

3 THE *LIBREOFFICE* DRAWING TOOLS

LEARNING OUTCOMES

In Lesson 2 you learned how to work with a longer document (the Term Paper). You practiced inserting page numbers, formatting text, using the indent markers, creating sections and columns of text, finding and replacing text, moving and copying text, and putting borders around blocks of text. You also learned how to create a list, such as a Table of Contents, with dot leaders to connect the eye visually to the items in the list.

After completing lessons 1 and 2, you should be beginning to think of yourself as reasonably proficient at word processing, but there is still much to learn. In this tutorial you will be introduced to features of *LibreOffice* that are especially useful when working with images (pictures, charts, and so forth)

The set of *LibreOffice* drawing tools that are accessible from within *Writer*, and that are therefore useful for annotating and/or illustrating ideas expressed in a writing assignment, are extensive, easy to use, and powerful in the sense that they enable anyone to create good quality images or designs for a multitude of practical applications. Teachers, in particular, should familiarize themselves with these drawing tools, not only for their own purposes, such as the preparation of handouts for class, but also so they can introduce the use of the tools to their students. Thus the students, too, will use them in the completion of project work of all kinds.

Lesson 3 thus will cover the following:

- The tools available for drawing
- Drawing, moving, rotating, resizing, and otherwise editing simple shapes and lines
- AutoShapes
- Selecting one or more objects at once—overlapping, ordering, aligning, and rotating objects
- Using colors, patterns, and other visual effects
- Grouping and ordering objects
- Fontwork

A caveat before you begin: You'll find it easiest to use the tutorial if you follow the directions carefully. On computers there are always other ways of doing things, but if you wander off on your own be sure you know your way back!

3.1 GETTING STARTED

This tutorial is designed to give you practice working with the drawing tools that are built into the various *LibreOffice* applications. Drawings that you create in one *LibreOffice* application such as

Draw can be easily copied and pasted into other *LibreOffice* applications, such as *Writer*, *Impress* or *Calc*.

The only way to learn the skills required to get the most out of the drawing tools is to use them. This lesson will get you started in that direction, introducing you to most all the drawing tools and showing you how to use them. But if you want to become proficient, you will need to work with them as much as possible (practice makes perfect) and experiment with ideas of your own for applying the tools in the creation of graphic art work of all kinds

Perhaps you already have a natural flair for drawing, in which case you will especially love these tools. But even if you think you don't have a flair for drawing, you may discover, as you become adept in the use of the drawing tools, that you have more artistic ability than you ever dreamed.

One more thing before you proceed. As you work your way through the exercises in this lesson you will frequently come across tools and skills that are not touched upon here. This is because they are beyond the scope of these *Essentials* tutorials. But if they strike your interest, don't hesitate to check them out; try them and see how much more you can learn.

For this lesson it will be useful to have a separate folder, inside your Data Files folder, for all the drawing-based documents you're going to create.

On your computer, go to your **USB drive (Removable Disk) > Work Files for LibreOffice 5 > Data Files** folder, and, in the dialog box, click on **New folder** and name the new folder **Drawing Documents**

3.2 OVERVIEW OF THE *LIBREOFFICE* DRAWING TOOLS

Let's start by checking out some of the drawing tools available when you're using *LibreOffice Writer* since you are now most familiar with that application. In *Writer*, the drawing tools are accessed in the *View* menu > *Toolbars* option (Fig. 3.1).

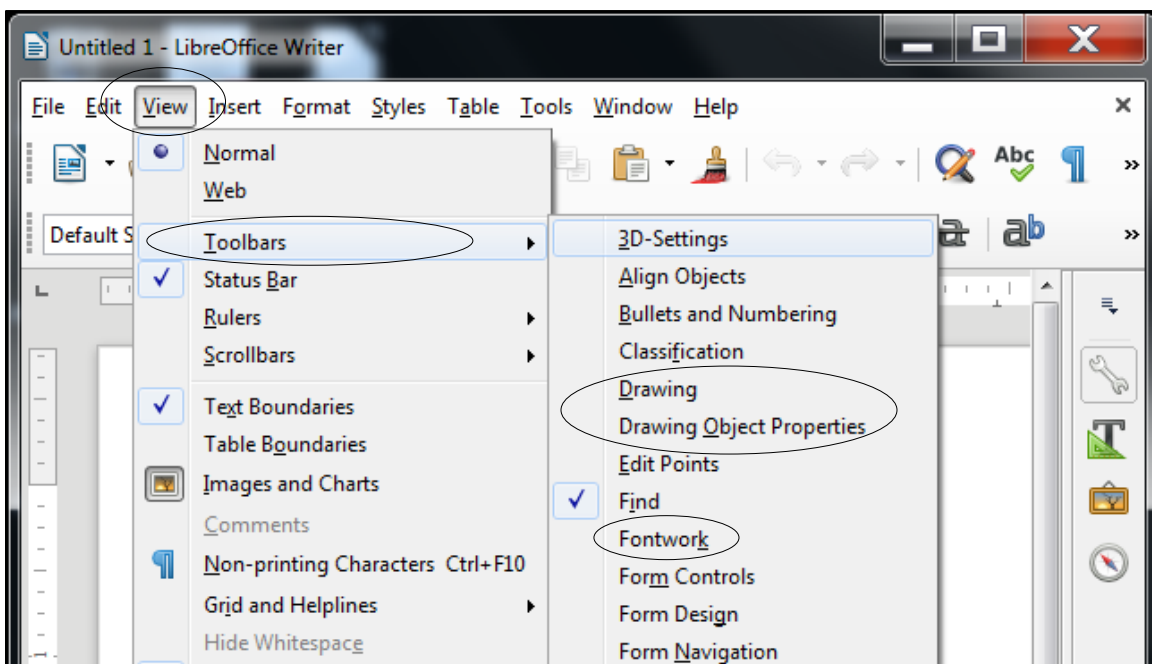


Fig. 3.1 The Drawing Toolbars in *Writer*

Bear in mind that none of these tools are difficult to use once you become familiar with them. Anyone, especially teachers, will find them invaluable for many, many applications in and out of the classroom. Your students will love them, and love you for encouraging them to learn how to use them.

Working with Shapes and Lines

If you are drawing shapes and lines you'd use the tools in the *Drawing* toolbar (Fig. 3.2), which are accessed from the *View* menu > *Toolbars* > *Drawing* tools.



Fig. 3.2 The set of lines and basic shapes in the Drawing toolbar

Aside from basic shapes and lines, the Drawing toolbar provides *Symbol*, *Block Arrow*, *Star*, *Callout*, *flowchart*, *Text Box*, and *Fontwork* shapes.

In order to work with those lines and shapes—change the color of a line or border or the area style or fill of a shape, or rotate the shape, and so on—you would use the tools in the *Drawing Object Properties* toolbar (Fig. 3.3), also accessed from the *View* menu > *Toolbars* option.



Fig. 3.3 Working with existing shapes and lines in the Drawing Object Properties toolbar

Grouping and Aligning objects on the page

When using the drawing tools to create shapes and other objects, you may well want to align some or all of them and perhaps group them together so that they become one object. To do this you would use the *Select* tool in the Drawing toolbar to select or “gather” the objects you want to group together. Having done that, you would then select from the several *alignment* tools available in the Align Objects toolbar to align them according to your design (Fig. 3.4).



Fig. 3.4 Aligning selected groups of objects on the page

If you wanted to convert several objects into a single object, you would use the *Group/Ungroup* tools to “combine” them as one. This is very useful when you have a complex set of objects (perhaps an architectural drawing, for example) that you need to move around *as one unit* on the page, or transfer to another page or another document, and so forth.

Working with your own Pictures

If, on the other hand, you are working with a *picture* that you already have stored on your disk—such as a photograph or a diagram or a chart—you’ll use the *Picture* toolbar (Fig. 3.5).



Fig. 3.5 The set of tools for working with photographs and other prepared images

The Picture tools enable you to create *watermarks*, for example, or convert a picture to *grayscale*, make adjustments to *color density*, *brightness*, and *contrast*, adjust the *transparency* of a picture, and *rotate* and *flip* an image in various ways.

Bullets and Numbering

In *Writer* you will sometimes have lists of items in your document. If you want to use bullets or have a numbered list, or if you needed to create different levels, or change the level of a list item; or if you needed to adjust the numbering of the list, you would use the Bullets and Numbering toolbar (Fig. 3.6).



Fig. 3.6 The Bullets and Numbering toolbar

Fontwork

LibreOffice helps you create eye-catching text-based graphics, which can come in handy when you want to create signs, posters, and displays of various kinds. Again, you’ll find this toolbar, called *Fontwork*, in the *View > Toolbars* menu (Fig. 3.7).

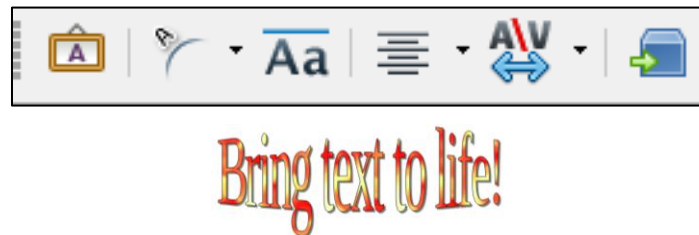


Fig. 3.7 Fontwork toolbar with a Fontwork example

3D-Settings

Any shape you draw can be rendered as a 3-dimensional (3D) object, a process called *extrusion*. Fig. 3.8 shows the 3D-Settings toolbar, also accessed from the *View > Toolbars* menu.

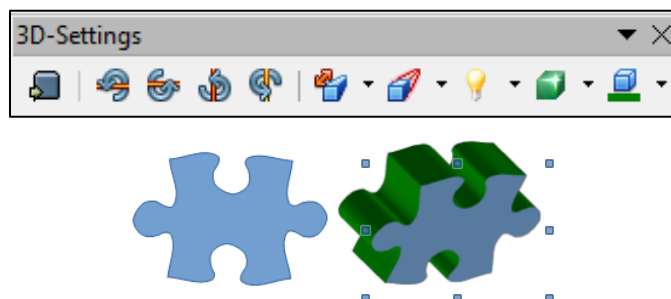


Fig. 3.8 The 3D-Settings toolbar with example of an extruded puzzle shape

Changing the Page Orientation

In *Writer* there are two possible orientations for a page—*Portrait* and *Landscape* (Fig. 3.10).

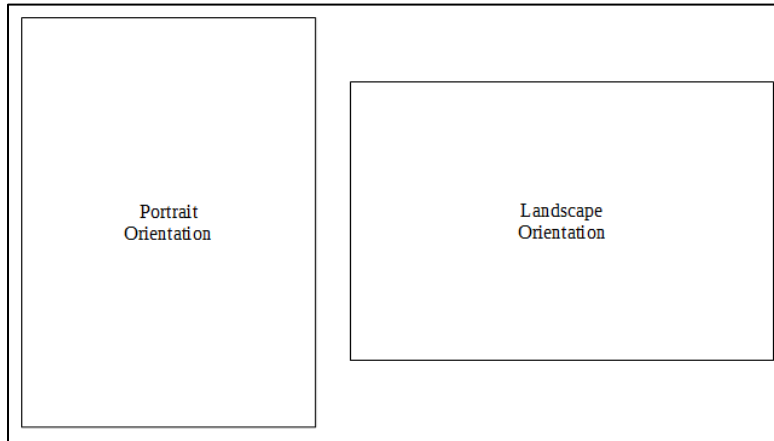


Fig. 3.9 Portrait or Landscape page orientation

Landscape orientation turns the page on its side. This mirrors the orientation of the computer screen and often makes it easier for you when you are working with drawing objects, though there will be many occasions when you will want to work in Portrait orientation, too. The default page orientation in *LibreOffice* is called *Page Orientation*. You'll be using *Landscape Orientation* for most of the exercises that follow. To select one or the other, you'd select *Page...* from the *Format* menu, and in the *Page dialog box* (Fig. 3.10) you'd click on the *Page* tab, then in the *Paper format* section click on the *radio button* to select *Portrait* or *Landscape*.

