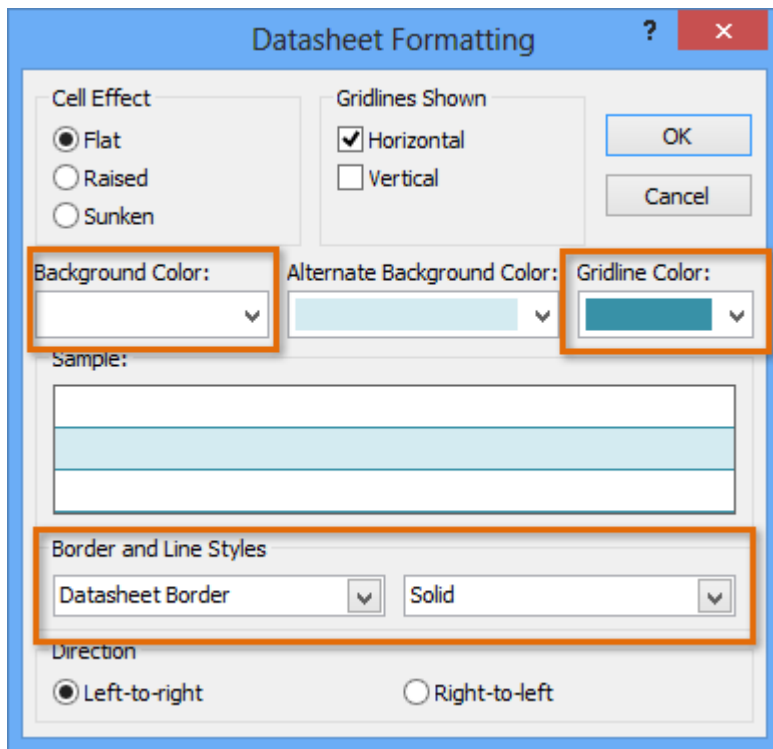
Additional formatting options

To view additional formatting options, click the **Datasheet Formatting** arrow in the bottom-right corner of the **Text Formatting** group.



The **Datasheet Formatting** dialog box offers several advanced formatting options, including the ability to modify background color, gridline color, and border and line style. It even includes the ability to view a **sample** table with

your formatting choices, so play around with the various formatting options until you get your table looking the way you want it.



Challenge!

1. Open an **existing Access database**. If you want, you can use our “Tables.accdb”
2. Open the **Customers** table.
3. Add a new **record** to the table. Be sure to enter data for every field.
4. **Find** the record with the name **Tyra Kirby**, and **replace** it with a name of your choice.
5. **Hide** a field, then **unhide** it.
6. Change the **alternate row color**.