

## CHAPTER 1

# FILLING DATA

**INFocus**

**Filling** refers to the process of filling cells with data. It is very much like copying the contents of one cell to another, and in some cases does exactly that. In other situations, filling can create a series of data items in consecutive cells.

The **fill handle** and **fill pointer** are the tools used for filling. The fill handle is a black square that appears at the bottom right corner of the active cell. When you hover over the fill handle with the mouse, the pointer changes to a thin, black cross known as the fill pointer.

Filling is as simple as dragging the fill handle with the fill pointer.

**In this session you will:**

- ✓ gain an understanding of filling
- ✓ learn how to use **Fill** to create a series of values
- ✓ learn how to use **Fill** to create a growth series
- ✓ learn how to fill a series backwards from right to left
- ✓ learn how to fill using the options on the **SmartTag** menu
- ✓ learn how to create a custom fill list
- ✓ learn how to modify a custom fill list
- ✓ learn how to delete a custom fill list.

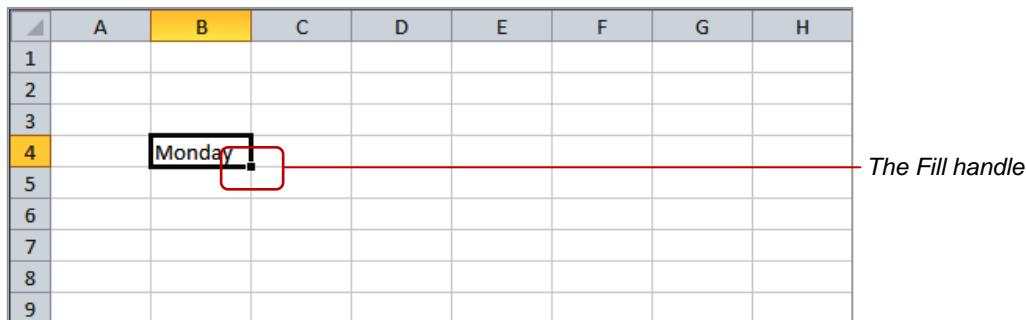
# UNDERSTANDING FILLING

Microsoft Excel enables you to quickly populate cells that follow a series, like fortnightly dates, months of the year, days of the week etc. This process is known as **filling** and requires you to

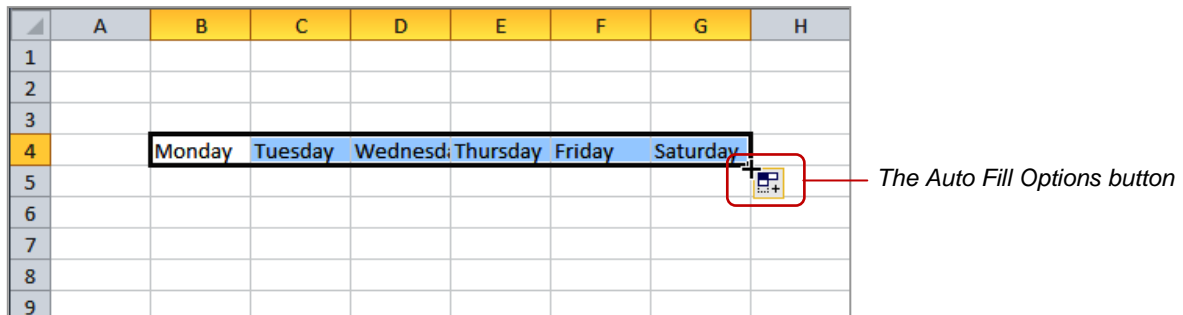
indicate the first part of the series, before dragging the contents across to the other cells using the **Fill** handle. Below is a description of the different types of series that you can create using filling.

## The Fill Handle

To create a series, you need to use the **Fill handle** – the small black square, located in the bottom, right corner of a selected cell. By dragging this handle across to other adjacent cells, you fill these cells with a series. The **AutoFill Options** button allows you to select what you want to fill across.



1



## Types of Series

A **series** refers to a sequence of ordered entries in adjacent cells, such as the days of the week or months of the year.