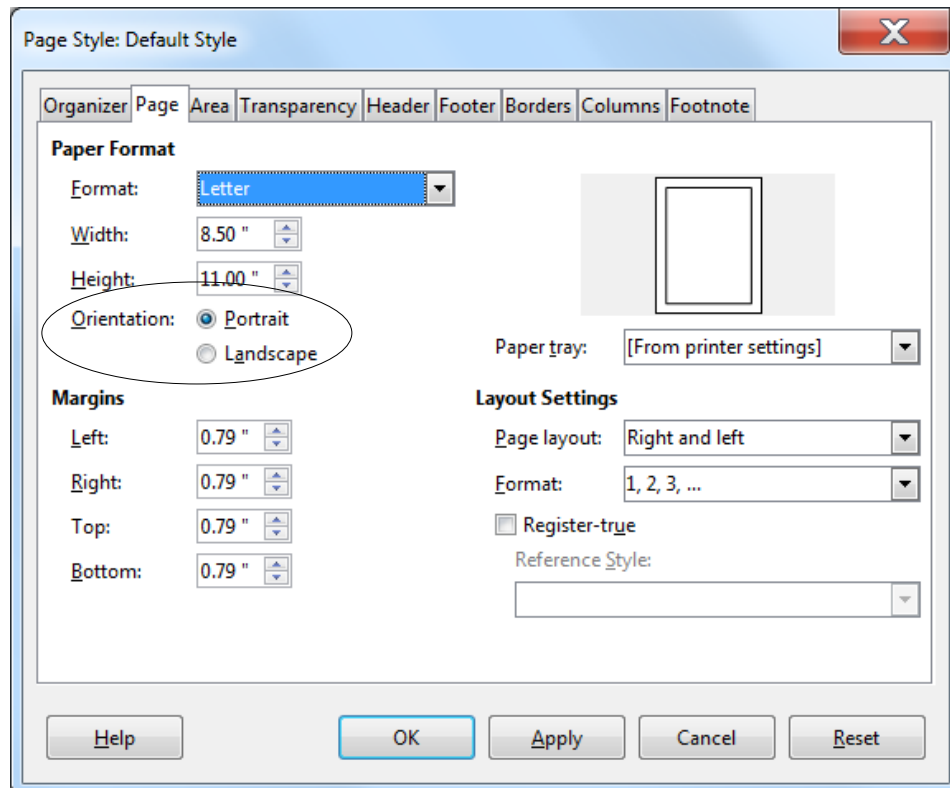


Fig. 3.10 Selecting Portrait or Landscape Page Orientation

Using the Zoom tool

The Zoom tool lets you zoom in on a page (so you can check out the details) or zoom out (so you can see the big picture of a page or the document as a whole). While using the *LibreOffice* drawing tools, you will often want to zoom *in* on an object you are working on, and it is also useful at times to zoom *out* so you can check out the big picture. For this reason it is good to know where to find the Zoom tools (Fig. 3.11).

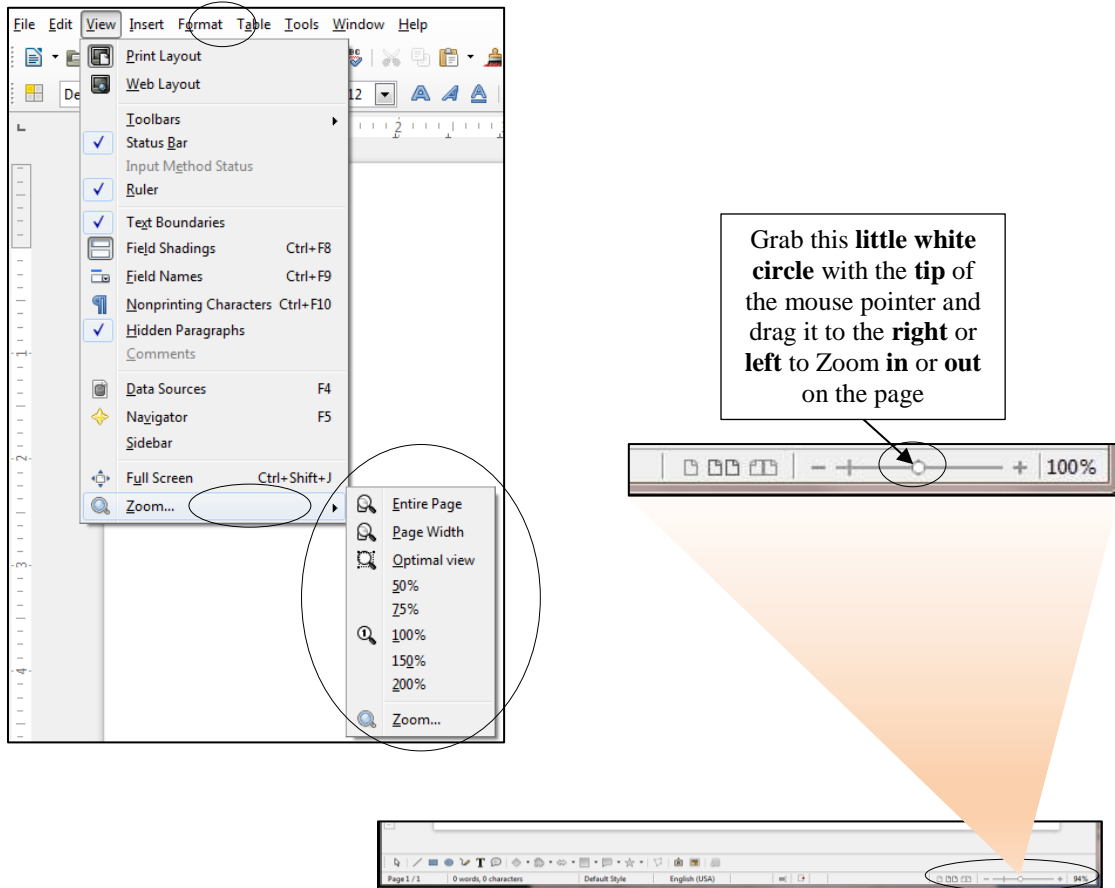


Fig. 3.11 The Zoom tools

As you can see in Fig. 3.11, you can Zoom in and out using the various selections in the *View menu > Zoom...* options. Alternatively, you can Zoom in and out very discretely using the *slider* in the Status bar at the *bottom right* of the *Writer* page (check the second illustration in Fig. 3.11).

In the sections that follow, you will practice zooming in and out of the pages you are working on, and you also will use most of the tools in the various drawing toolbars.

Time for you to get to work.

3.3 DRAWING, MOVING, ROTATING, RESIZING, AND OTHERWISE EDITING BASIC SHAPES AND LINES

You need a new document for each of the drawing exercises you'll be completing for the rest of the tutorial. This is so that you can share them all with your instructor if required. You'll save them all in your Drawing Documents folder.

Start by opening a **new document** in *Writer*

Click on **Writer Document** to open the new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 1**, and hit **Save**

Let's start by learning how to use the basic drawing tools to work with simple shapes and lines.

Working with shapes

In the **View menu > Toolbars** click on the **Drawing** option to bring the **Drawing toolbar** onto the bottom of the *Writer* window (Fig. 3.12)

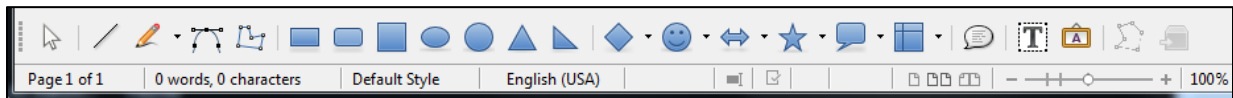


Fig. 3.12 Drawing toolbar

Look at the bottom of your *Writer* screen, which is where the Drawing toolbar is located.

Slide your mouse pointer slowly along the **Drawing toolbar** and read the descriptions that pop up as you pass over each of the drawing tools

As you can see, there are *dozens* of shapes to choose from, including the simplest shapes such as lines, rectangles, ellipses, and freeform lines, which you will practice using in this section of the tutorial. In the next section you will practice using more elaborate (yet still basic) *geometric* shapes, as well as a variety of *symbol* shapes, *block arrows*, symbols for *flowcharting* (very useful for anyone in the management or design fields), *callouts*, and *stars* and banners useful for creating certificates of excellence, graduation, and so forth. But let's keep it simple for now.

In the **Drawing toolbar**, locate and click on the **Rectangle** shape and, using the **mouse pointer**, draw a **rectangle** of any size (the larger the better) on the *Writer* page

Now, in the **View menu > Toolbars** click on **Drawing Object Properties** to open the **toolbar** on the bottom of the *Writer* window (Fig. 3.13)

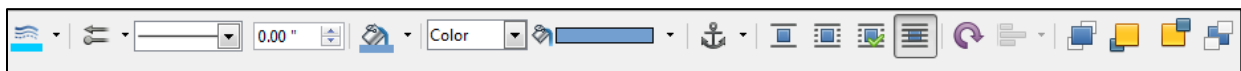


Fig. 3.13 The Drawing Object Properties toolbar

Because the *Drawing toolbar* and *Drawing Object Properties toolbar* display at the bottom of the *Writer* window, it will be easiest to complete the exercises that follow if you *zoom out* on the page. This will allow you to view the whole page on the screen without the toolbars limiting your view.

Use the **zoom slider** in the **lower right corner** of the *LibreOffice* window (Fig. 3.14) to **zoom out to at least 65%**

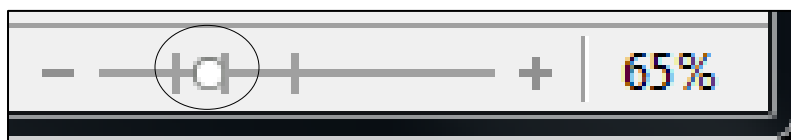


Fig. 3.14 The *LibreOffice* Zoom tool set at 65%

There, now you should be able to see the full page. You could, if you wanted to, move the toolbars (by grabbing them on the dotted line at the left edge with the mouse pointer and dragging) to the top of the window, amongst the other toolbars, or even to either side of the page, but let's leave them where they are for now.

Notice that the rectangle you drew on the page has a set of *handles* around it, which allow you to change the shape of the rectangle on the fly by grabbing any handle and dragging on it (Fig. 3.15).

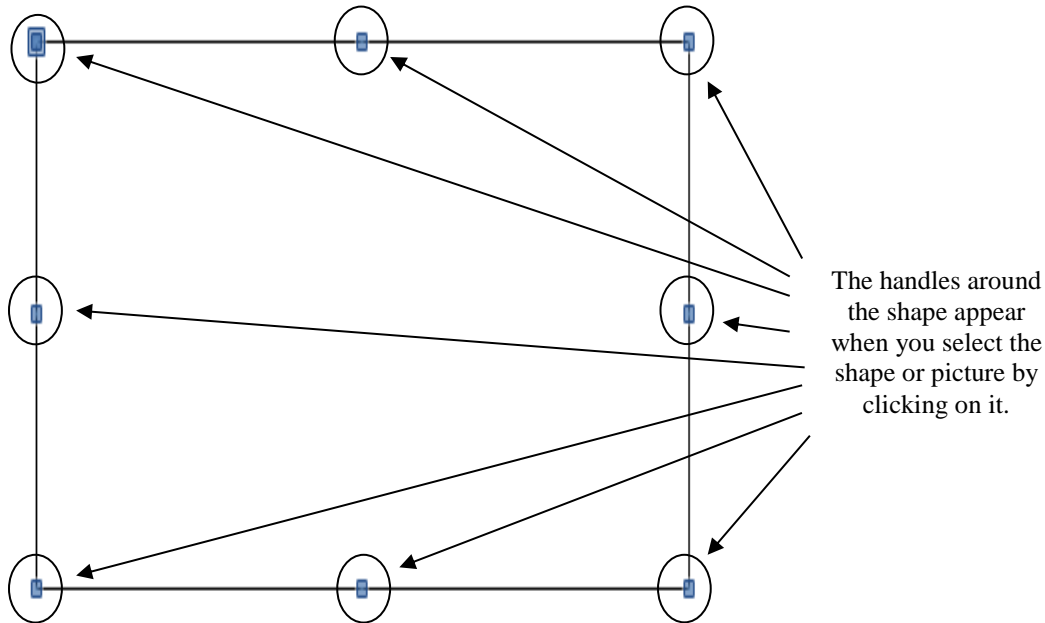


Fig. 3.15 The set of handles around shapes and other images

You're working with a rectangle, so you won't need the simple line or arrow tools at the left of the toolbar. But you may want to have a different size (thickness), color, or style of *border* on the rectangle.

With your rectangle selected (it has the **handles** around it), use the mouse pointer to scan the **Drawing Object Properties toolbar** to check out the various tools for working with the **Border** and **Fill** of drawing shapes (Fig. 3.16 on the next page)

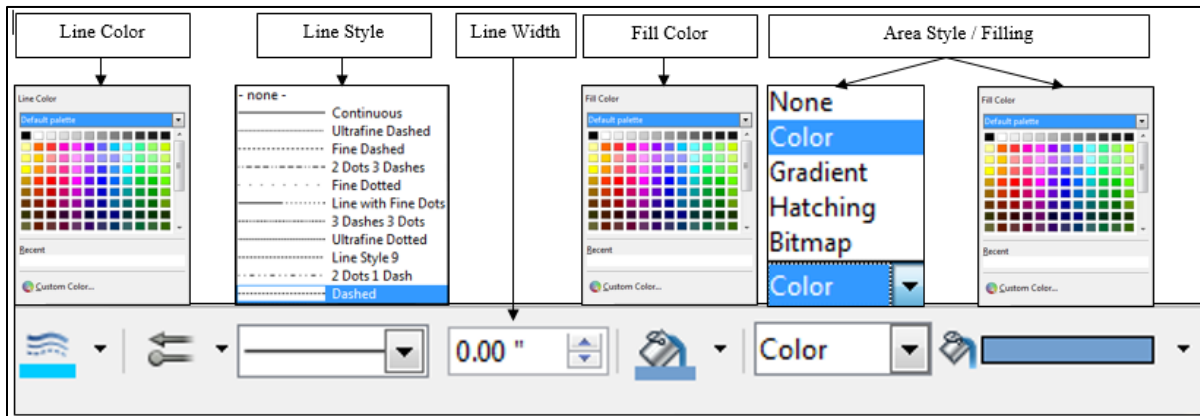


Fig. 3.16 The Drawing Object Properties toolbar (annotated)

Let's try out each of these *Drawing Object Properties* tools now. If necessary, refer to the illustration above (Fig. 3.16) as you complete the exercises that follow.

Border Color (not Fill Color)

A line or border can be any color. The same applies to the border around a rectangle or any other shape.

With the **rectangle selected** (it has the **handles** around it), try out some of the **Line Color options** (the first item annotated in Fig. 3.16 above) before proceeding with the tutorial

Border Style

A line can be continuous, or it can be dashed or dotted in different ways. The same applies to the border around a rectangle or any other shape.

With the **rectangle selected** (it has the **handles** around it), try out each of the **Line Styles** (the second item annotated in Fig. 3.16 above) before proceeding with the tutorial

Border Width

A line can be thick or thin—or even invisible! The same applies to the border around a rectangle or any other shape.

With the **rectangle selected** (it has the **handles** around it), try out some **border thicknesses** (the third item annotated in Fig. 3.16 above) as well as the **0 (zero) thickness** option before proceeding with the tutorial

Fill Color

The Fill Color tool lets you choose from a palette of colors for filling a shape with up to 16 million different colors.

With the **rectangle selected** (it has the **handles** around it), try some of these **Fill Color options** (the fourth item annotated in Fig. 3.16 above)

Area Style / Filling

As you probably noticed when you checked out the Area tool above, the area of a shape (inside area, not including the border) can be filled with a range of colors, but it can also be filled with several *Styles* of fill, such as Gradients, Hatching, and Bitmapping (Fig. 3.17).

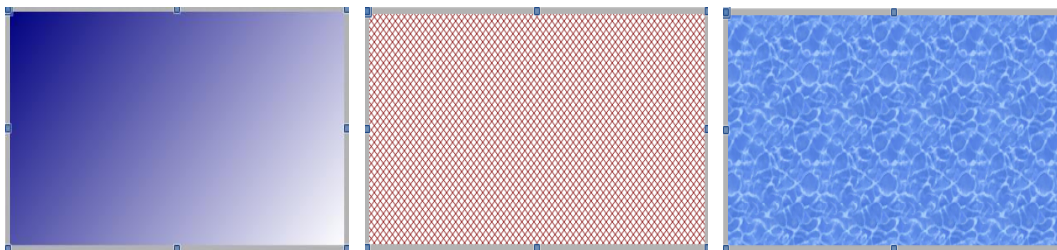


Fig. 3.17 Gradients, Hatching, and Bitmap options for Area Style / Filling

With the **rectangle selected** (it has the **handles** around it), try out each of these **Area Style / Filling options** (the last item annotated in Fig. 3.16) before proceeding with the tutorial; the **Gradients** are especially interesting—have fun!

Save the document (**Practice Drawing 1**) when you are ready, and **Close** it

Working with lines

You need a **new document** for the next drawing exercise, so click on **Writer Document** to open a new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 2**, and hit **Save**

Let's practice drawing different kinds of lines.

In the **Drawing toolbar** (which should be open at the bottom of the *Writer* window) click on the **line tool** to select it, then use the mouse to draw a straight **line** anywhere **on the page** (Fig. 3.18)

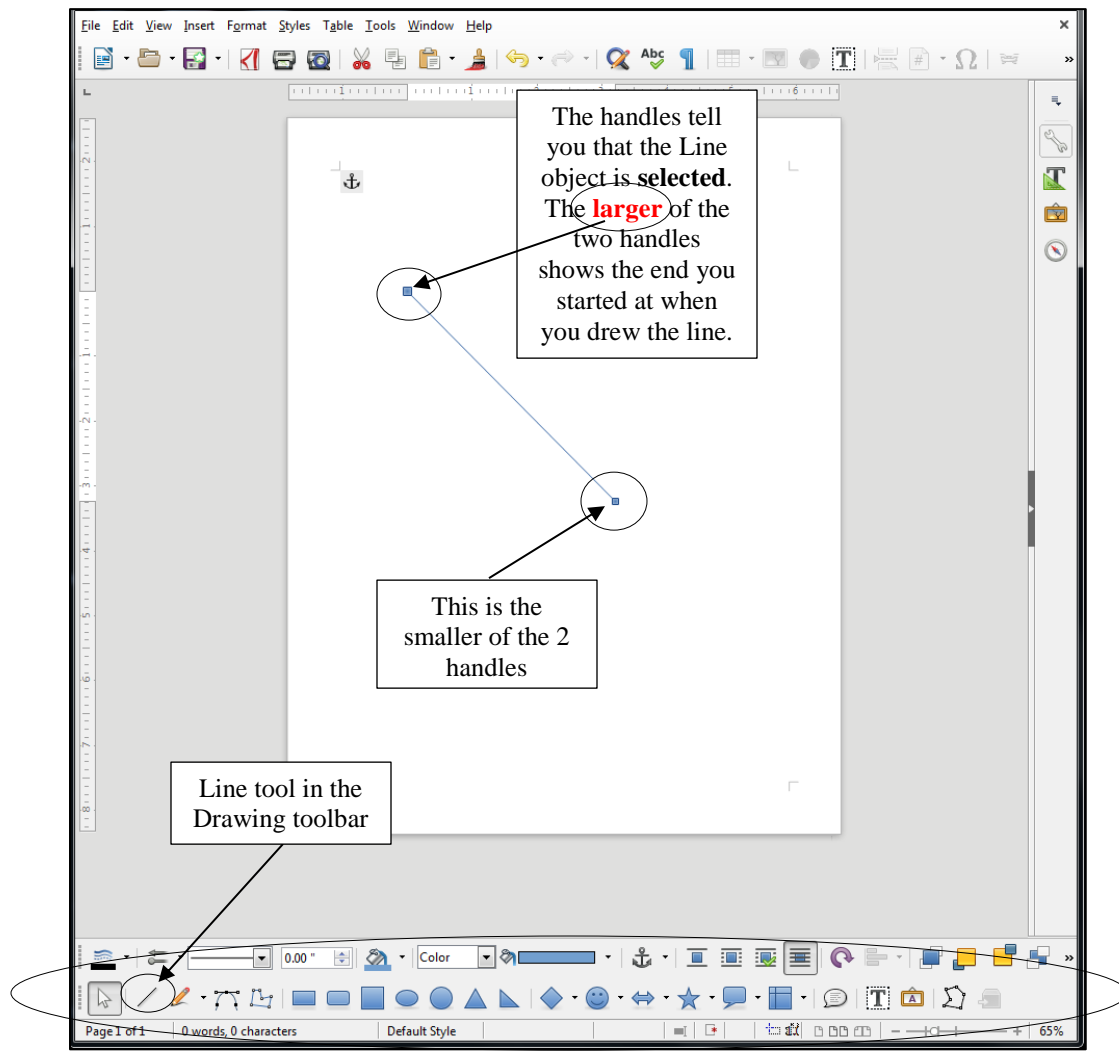


Fig. 3.18 A simple line drawn on the *Writer* page


The *handles* tell you that the *Line object* is *selected*. If you look carefully, you'll notice that the two handles are not the same size—one is bigger than the other. The *larger* of the two handles shows *the end you started at* when you drew the line. You'll see the relevance of knowing this when you later want to put arrowheads on the line (explained on page 91—Adding arrowheads to lines).

Now complete the following tasks to learn how to work with different styles of lines.

Click anywhere **off** the line you just drew and notice that the **handles** (little squares) at each end of the line **disappear**; the **LibreOffice Drawing Object Properties toolbar** also disappears because it is only needed as long as a drawing object is selected

So... You can only edit or move a drawing object of any kind if the handles are showing. The handles indicate that the object is *selected*. Clicking ON the object selects it; clicking OFF the object deselects it.

Click anywhere **on** the line now, and notice that the **handles** (little squares) **reappear** at each end, and both the **Drawing toolbar** and the **Drawing Object Properties toolbar** *reappear*, waiting for you to decide what you want to do with the selected Drawing object (the selected line)

Position the mouse pointer anywhere **on** the line and notice how the cursor changes to a **crosshair** (), which tells you that the mouse is correctly positioned on the line so that when you click the mouse it will allow you to work with the line

Now, with the handles showing, you can edit the line you just drew.

Work your way across the **Drawing Object Properties toolbar**; try out a few of the **Line Colors**, **Line Styles**, and **Line Widths**

These are all the options you have when it comes to a simple line. Take your time; have fun with it and make yourself familiar with the various options available.

When you are done checking out the different design options for the line, hit the **Backspace** key or the **Del** key to delete the line from the page

Save the document (**Practice Drawing 2**) when you are ready, and **Close** it

Working with rectangles and ellipses

You need a **new document** for the next drawing exercise, so click on **Writer Document** to open a new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 3**, and hit **Save**

Creating and editing lines is simple enough. How about shapes such as rectangles and ellipses— or squares and circles?

In the **Drawing toolbar** click on the **ellipse (oval)** tool, and use the mouse to **draw an ellipse (oval)** object on the page

Notice the small handles that surround the shape, which you use to change the object's shape.

Grab any of the **handles** and **stretch** them to change the shape; notice that the **corner handles** allow you to stretch the shape **diagonally** as well as **up, down, left, or right**—whereas the **handles at the middle of each side** only allow you to stretch the shape **up, down, left, or right**

Rotating Objects

To rotate an object that you have drawn on the screen, you need to use the *Rotate* tool in the *Drawing Object Properties* toolbar (Fig. 3.19).

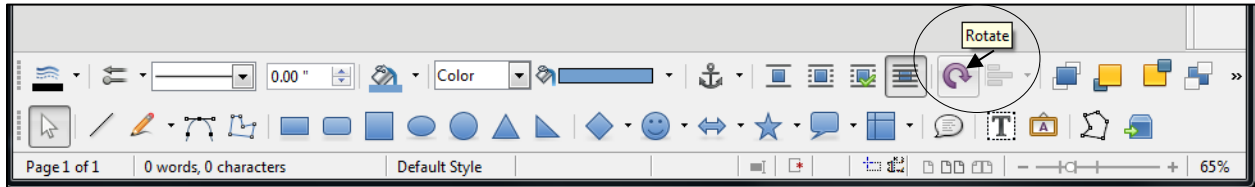


Fig. 3.19 Rotating a shape

Let's try this now.

First, if necessary, click on the **Oval object** to select it (you should see the handles around it), then, in the **Drawing Object Properties** toolbar, use the mouse to click on the **Rotate tool** (see Fig. 3.19 above)

This changes the ellipse shape into an object that can be rotated on a central point (Fig. 3. 20).

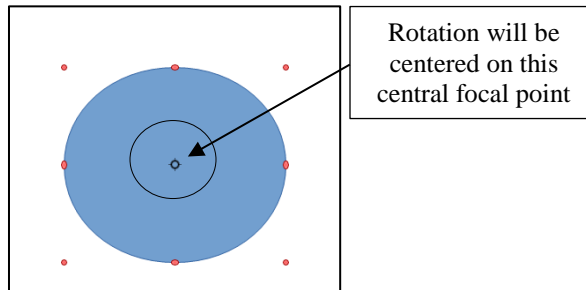


Fig. 3.20 A drawing object that can be rotated

Notice that the handles have changed to a *red* color and that in the *center* of the ellipse there is a *focal point* around which the ellipse object can rotate (Fig. 3.20 above).