When you fill to the right or down, you create a **growth series** – where the values increment. Growth series require that you start with the first two values in the series so that Excel can determine the size of the increment to be used. For example, the values could be payroll dates two weeks apart. Excel would use that to determine that you want to increment the date value by 14 each time. If you use a combination of a label and a number, you can start a growth series with one value. For example, *Day 1* would become *Day 2*, *Day 3*, and so on

If you fill to the left or upwards, you will create a **decrementing** series, where the numbers decrease and the series will be filled in order *down* the values.

You can also use the **fill options** to create a series. The options include normal **copying**, copying **formats** or **values** only, and creating a series of dates that only includes **weekdays**. To access the options, you click on the **AutoFill Options** drop arrow

Although most of Excel's filling options come from pre-created, built-in lists, you can also create your own **custom lists**, for instance, department names or product categories.

# FILLING A SERIES

A **series** refers to a sequence of ordered entries in adjacent cells, such as the days of the week or months of the year. The **fill** technique can be used to create these in a worksheet for you,

reducing the amount of time taken for data entry and ensuring that the spelling is correct. Excel provides days and months as special built-in **series** that you can access.

## Try This Yourself:

**Open File** Before starting this exercise you **MUST** open the file *E807 Filling\_1.xlsx...*

**1** Click on **A3** to make this the active cell

**2** Move the mouse pointer to the small square (the **fill handle**) in the bottom right corner of the cell until the mouse pointer appears as a thin, black cross

**3** Drag the mouse pointer to column **F**  
Excel will fill the range with the first six months of the year...

**4** Click on **A4** and repeat steps **2 & 3** to create the series of months with their full names

*You can also fill more than one row at a time...*

**5** Select the range **A5:A11**

**6** Repeat steps **2 & 3** to fill across to column **F**

**7** Examine each of the series created by the filling process

**2**

	A	B	C	D	E	F	G
1							
2	Normal Series						
3	Jan						
4	January						
5	Mon						
6	Monday						
7	Quarter 1						
8	Qtr 1						
9	Q1						
10	1st Day						
11	Serial 002						
12							

**3**

	A	B	C	D	E	F	G
1							
2	Normal Series						
3	Jan	Feb	Mar	Apr	May	Jun	
4	January						
5	Mon						
6	Monday						
7	Quarter 1						
8	Qtr 1						
9	Q1						
10	1st Day						
11	Serial 002						
12							

**6**

	A	B	C	D	E	F	G
1							
2	Normal Series						
3	Jan	Feb	Mar	Apr	May	Jun	
4	January	February	March	April	May	June	
5	Mon	Tue	Wed	Thu	Fri	Sat	
6	Monday	Tuesday	Wednesd	Thursday	Friday	Saturday	
7	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	
8	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	
9	Q1	Q2	Q3	Q4	Q1	Q2	
10	1st Day	1st Day	1st Day	1st Day	1st Day	1st Day	
11	Serial 002	Serial 003	Serial 004	Serial 005	Serial 006	Serial 007	
12							

## For Your Reference...

To **fill** a **series**:

1. Click on the first cell in the series
2. Drag from the fill handle across as many columns as required

## Handy to Know...

- As you drag the fill handle across, a **tool tip** appears below the fill pointer displaying the current value in the series. This is really handy when you want to end on a particular day, month or value.

# FILLING A GROWTH SERIES

The fill handle can also be used to create **growth series** – where the values increment. Growth series require that you start with the first two values in the series so that Excel can determine

the size of the increment to be used. For example, the values could be payroll dates two weeks apart. Excel would use that to determine that you want to increment the date value by 14 each time.

## Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file E807 Filling\_2.xlsx...

- 1 Click on **A14** to make it active
- 2 Drag the fill handle across to column **F**  
*Excel will copy 23 across the cells because it has no reason to think you wanted to change the value...*
- 3 Select the range **A15:B15**  
*The values in these cells have a difference of 12...*
- 4 Drag the fill handle across to column **F**  
*The values increase by 12...*
- 5 Repeat steps 3 & 4 for the range **A16:B16**  
*The dates increase by 14...*
- 6 If you can't read the dates click on **Format** in the **Cells** group and select **Autofit Column Width**
- 7 Repeat steps 3 & 4 for the range **A17:B17**  
*Excel can see a pattern for the first cell, but not the second, so it increments the Region cells only*

2

	A	B	C	D	E	F
12						
13	Growth Series					
14	23	23	23	23	23	23
15	12	24				
16	1/01/2010	15/01/2010				
17	Region 1	Target				
18						

4

	A	B	C	D	E	F
12						
13	Growth Series					
14	23	23	23	23	23	23
15	12	24	36	48	60	72
16	1/01/2010	15/01/2010				
17	Region 1	Target				
18						

5

	A	B	C	D	E	F
12						
13	Growth Series					
14	23	23	23	23	23	23
15	12	24	36	48	60	72
16	1/01/2010	15/01/2010	29/01/2010	12/02/2010	26/02/2010	12/03/2010
17	Region 1	Target				
18						

7

	A	B	C	D	E	F
12						
13	Growth Series					
14	23	23	23	23	23	23
15	12	24	36	48	60	72
16	1/01/2010	15/01/2010	29/01/2010	12/02/2010	26/02/2010	12/03/2010
17	Region 1	Target	Region 2	Target	Region 3	Target
18						

### For Your Reference...

To **fill** a **growth series**:

1. Select the first two values of the series
2. Drag from the fill handle across as many columns as required

### Handy to Know...

- If you use a combination of a label and a number, you can start a growth series with one value. For example, *Day 1* would become *Day 2*, *Day 3*, and so on.

# FILLING A SERIES BACKWARDS

When you fill to the right or down, the numbers increase or the series progresses forwards. If you fill to the left or upwards, the numbers will decrease and the series will be filled in order

down the values. In other words, to create an **incrementing** series, you fill down or to the right. To create a **decrementing** series, you fill up or to the left – that is, you fill **backwards**.

## Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file E807 Filling\_3.xlsx...

- 1 Select the range **G20:H20**
- 2 Move the mouse pointer to the fill handle, then drag left to cell **A20**
- 3 Click on **H21** to make it active
- 4 Drag the fill handle to **A21** then release the mouse button

The months will be filled backwards in their usual series order

	A	B	C	D	E	F	G	H
12								
13	Growth Series							
14	23	23	23	23	23	23		
15	12	24	36	48	60	72		
16	1/01/2010	15/01/2010	29/01/2010	12/02/2010	26/02/2010	12/03/2010		
17	Region 1	Target	Region 2	Target	Region 3	Target		
18								
19	Backwards							
20							8	10
21							Jan	
22								

1

	A	B	C	D	E	F	G	H
12								
13	Growth Series							
14	23	23	23	23	23	23		
15	12	24	36	48	60	72		
16	1/01/2010	15/01/2010	29/01/2010	12/02/2010	26/02/2010	12/03/2010		
17	Region 1	Target	Region 2	Target	Region 3	Target		
18								
19	Backwards							
20	-4	-2	0	2	4	6	8	10
21							Jan	
22								

2

	A	B	C	D	E	F	G	H
12								
13	Growth Series							
14	23	23	23	23	23	23		
15	12	24	36	48	60	72		
16	1/01/2010	15/01/2010	29/01/2010	12/02/2010	26/02/2010	12/03/2010		
17	Region 1	Target	Region 2	Target	Region 3	Target		
18								
19	Backwards							
20	-4	-2	0	2	4	6	8	10
21	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
22								

4

## For Your Reference...

To **fill** a series **backwards**:

1. Select the last cell(s) in the series
2. Drag the fill handle to the left or upwards until the desired starting point in the series is reached

## Handy to Know...

- If you backwards fill a series that consists of a text label and number, you will find that the numbers do not become negative; they will reverse in order after reaching zero.
- You can **delete** the contents of a single cell by dragging the fill handle upwards over the cell.

# FILLING USING OPTIONS

When you fill from a single date, Excel assumes that the increment level is by **day**. However, if you want to create a series that increments by **month** or **year** you can use the **fill options**.

These options include normal **copying**, copying **formats** or **values** only, and creating a series of dates that only includes **weekdays**. To access the options, you click on the **SmartTag** drop arrow.

## Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file E807 Filling\_4.xlsx...

- 1 Click on **A24**, and drag the fill handle across to **F24**  
So far, Excel thinks we want to increment by day...
- 2 Click on the drop arrow for the **SmartTag** to display a menu of options
- 3 Select **Fill Months**  
The series adjusts to increments by months. The final value is now 1/6/2010...
- 4 Repeat steps 1 to 3 for cell **A25**, but select **Fill Years**  
Now the final value is 1/01/2015.
- 5 Let's fill the format only...  
Click on cell **A26** and drag the fill handle across to **F26**
- 6 Click on the drop arrow for the **SmartTag** and select **Fill Formatting Only**  
The currency format will be copied to the other cells

1

	A	B	C	D	E	F	G
22							
23	Options						
24	1/01/2010	2/01/2010	3/01/2010	4/01/2010	5/01/2010	6/01/2010	
25	1/01/2010						
26	\$3.25	3.75	4.25	4.75	5.25	5.75	
27							
28							
29							

2

	C	D	E	F	G	H	I
	3/01/2010	4/01/2010	5/01/2010	6/01/2010			
	4.25	4.75	5.25	5.75			

5

	A	B	C	D	E	F	G
22							
23	Options						
24	1/01/2010	1/02/2010	1/03/2010	1/04/2010	1/05/2010	1/06/2010	
25	1/01/2010	1/01/2011	1/01/2012	1/01/2013	1/01/2014	1/01/2015	
26	\$3.25	\$3.25	\$3.25	\$3.25	\$3.25	\$3.25	
27							
28							
29							

6

	A	B	C	D	E	F	G
22							
23	Options						
24	1/01/2010	1/02/2010	1/03/2010	1/04/2010	1/05/2010	1/06/2010	
25	1/01/2010	1/01/2011	1/01/2012	1/01/2013	1/01/2014	1/01/2015	
26	\$3.25	\$3.75	\$4.25	\$4.75	\$5.25	\$5.75	
27							
28							
29							

### For Your Reference...

To use **fill options**:

1. Click on the first cell of the series
2. Fill using the **right mouse button**
3. Select the required option from the drop arrow for the **SmartTag**

### Handy to Know...

- The **fill options** can overcome the need to have two starting values in a sequence. For example, if you want to fill numbers with an increment of **5**, fill from the first number using the right mouse button, select **Series...** from the shortcut menu, type a **Step value of 5**, then click on **[OK]**.

# CREATING A CUSTOM FILL LIST

Most of Excel's filling techniques come from pre-created, built-in lists. For example, the names of the months are stored in a list that is accessed when you attempt to fill a range based on the

name of one of those months that is in the list. You can actually also **create your own custom lists** so that these too can be used for fill operations.

## Try This Yourself:

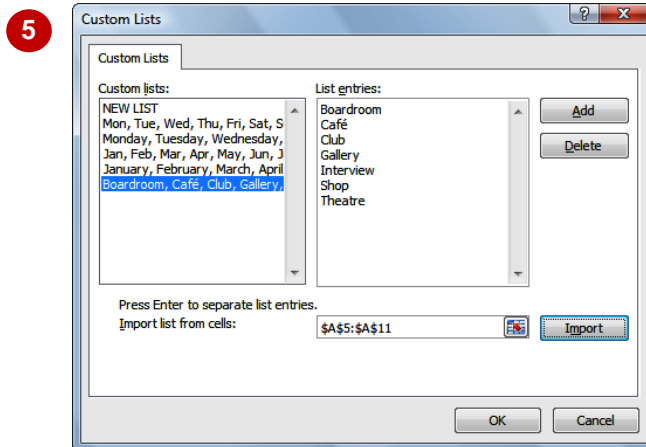
Same File

Continue using the previous file with this exercise, or open the file *E807 Filling\_5.xlsx...*

- 1 Click on the **Custom Series** worksheet tab
- 2 Click on **A5**, hold down **Shift** and click on **A11** to select the range **A5:A11**
- 3 Click on the **File** tab on the **Ribbon** and select **Options** to display the **Excel Options** dialog box
- 4 Click on **Advanced** in the list on the left, then click on **[Edit Custom Lists]** in **General**, to display the **Custom Lists** dialog box
- 5 Click on **[Import]** to import the selected text into the **Custom lists**
- 6 Click on **[OK]** to close each dialog box and return to the worksheet
- 7 Click on **C5**, type **Boardroom** and drag the fill handle down to **C18**