Position the mouse pointer on any of the **corner red handles** (Fig. 3.20 above) and **drag** in a clockwise or counter-clockwise motion to **rotate** the object

Now position the mouse pointer on any of the **side red handles** and **drag** in a clockwise or counter-clockwise circular motion to again **rotate** the object

The *side handles* allow rotation of the shape from side to side or up and down AND you can change its shape; whereas the *corner handles* allow full rotation of the object on the screen BUT you cannot change its shape. Check out these *Rotation* tools in the Drawing Object Properties toolbar.

While you have the shape selected, in the **Drawing Object Properties toolbar**, again try out some more of the **Line Colors, Styles, and Widths**

Also try out some of the **Area Style / Filling options**, including **Gradients, Hatching, and Color**

Bitmaps

The **Bitmap** option only works with digital images. Let's try this now.

In the **Area Style/Filling** tool select the **Bitmap** option then, in the adjacent menu, select one of the images such as **roses** listed there (you can also use an image of your own if you want by selecting **Image...** from the **Insert** menu)

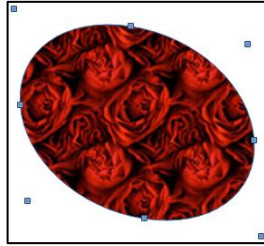


Fig. 3.21 The Bitmap option when working with shapes

When you are done checking out these **Drawing Object Properties** tools, hit the **Backspace** key or the **Del** key to delete the **Oval shape** from the page

As you see, there are dozens—well, actually thousands at least—of different options that you can apply to any shape that you draw on the screen.

Drawing a perfect square or circle

Drawing rectangles and ellipses is easy. What about drawing a perfect square or a circle? If you want to draw a “perfect” square or a “perfect” circle, you would naturally use the *Square* tool or the *Circle* tool. Try this now.

In the **Drawing toolbar** select either the **Square** or **Circle** tool and draw the shape in any size

Notice that the shape will always be a perfect square or circle when you first draw it on the page. After you've drawn the square or circle, however, if you want to resize the shape AND keep it perfectly square or circular, you must *hold down the Shift key* while dragging on the handles.

Hold down the Shift key and use the handles to change the size of the object


If you let go of the Shift key and drag on the handles, you can change the shape of the square or circle any way you want.

Try this now—**let go of the Shift key** and change the shape of the object

The Square or Circle shape will always be a perfect circle or square as long as you hold down the Shift key. Remember this neat trick. It'll work with other software, too.

Moving drawing objects

Creating lines and other shapes is simple enough. But once you have an object drawn, how about editing it and moving it around on the page? To do either of these things, the line or rectangle or ellipse or other drawing object must first be selected (which means clicking on it so that you can see the handles around it). First let's practice moving an object around on the page without changing its shape.

Click on the **object you have on the screen** to select it (you see the handles around the shape), slide the mouse pointer over the object and notice that the pointer changes to a **crosshair** (), any time the pointer is **anywhere**

within the perimeter of the object or **on** the object if it's a simple line—the crosshair tells you that you can move or edit the object

Now, hold down the **left mouse button** and **drag** to move the object anywhere you like on the page

Resizing drawing objects

How about resizing drawing objects—changing their size and shape? To do this, once again the line or rectangle or other drawing object must first be selected so you can see the handles.

Make sure the **object** from the previous exercise is still selected—you should be able to see the handles around it

If you want to change the *size* of the object without losing the object's *shape*, you must use a combination of the Shift key and one of the four *corner* handles (not the 4 handles in the middle of each side). Try this first.

Hold down the **Shift** key, then position the mouse pointer on one of the small handles in any **corner** of the shape (**not** one of the 4 handles in the middle of each side or the rotate handle), hold down the **left mouse button** and **drag** in or out to stretch or squeeze the object you have on the screen

Notice that the object keeps its basic shape; when you hold down the Shift key *only the size changes*. If you're not concerned about distorting the object's shape you can drag on any of the handles without holding down the Shift key. Try this now.

Position the mouse pointer on any of the handles, hold down the **left mouse button** and **drag** to stretch or squeeze the ellipse anyway you want

The same thing applies to irregular shapes such as polygons in general or freeform drawings like squiggly lines (yes, there's a squiggly line tool, too! It's called the *Freeform Line* tool). When you click on the shape, it shows the handles around it. By holding down the Shift key and grabbing one of the handles in the corners, you can make the shape smaller or larger *without otherwise distorting it*. By grabbing any of the handles around the shape *without* simultaneously pressing the Shift key, you can distort the shape by making it thinner or fatter, taller or shorter—whatever.

Make sure the **object you have on the screen** is **selected**—you should be able to see the handles around it—then hit the **Backspace** key or the **Del(ete)**

Now, in the **Drawing toolbar** select the **Freeform Line** tool (Fig. 3.22), then, careful as you can, **write (scribble) your name** anywhere on the page—you'll need a steady hand and you must keep your finger on the **left mouse button** from start to finish—try it a couple of times

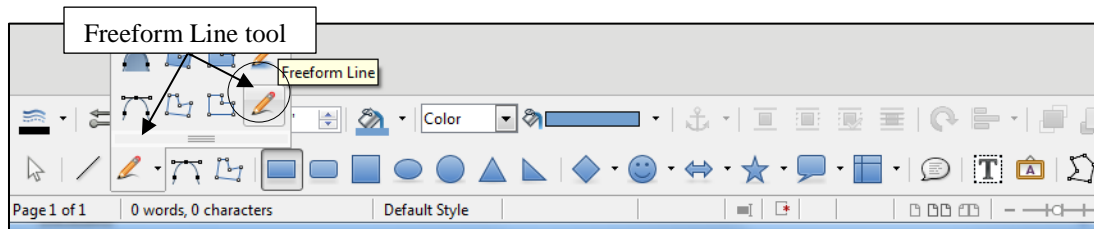


Fig. 3.22 The Freeform Line tool

When you're done trying to write your name, and with your name (the object on the page) still highlighted, hold the **Shift** key down, then position the mouse pointer on any of the **corner** handles, hold down the **left mouse button** and **drag** to stretch or squeeze the object anyway you want—it will keep its basic shape; only the **size** of your name will change

Now try it again, but this time without holding the **Shift** key, and notice the **difference**—try each of the handles and notice the difference there, too, between using the **corner handles** or the **handles at the middle of each side**

When you are done playing around with your signature, **Close** the document (**Practice Drawing 3**)

Adding arrowheads to lines

You need a **new document** for the next drawing exercise, so click on **Writer Document** to open a new document and, in the **File** menu, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 4**, and hit **Save**

First of all, an arrowhead is associated with a line. A line might have an arrowhead on one end or on both ends. You can add an arrowhead to a line using the *Arrow Style* tool in the *Drawing Object Properties* toolbar (Fig. 3.23).

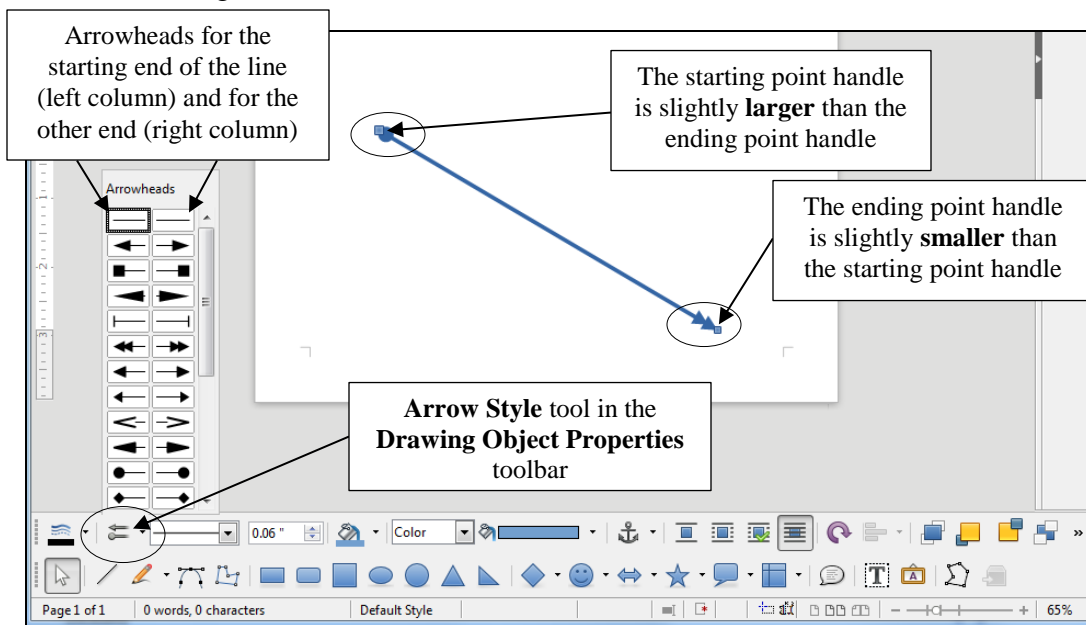


Fig. 3.23 The Line tool and the Arrow Style tool in the Drawing Objects toolbar

Use the **Line tool** to draw a **straight line** on the page (the **Drawing Object Properties** toolbar will now pop up at the bottom of the *Writer* window)

Now, with the line still selected, click on the **Arrow Style** tool (Fig. 3.23 above), select an **arrowhead** style from **the left column** of arrowheads

Selecting from the *leftmost column* of arrowheads will add the arrowhead to the *starting point* of the line—that's the end of the line that has the *larger* of the two handles.

If you want an arrowhead on the other (*ending point*) of the line, you would choose an arrowhead from the *rightmost column* of arrowheads (the column of arrowheads for the *ending point* of a line drawn on the page). Let's do this for practice.

With the line still selected, click again on the **Arrow Style** tool (Fig. 3.23 above), and select an **arrowhead** style from the **right column** of arrowheads, and **add** it to the **ending point** of the line, as illustrated in Fig.3.23 above

If you wanted the arrowheads reversed on the line, you'd either use the *Rotate tool* to spin the arrow around, or you'd reverse the directions you just completed above. Simple.

Editing a straight line or a straight line arrow works a little differently than solid shapes such as ellipses, polygons, and so forth, since you only have two handles to worry about—one at either end of the line or arrow. You use either of the handles to lengthen or shorten the line. You also can drag on either handle to rotate it from either end. Let's try this now.

Grab hold of the **handle** at either end of the line or arrow, and **drag the handle** in or out, up or down, from side to side, so you can get a feel for how to change its **length** and **orientation**

When you are done, **Close** the document (**Practice Drawing 4**)

3.4 OTHER DRAWING SHAPES

You need a **new document** for the next drawing exercise, so click on **Writer Document** to open a new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 5**, and hit **Save**

There is a wide selection of predefined shapes that you can use to create your drawings. These shapes are again accessed from the Drawing toolbar (Fig. 3.24).



Fig. 3.24 Drawing toolbar (annotated)

Specifically, there are Basic Shapes like rectangles, ellipses, triangles, cylinders, and so forth, most of which would take you quite a while to create from scratch by hand—unless you're a talented artist or draftsman, of course.

Then there are shapes designed to help you draw Block Arrows, and shapes to help you create Flowcharts—very useful for planning diagrams. If you want to add “speech” to characters in a diagram, there is a nice selection of Callouts you can use. Finally, when you want to create certificates and such, you can use the Stars and Banners shapes.

For the next exercise, when you have finished the exercise, you are going to Save the file in your Drawing Documents folder (in the Data Files folder) so that you can later, if required, send it to your instructor as an attachment in email. So let's save the blank document you have open on your screen now before we proceed.

In the **File** menu select **Save As...**, navigate to your **USB (Removable) disk > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 1**, and hit **Save**

When you are ready, you are going to complete the following exercise that is illustrated in Fig. 3.25 below. You'll draw each of the shapes **small enough** so you can fit them all on the page **without overlapping**. *Don't delete any of them* because you're going to send the file to your instructor, if required, when you have completed Lesson 3.

When you are done with the exercise, your page will look something like—though obviously not exactly the same as—Fig. 3.25.

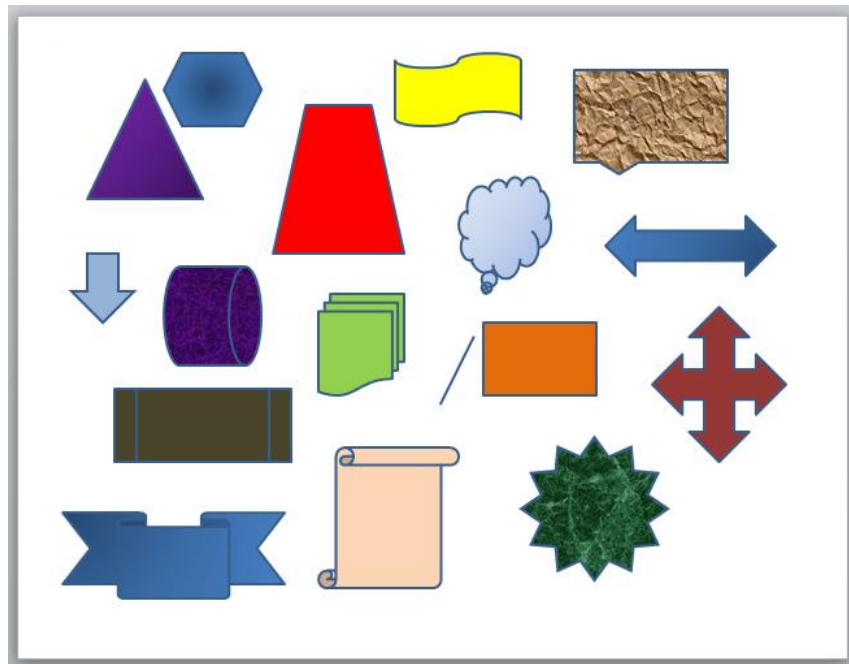


Fig. 3.25

Draw at least **three Basic Shapes** (line, rectangle, ellipse, freeform shape, triangle, hexagon, cube, etc., etc.)

Draw at least **three Block Arrows**

Draw at least **three Flowcharting Shapes**

Draw at least **three Callouts**

Draw at least **three Stars or Banners**

Now use the tools in the **Drawing Object Properties** toolbar to add **Line Styles and Line Colors** to lines and the borders of the various shapes

Fill the **Areas** of shapes with a mix of **colors, gradients, and bitmaps**

Save the file (with the name **Practice Drawing 5**), then **Close** the document (**File > Close**)

Tools like these are designed to make your life easier. Why would you go to all the trouble of creating your own shapes by hand when many of them are already available for you on the computer? You can use these tools with a class to help them learn the geometric shapes, for example. This is included as one of the exercises in the **SKILLS CONSOLIDATION** section at the end of the lesson.

3.5 USING COLORS, PATTERNS, AND OTHER VISUAL EFFECTS

Area Fill Effects: Transparencies

The *Writer* drawing tools give you lots of control over colors, patterns, gradients and other visual effects. Some of those other visual effects include transparencies, shadows and 3-D. Let's take a closer look at some of these tools, starting with transparencies.

You need a **new document** for this next drawing exercise, so click on **Writer Document** to open a new document and, in the **File** menu, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 6**, and hit **Save**

Start by drawing a **rectangle** on the blank page and give it an **Area Fill color** of your choice, then draw an **ellipse** that **overlaps** the rectangle and which has a **different Area Fill color** than the rectangle—something like Fig. 3.26

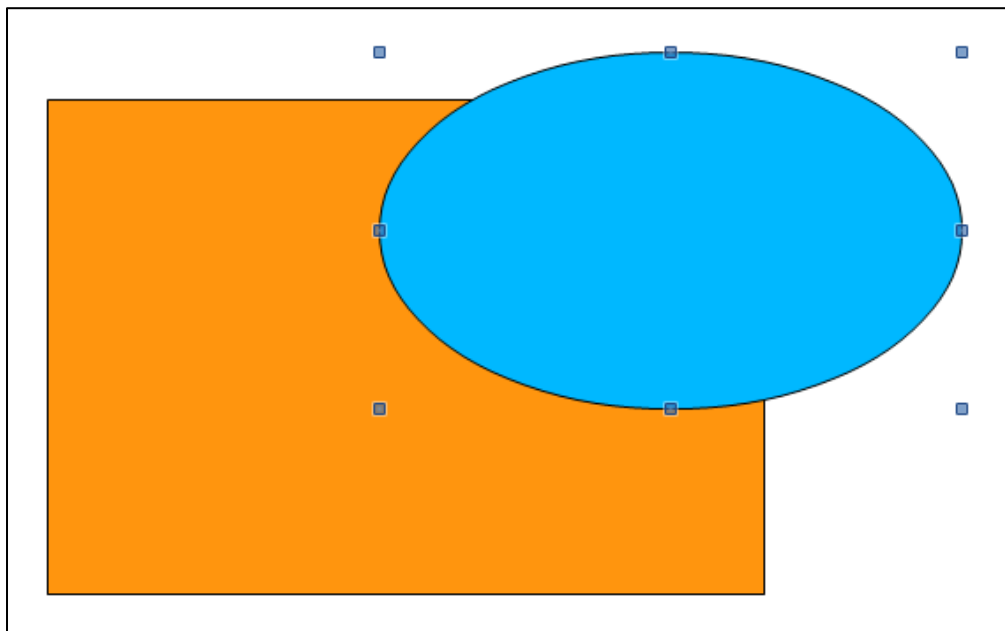


Fig. 3.26 One shape overlapping another

The ellipse, being opaque (a solid color), hides part of the rectangle. But you can adjust the *Transparency* of the *Area Color* of a drawing object, such as the ellipse in this case, thus allowing a drawing object that is hidden behind it to show through. Let's try this.

With the ellipse selected, right click on it and, in the context menu that pops up, click on the **Area** tool (Fig. 3.27)

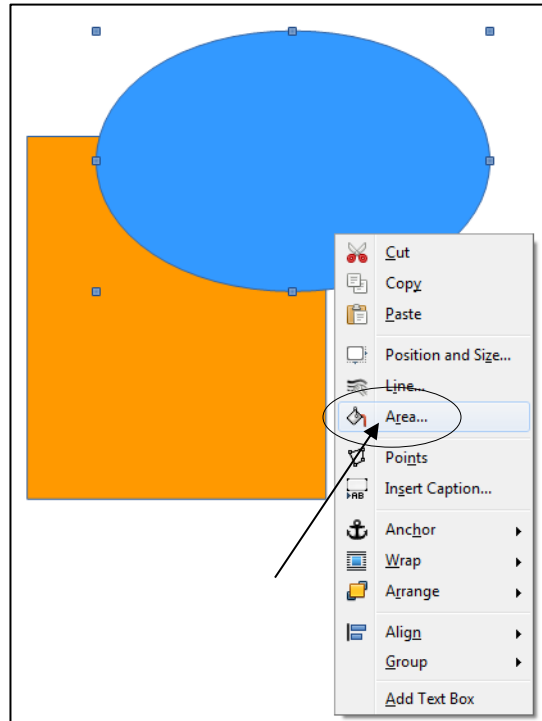


Fig. 3.27 Selecting the Area tool from the Drawing Object Properties context menu

This will bring up the *Area dialog box* (Fig. 3.28).

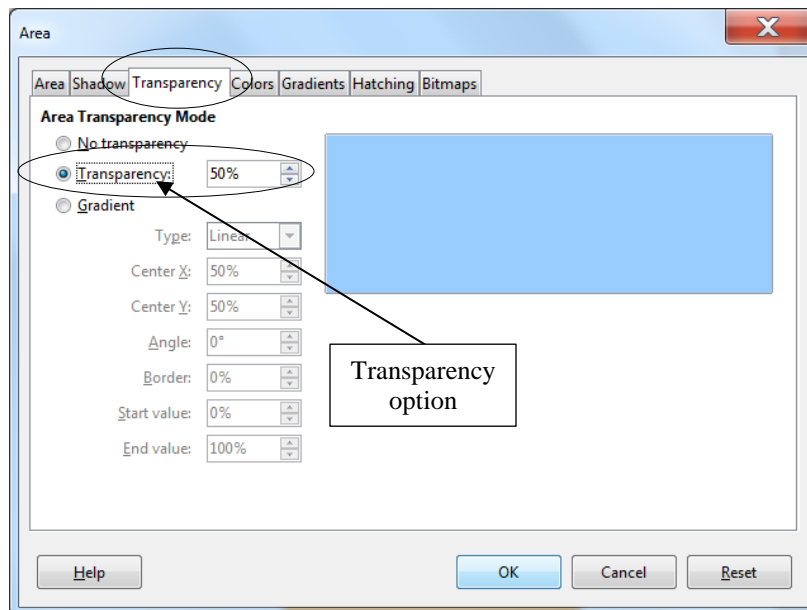


Fig. 3.28 Settings for a semi-transparent shape

In the **Area dialog box**, click on the **Transparency tab** then, in the **Area Transparency Mode** section, click on the **radio button** next to **Transparency** (Fig. 3.28 on the previous page) then click on **OK**

You now have a *50% transparency* for the selected object (the ellipse). The ellipse shape now looks like a semi-transparent piece of glass or plastic or sheer material, partially revealing the object that is behind it, as illustrated in Fig. 3.29.

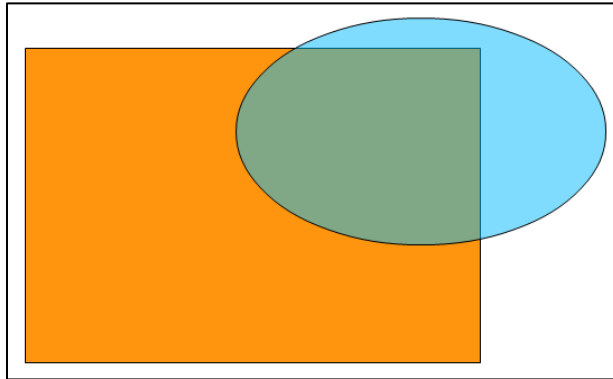


Fig 3.29 The transparent ellipse

Neat, huh? Other than plain colors, there are *shadow* fills, *gradients*, a small selection of *hatching* fills. You can also fill shapes with *bitmaps* (digital pictures), some of which come with *LibreOffice*, and you can also add your own. Let's check out a couple of other useful *Area Fill* along these lines. This time you'll work with both drawing objects at once.

Hold down the **Shift key** while clicking on the ellipse shape and the rectangle shape so that both are selected at the same time

With the ellipse and the rectangle selected, **right click** on the objects and, from the context menu that pops up, select the **Area** tool to bring up the **Area dialog box**

Click on the **Gradients** tab, then select the **Type** of gradient you want from the **drop down list**

Try this with the **Shadow > Use Shadow** option, and the **Hatching** option

Hey presto! Bear in mind that the purpose of this lesson is to show you the many drawing tools in *LibreOffice* and let you practice with them. It's up to you now to use them with creativity and skill to produce art work of all kinds for use in your profession.

Save your **Practice Drawing 6** then **Close** the document

Filling Shapes with Imported Pictures (Bitmaps)

You need a **new document** for the next drawing exercise, so click on **Writer Document** to open a new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 7**, and hit **Save**

Bitmaps are essentially digital images, and can include any picture you want—pictures that you may have taken yourself, for example, or which you might find amongst collections of pictures and other art work that are freely available on the web.

Draw a largish **rectangle shape** on the page (say **6" square at least**)

Right click on it to bring up the **Context menu**, then in the pop up menu click on the **Area** button to bring up the **Area dialog box**

In the **Area dialog box** click on the **Bitmap** tab, then click on the **Import** button

The Import button brings up the *Import dialog box*, which is essentially the Open button for the operating system you're using on your computer—Windows, Mac OS or whatever.

In the **Import dialog box**, navigate to your **USB drive > Work Files for LibreOffice 5 > Miscellaneous Files folder > Practice folder**, then double click on the file named **Bouquet** and click on **OK**

Immediately the Bouquet picture is uploaded to the rectangle shape on the *Writer* page (Fig. 3.30).