2

	A	B	C	D	E
4					
5	Boardroom				
6	Café				
7	Club				
8	Gallery				
9	Interview				
10	Shop				
11	Theatre				
12					
13					



7

	A	B	C	D	E
4					
5	Boardroom		Boardroom		
6	Café		Café		
7	Club		Club		
8	Gallery		Gallery		
9	Interview		Interview		
10	Shop		Shop		
11	Theatre		Theatre		
12			Boardroom		
13			Café		
14			Club		
15			Gallery		
16			Interview		
17			Shop		
18			Theatre		
19					
20					

## For Your Reference...

To create a **custom list**:

1. Type and select the list in the worksheet
2. Click on the **File** tab and select **Options**
3. Click on **Advanced**, then click on **[Edit Custom Lists]**
4. Click on **[Import]** then click on **[OK]**

## Handy to Know...

- You can create new custom lists in the **Custom Lists** dialog box by selecting **NEW LIST** in **Custom lists**, then click in **List entries** and type the entries in the required order. When you have completed the list, click on **[Add]**.

# MODIFYING A CUSTOM FILL LIST

You can **modify custom fill lists** using the **Custom Lists** dialog box which is accessed from the **Excel Options** dialog box. You can modify the list by displaying the list entries, making the

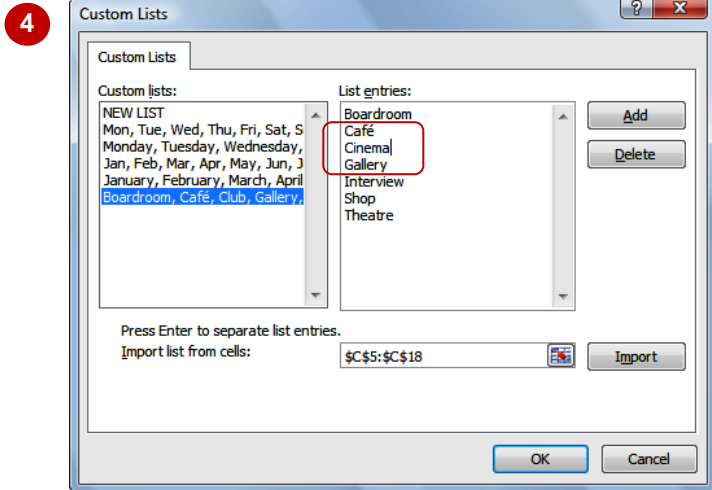
required changes, then clicking on **[Add]** to update them. You cannot however modify the standard, built-in lists that Microsoft Excel provides.

## Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file E807 Filling\_6.xlsx...

- 1 Click on the **File** tab on the **Ribbon** and select **Options** to display the **Excel Options** dialog box
- 2 Click on **Advanced** in the list on the left, then click on **[Edit Custom Lists]** to display the **Custom Lists** dialog box
- 3 Click on **Boardroom, Cafe...** in **Custom lists** to see the **List entries** for this series
- 4 Double click on **Club** in **List entries** to select it and type **Cinema**
- 5 Click on **[Add]** to update the list, then click on **[OK]** to close each dialog box
- 6 Click on **C5** and drag the fill handle down to **C18** to update the list with the new item



6

	A	B	C	D	E
4					
5	Boardroom		Boardroom		
6	Café		Café		
7	Club		Cinema		
8	Gallery		Gallery		
9	Interview		Interview		
10	Shop		Shop		
11	Theatre		Theatre		
12			Boardroom		
13			Café		
14			Cinema		
15			Gallery		
16			Interview		
17			Shop		
18			Theatre		
19					
20					

### For Your Reference...

To **modify a custom fill list**:

1. Click on the **File** tab and select **Options**
2. Click on **Advanced**, then click on **[Edit Custom Lists]**
3. Click on the list to be modified

### For Your Reference (cont'd)...

4. Change the entries as required
5. Click on **[Add]**
6. Click on **[OK]** to close each dialog box



# DELETING A CUSTOM FILL LIST

Custom fill lists are available system-wide. This means that no matter which workbook you have open everyone will be able to access and use your custom fill lists. As custom fill lists become

out-dated or are no longer needed they can easily be **deleted** from the **Custom Lists** dialog box.