Fig. 3.30 Filling a shape with a picture imported from your disk

Right click on your **Bouquet bitmap** to bring up the **Context menu**, then in the pop up menu click on the **Area...** button to bring up the **Area dialog box** and click on the **Area** tab to bring up the **Area dialog** (Fig. 3.31)

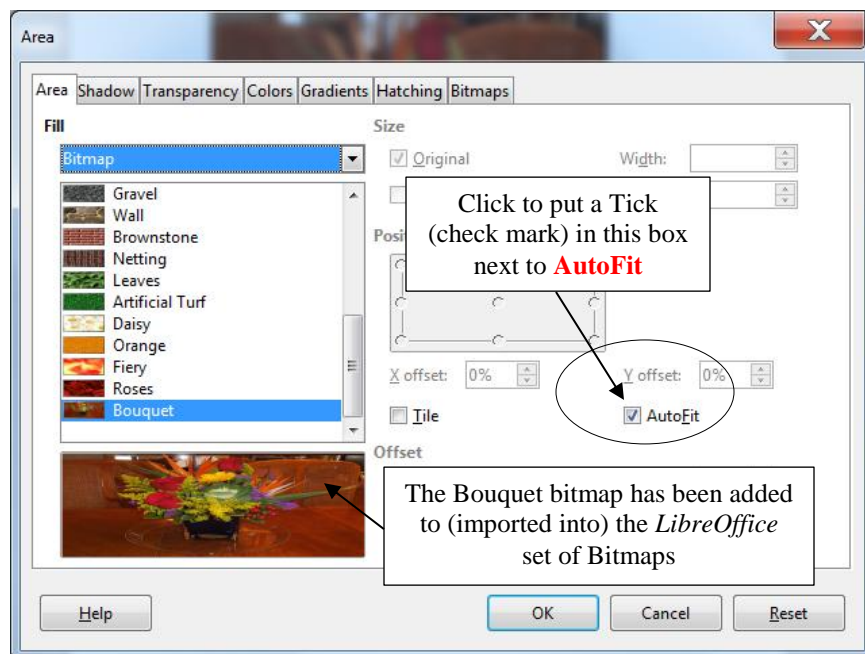


Fig. 3.31 Selecting AutoFit in the Area dialog box

Click to put a **check mark (tick)** in the **small box** next to **AutoFit** (Fig. 3.31 previous page)

That's better. Now you can see the whole bouquet in its vase on the oak dining table (Fig. 3.32).



Fig. 3.32 The imported Bouquet Bitmap is added to the LibreOffice set

Notice that the Bouquet picture has now been added to the set of bitmaps (Fig. 3.30 on the previous page), which means you no longer need to *Import* it again from your disk. You'll be able to easily use it whether in *Writer*, *Draw*, *Impress*, or any of the other *LibreOffice* applications.

Save the file (**Practice Drawing 7**) and **Close** it before going on

3D Effects

You need a **new document** for this next drawing exercise, so click on **Writer Document** to open a new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 8**, and hit **Save**

In the **Drawing toolbar > Symbol Shapes** select the **Puzzle shape** (Fig. 3.33)

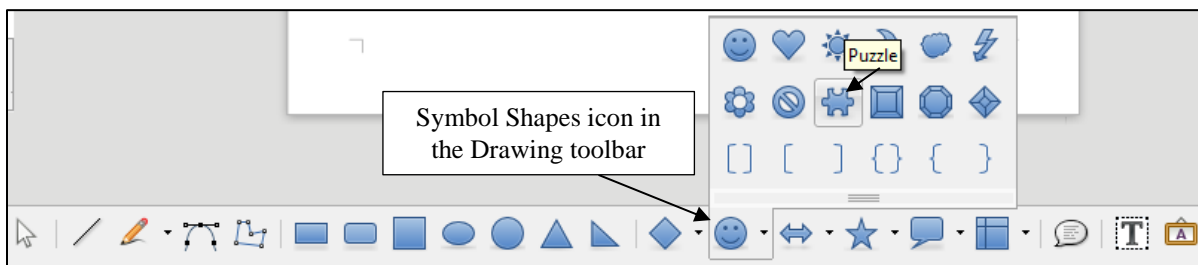


Fig. 3.33 The Puzzle Shape in the set of Symbol shapes

Draw a **puzzle shape (jigsaw piece)** about **5” square** on the page (Fig. 3.34)

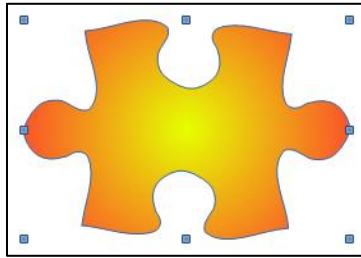


Fig. 3.34 Puzzle image

In the **Drawing Object Properties toolbar**, select any **Line color** for the **Puzzle shape** and any **gradient** for the **Area Fill**

Next, in the **View > Toolbars** menu select **3D-Settings** to bring up the **3D-Settings toolbar**

The 3D-Settings toolbar are displayed at the end of the drawing toolbar at the very bottom of the Writer window. But, unless you have a wide screen, it's likely that the 3D-Settings tools are off the right end of the Writer window. It's a good idea, therefore, to grab the toolbar and slide it up onto the page where you have the Puzzle image, so that you can more easily access the various 3-D tools. Here's how you do this.

In the **lower right hand corner** of the window locate the **vertical line of dots** at the end of the Drawing Toolbar (Fig. 3.35)

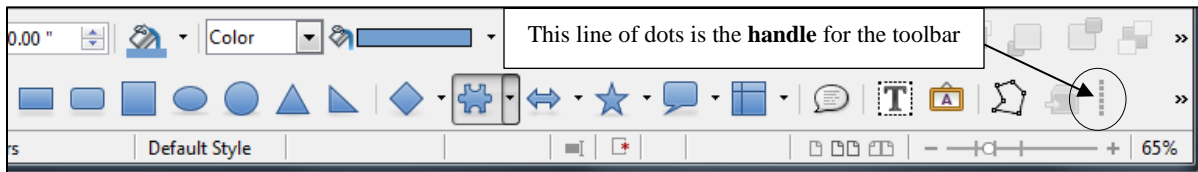


Fig. 3.35 Grab the vertical line of dots that act as the handle for the 3-D Settings toolbar

Now, with the **tip** of the mouse pointer positioned on the **line of dots**, hold down the **left mouse button** to **grab** the line of dots and **slide** the **3-D Settings toolbar** up onto the page **close to the Puzzle image** you just drew there (the line of dots is the **“Handle”** for the toolbar) (Fig. 3.36)

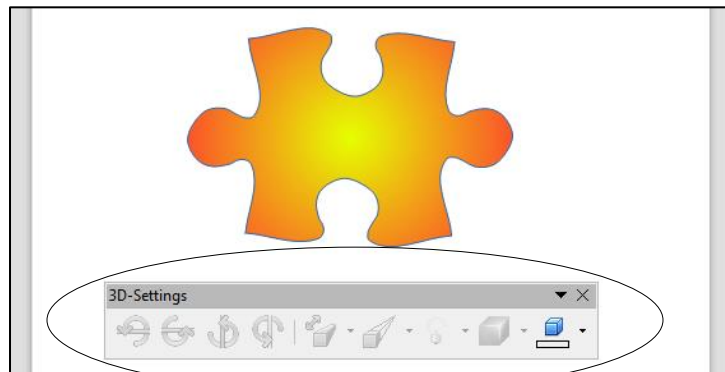


Fig. 3.36 Slide the 3D-Settings toolbar close to the Puzzle image on the page

Before you can use the 3D-Settings tools you must turn on *Extrusions*¹. This is easy to do.

First **click** on the **Puzzle image** to **select** it (the handles surround it) then click on the **small arrow** next to the **X** on the **right end** of the **3D-Settings toolbar** to bring up the **Extrusion On/Off switch** (Fig. 3.37)

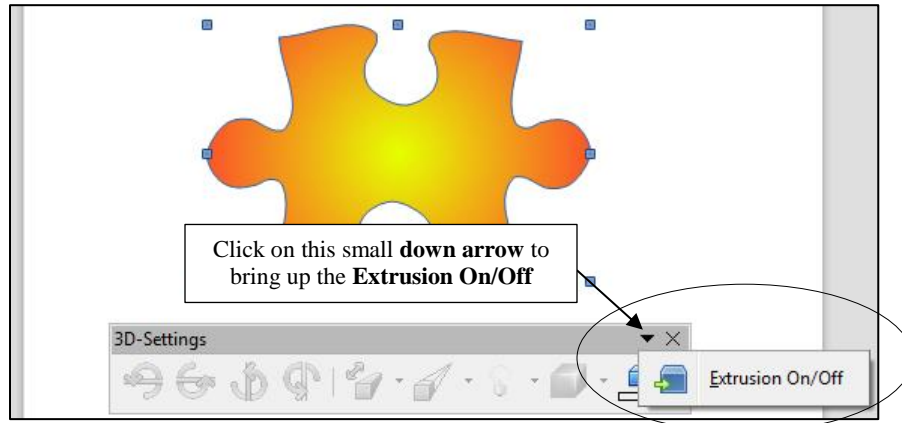


Fig. 3.37 The Extrusion On/Off switch

Now, in the **3D-Settings toolbar**, click on the **Extrusion On/Off switch** to **turn on Extrusion**

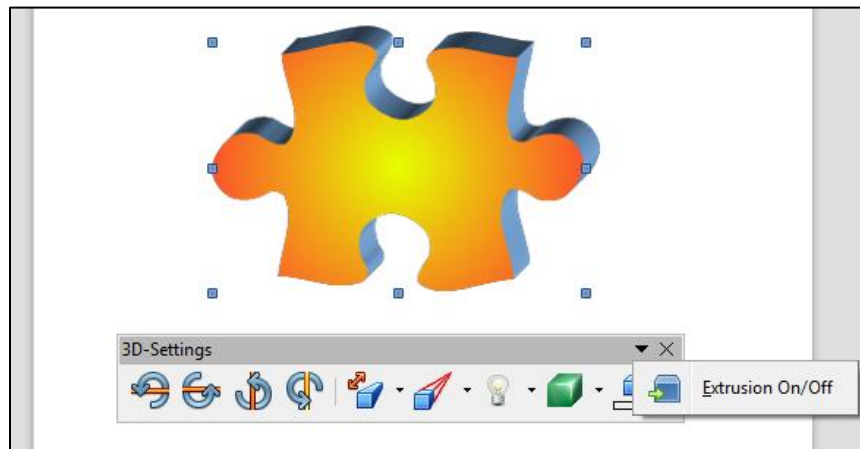


Fig. 3.38 Draw a Puzzle shape on the page

Notice the 3D-Settings toolbar now “comes to life” with the various 3D (digital extrusion) tools now coloured and available for you to use on the selected object—the Puzzle shape—which has also been transformed into a basic 3D image (Fig. 3.38 above).

Notice, too, the tools for tilting the image in various directions; tools for adjusting the depth or direction of the 3D modeling; and the tools for controlling the light source on the image, the surface texture, and color.

¹ Extrusion is a word used in the metal industry to describe the process of making a shaped object, such as a rod or a tube, by forcing a material into a mold. On the computer, all this moulding and modelling work is digital and is done using mathematics. “Extrusion” is thus used in computer graphics to describe converting a 2-dimensional object (like the picture of a jigsaw puzzle piece on the previous page) into a 3-dimensional image.

Make sure the **Puzzle shape** is **selected** (you see the handles around it—see Fig. 3.39 below), and take a few minutes now to try out **each of the various 3D-settings tools** illustrated in Fig. 3.39 in order to see how they work and to see what effect they have on the **Puzzle piece** object

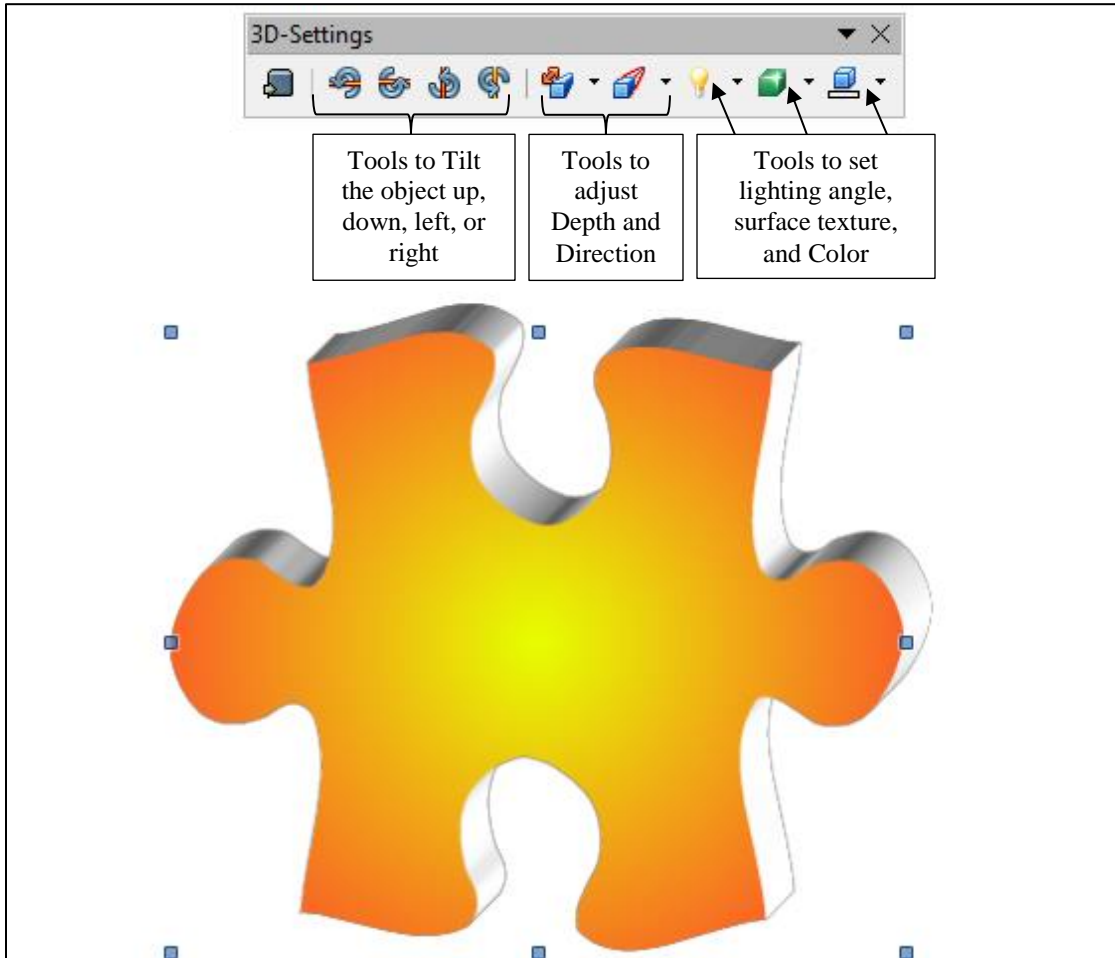


Fig. 3.39 The 3D-Settings toolbar (annotated)

Very simple, very effective, very impressive. Actually, if you were aware of the math that is necessary to create these 3-D effects, you'd be very impressed indeed!

Save the file (still **Practice Drawing 8**) before proceeding with the tutorial, then **Close** the document

The more artistic you are, the more skillfully you will be able to apply these effects. But even if you don't think you are artistic, you'll be surprised what you can come up with.

3.6 GROUPING, ORDERING, AND ALIGNING OBJECTS

You've probably noticed that when you put one shape, or drawing object, on top of another, it stays there, overlapping the other shape, as with the ellipse and rectangle shapes in the previous exercises.

With the Drawing Tools, every object you create is always a separate entity from the other objects on the page, even if they overlap. However, you can *group* objects together if you want, as we'll see in a moment. When you group them, they effectively become one object for as long as they are grouped. But you also can *ungroup* them whenever you please. This is because all the drawing objects are like a deck of cards. You can group the cards in a deck by gathering them into a pack of cards--or you can ungroup them by scattering them to the winds. Let's see how this works in *LibreOffice*.

You need a **new document** for this next drawing exercise, so click on **Writer Document** to open a new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 9**, and hit **Save**

You are going to draw seven different shapes, one on top of the other, each with a different border color and fill color or gradient. You'll end up with something like Fig. 3.40.

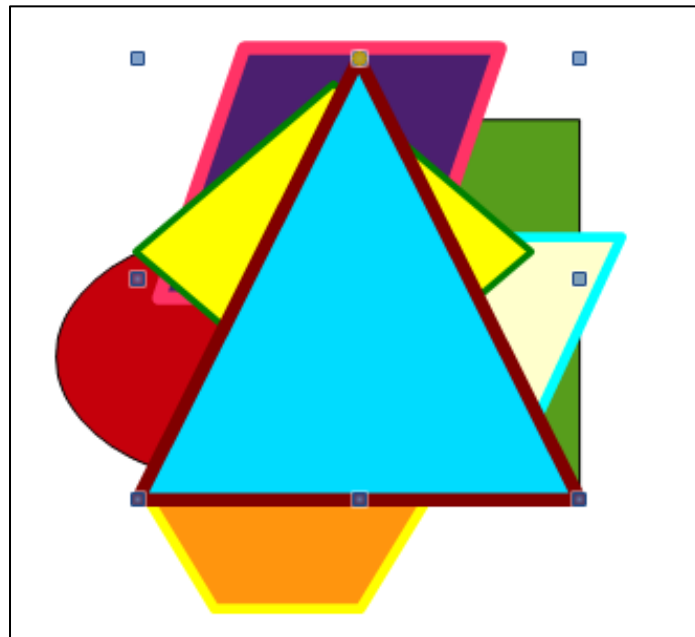


Fig 3.40 Shapes layered on top of one another

In the **Drawing toolbar** click on the **ellipse tool**, draw an **ellipse** (no more than **about 2" in diameter**) on the page and fill it with a **basic color** of your choice

Next, in the **Drawing toolbar** click on the **rectangle tool**, draw a rectangle (no more than **about 2" square**) on the page so that it **overlaps** the ellipse and fill it with a **basic color** of your choice

Now, in the **Drawing toolbar** click on the **hexagon tool**, draw a hexagon (no more than **about 1" on any side**) on the page so that it overlaps the ellipse and/or the rectangle, but **doesn't actually hide** either the **ellipse** or the **rectangle**—make sure you can still see at least a piece of **all three shapes** and fill the hexagon with a **basic color** of your choice

Now use the **Line Width** tool to increase the thickness (**weight**) of the hexagon's border to at least **0.06"**, and use the **Line Color** tool to select a **different color** for the border

Repeat the same steps to draw and fill (using colors or gradients) both the **Border** and the **Fill area** of a **parallelogram**¹, **trapezoid**, **diamond**, and **triangle** (again making sure none of the objects actually hides any of the others completely—you should be able to see a piece of all seven (7) shapes when you're done, as illustrated in Fig. 3.40 on the previous page)

So now you should have on your page (screen) seven different shapes with seven different fill colors and various other effects. The reason you need to be able to see at least a piece of each shape is to make it easier for you to do the next exercise.

Grouping drawing objects

Right now, all the objects are separate—ungrouped. Let's group them into three groups.

First, click anywhere **off all the shapes** so that none of them is selected then, using the mouse, and holding the **Shift** key down, click on the **ellipse** shape and the **rectangle** shape

Now, **right click** on the 2 selected shapes (the ellipse and the rectangle should both have handles around them) and, in the **context menu** that pops up, select the **Group > Group** option (Fig. 3.41)

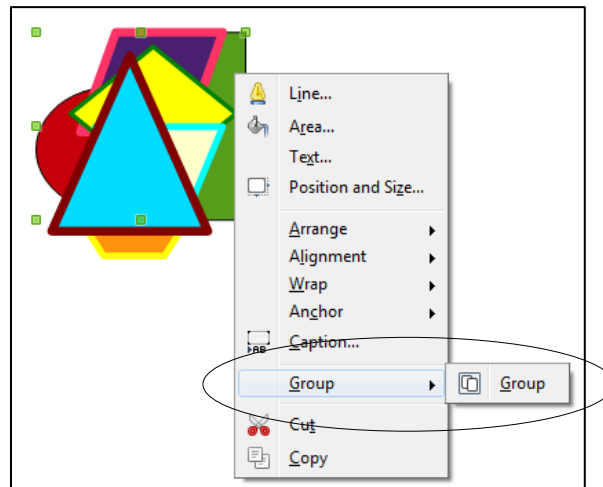


Fig. 3.41 Grouping objects together

Check your drawings now and notice that the ellipse and rectangle shapes have just one common set of handles. Now you can treat them as one object and move them around on the screen as one object, independently of the other objects.

Grab the **rectangle shape** with the mouse and slide it over to the **right edge** of the page—notice that the **ellipse** goes right along with it because they are now grouped together

¹ Slide your mouse pointer over the shapes in the **Drawing toolbar** and the system will tell you which is a parallelogram or trapezoid, etc.

Complete the following steps to create groups of the other objects.

Again, click anywhere **off all the shapes** so that none of them is selected

Using the mouse, and holding the **Shift** key down, click on the **trapezoid** shape and the **Triangle** shape, **right click** on the selected shapes and, in the context menu select the **Group > Group** option

Next, slide the **trapezoid and triangle shapes** up towards the **top center** of the page and click anywhere **off all the shapes** so that none of them is selected

Using the mouse, and holding the **Shift** key down, click on the remaining 3 independent shapes: the **hexagon** shape, the **parallelogram** shape, and the **diamond** shape, **right click** on the selected shapes and, in the context menu select the **Group > Group** option

Slide this final group of shapes down towards the **left center** of the page

Your page should look something like Fig. 3.42 when you're done.

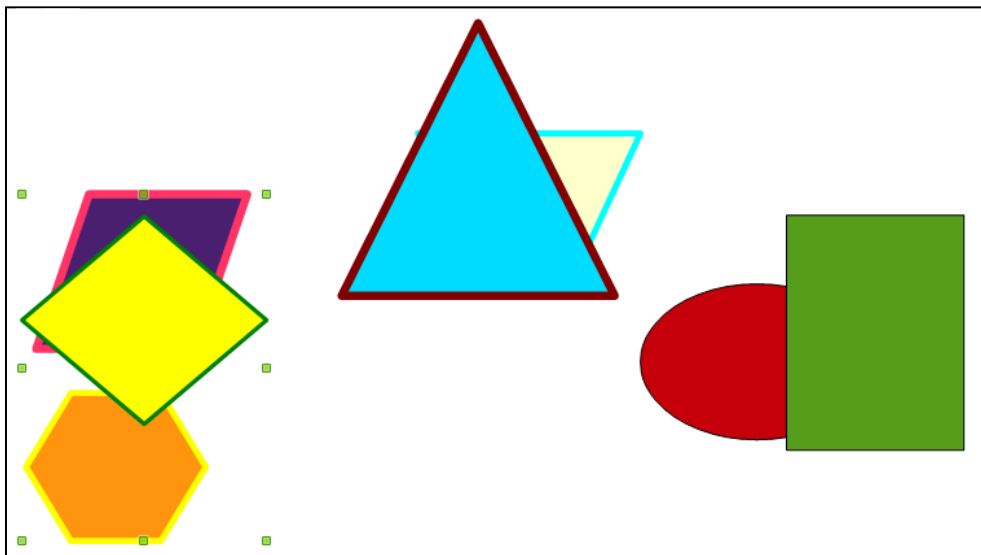


Fig. 3.42 Three separate groups of shapes

Check your drawings, click on **each group in turn**, and **slide them around** on the page

Notice that each group now has just one set of handles and that they move as a group. You can even rotate them as a group.

Try this now by clicking on any of the three groups, click in the **Drawing Object Properties toolbar** on the **Rotate tool**, and **rotate** the grouped shapes any way you want

This is often very useful when you create a complicated drawing using several objects, like lines and shapes, and you want to move them around a few items at a time, or all together or rotate them as one object or as several specific objects, and so on. Just group them all together, and Bob's your uncle! You'll have another chance to practice this when you do the Skill Consolidation exercises at the end of the lesson.

Resizing objects

This is easy.

Click on any of **the shapes** to select a group and grab hold of one of the corner handles and drag in to make the group smaller

Do the same thing to reduce the size of the other two groups, then drag the ellipse and rectangle group to the **top right corner** of the page, the trapezoid and triangle to the **lower center**, and the hexagon, diamond and parallelogram to the **top left corner**

Your drawing should now look something like Fig. 3.43.

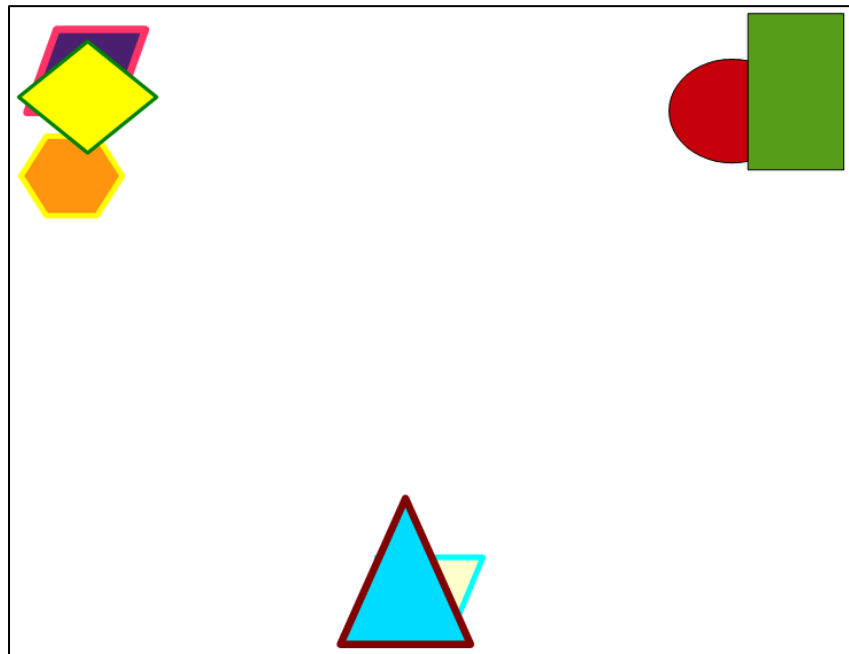


Fig. 3.43 Resized grouped sets of objects

Save the contents of the page (**Practice Drawing 5**)

Ungrouping objects

This is easy, too.