## Try This Yourself:

Same File

Continue using the previous file with this exercise, or open the file E807 Filling\_7.xlsx...

1 Click on the **File** tab in the **Ribbon** and select **Options** to display the **Excel Options** dialog box

2 Click on **Advanced** in the list on the left, then click on **[Edit Custom Lists]** in **General**, to display the **Custom Lists** dialog box

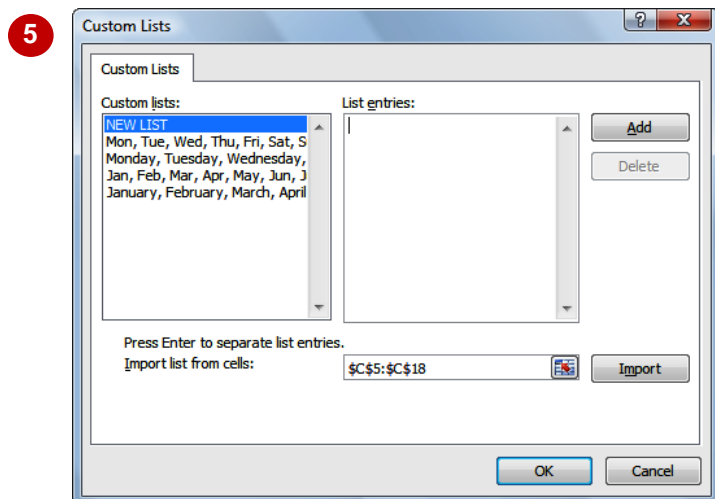
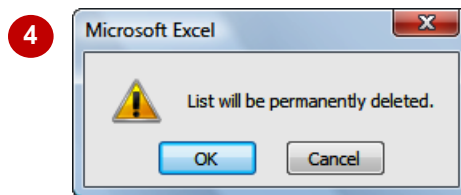
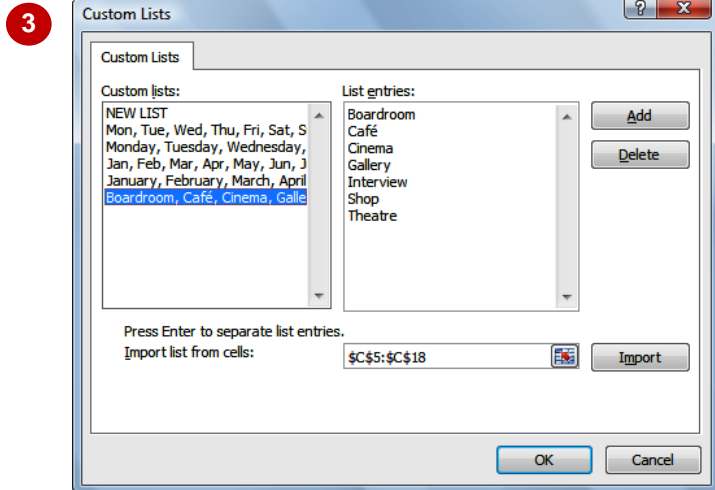
3 Click on **Boardroom, Cafe...** in **Custom lists** to see the **List entries** for this series

4 Click on **[Delete]** to start the deletion process

*Excel will now warn you that the list will be permanently deleted from the system...*

5 Click on **[OK]** to delete the list

6 Click on **[OK]** to close each dialog box and return to the workbook



## For Your Reference...

To **delete** a **custom fill list**:

1. Click on the **File** tab and select **Options**
2. Click on **Advanced**
3. Click on **[Edit Custom Lists]** in **General**
4. Click on the list to be modified

## For Your Reference (cont'd)...

5. Click on **[Delete]**
6. Click on **[OK]** to confirm the deletion
7. Click on **[OK]** to close the dialog boxes

**NOTES:**

---