You need a new name for this next drawing exercise, so in the **File menu** select **Save As...**, navigate to your **USB (Removable) disk > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 6**, and hit **Save**

First, click anywhere **off all the shapes** so that none of them is selected

Click on the **ellipse-rectangle** shape, right click on it and, from the context menu, select **Grouping > Ungroup**

Look at the ellipse and rectangle shapes now and notice that all the handles for each shape have reappeared.

Now click anywhere **off the ellipse-rectangle shapes** so that neither of them is selected, then click on **just the ellipse shape** and notice that it is now independent of the rectangle shape

Move the **ellipse** shape away from the **rectangle** shape so there is **no longer any overlap**

Repeat this to **ungroup all** the other objects—be sure to ungroup them all for the sake of the following exercises, then move each of the shapes away from each other so there is **no longer any overlap anywhere**—you should now have 7 separate shapes spread out on the page

Ordering drawing objects

The order of the shapes right now should still be the same as the order in which you created them. So the rectangle is in the back, the ellipse on top of the rectangle, and so forth. Think of the objects as layered one on top of the other—even if they aren't actually touching. But because you've moved them all around, they may no longer all be touching each other. So let's slide them all back on top of each other in the middle of the page so you can see how the ordering function works.

Rearrange all the shapes so they are **overlapping** each other again in the center of the page (something like in Fig. 3.44)

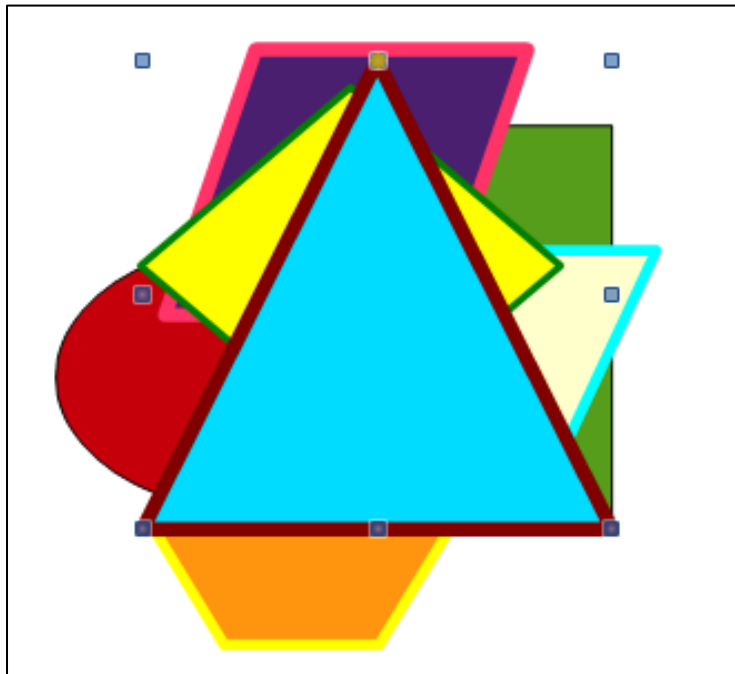


Fig. 3.44 Drawing objects layered on top of each other

Notice how they are all still layered in the order that you originally created them, so the first shape you created (the ellipse) is still on the bottom and the last shape you created (in Fig. 3.44 it's the triangle) is still on top.

You can move (re-order) objects backward or forward in the layers. Time to try this out; then you'll see how it works.

Click to select the **top** shape first (the triangle), **right click** on it, then from the **context menu** select **Arrange > Send Backward**

This drops the top shape back behind the next shape down in the pile of shapes (or deck, if you think of the shapes as a deck of cards). The trapezoid should now be on top.

Select the new **top** shape again, **right click** on it, then from the **context menu** select **Arrange > Send to Back**

Now the top shape (the trapezoid) is moved all the way to the bottom of the deck. You can bring objects forward or send them back, either one layer at a time, or all the way forward or all the way back in one go.

Try this now with **several** of the objects, using **each one of the Order options** till you get the hang of it, then **Save** the file (**Practice Drawing 6**) when you're ready to move on

Aligning Drawing objects

No doubt your page now looks like a work of abstract art! One last task remains in this section of the tutorial. You need to take a moment to check out the *LibreOffice* Align tools, which make it easy for you to *Align* an object or a set of objects (shapes) in the space that contains them. To practice this you can use the set of 7 shapes you were working with in the previous exercise.

At the **left hand end** of the **Drawing toolbar**, click on the **Select** tool, then use the mouse pointer to **drag** from **outside the top left** of the 7 shapes **down across** all the shapes to the **bottom right**

You should now see a single set of handles around the 7 shapes as a whole.

Using the mouse pointer again, grab any of the **handles** and **drag** to make the **set of shapes** as big as you can to **fill the page**

When you're done "stretching" the shapes, your page might look something like Fig. 3.45.

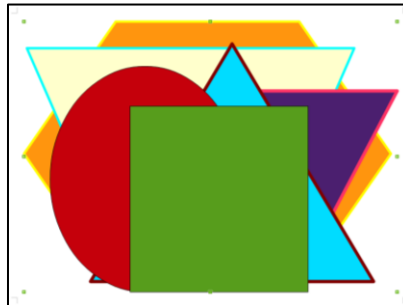


Fig. 3.45 The 7 shapes stretched to fill the page

In the **View menu > Toolbars menu**, click to select the **Align Objects toolbar** (Fig. 3.46)

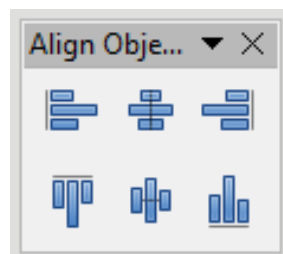


Fig. 3.46 The Align Objects toolbar

Now, with all the shapes still selected, click on **each of the tools** in the **Align Objects toolbar** and watch as the shapes are all aligned, *in relation to the set of shapes as a whole*, **to the left, horizontally centered, to the right, to the top, vertically centered, and to the bottom**

Save the contents of the page (**Practice Drawing 9**) then **close** the document (**File > Close**)

3.7 USING THE TEXT BOX TOOL AND *Fontwork*

Using the Textbox tool

You need a **new document** for this next drawing exercise, so click on **Writer Document** to open a new document and, in the **File menu**, select **Save As...**, navigate to your **USB drive > Work Files for LibreOffice 5 > Data Files folder > Drawing Documents**, name the file **Practice Drawing 10**, and hit **Save**

In the **Drawing toolbar** click on the **Text Box tool**, then drag with the mouse pointer to create a **text box** on the page (Fig. 3.47)

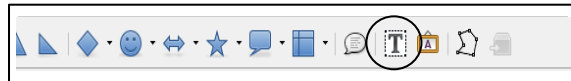


Fig. 3.47 The Text Box tool in the Drawing toolbar

Copy and paste into the Text Box **the following text** as illustrated in Fig. 3.47 above:

The beauty of these drawing tools is that they give you lots of control over your art work and make it relatively easy for you to create very sophisticated designs—once you know how to use them, that is, and that's what this lesson is all about. You won't be an expert by the time you're done with this lesson, but you will probably have a much better idea what you're doing. It's up to you to use the tools A LOT till you become an expert. Only then will you be able to make them really sing for you!

Play with the **handles**, **stretch** the **Text Box** up and down and from side to side and notice that you can make the Text Box any shape you want to fit the contents you have put inside it

Now, with the **tip** of the mouse pointer anywhere on the outside border (**but NOT on one of the handles**) hold down the **left mouse button** and **drag** the **text box** to the right or left or up or down—you decide where its final position will be on the page

Save your work (**Practice Drawing 10**)

Teachers need to know how to do handle layout skills such as this, where you have a piece of writing in a text box and where you need to lay it out on a page. You will undoubtedly be putting together handouts for your students, or maybe you'll produce a class magazine or, even better, you will supervise your students producing the class magazine under your direction.

For example, the Text Box is a useful tool for explaining the contents of diagrams, as illustrated throughout these tutorials and in Fig. 3.48.

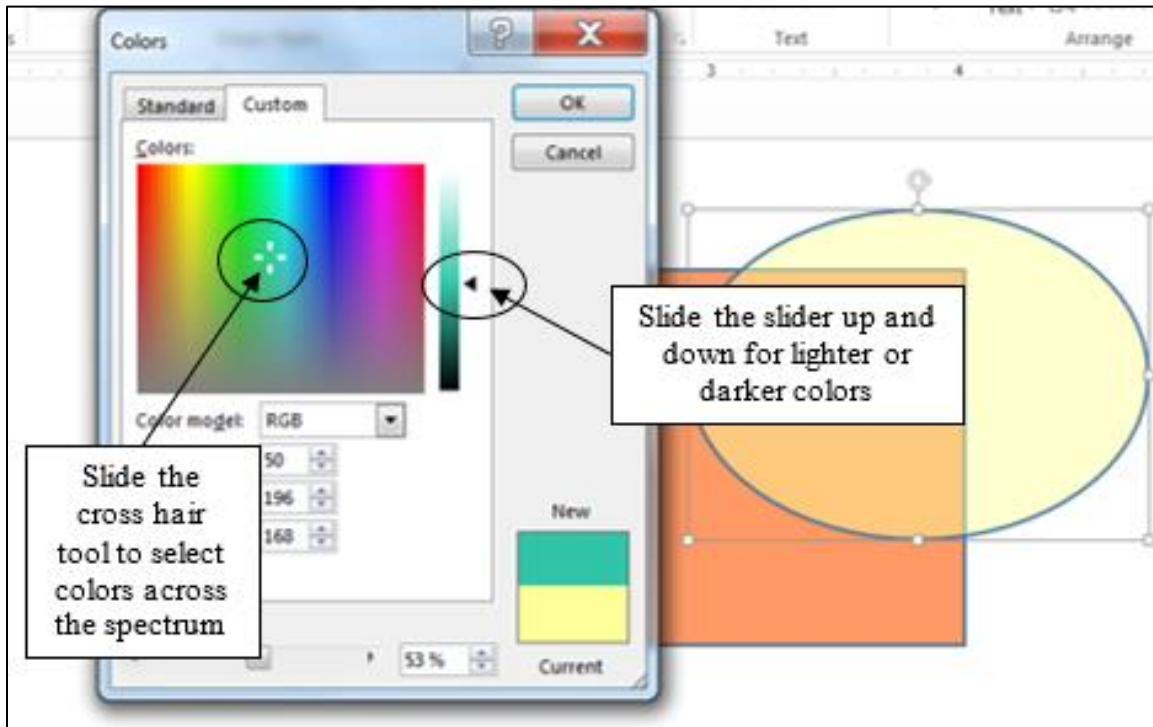


Fig. 3.48 Using Text Boxes to explain components of a handout or illustration

Using the *Fontwork* tool

Fontwork is a set of graphic fonts that add a touch of flair or pizzazz to your text. The best way to see what this involves is to try it for yourself.

Click to put the cursor at the **beginning** of the text in the **Text Box** you created in the previous exercise (before the words: **The beauty of these drawing tools...**), hit **Enter twice** to move the text **down two lines**, then click at the **top left** just inside the text box to put the cursor there

In the **View menu > Toolbars menu**, click on **Fontwork** to bring up the **Fontwork toolbar**, which will show up at the bottom left of the *Writer* window on your screen

As for the 3D-Settings toolbar you used earlier, it would be useful to have the Fontworks toolbar close to where you'll be working on the Text Box exercise.

So use the mouse to position the **tip** of the mouse pointer on the **vertical line of dots** in the **lower left** of your *Writer* window (Fig. 3.49)

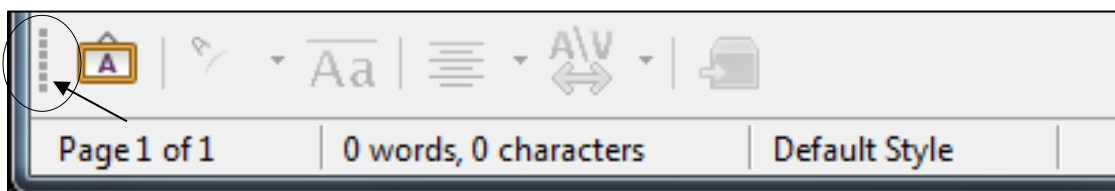


Fig. 3.49 The Fontworks toolbar, showing the handle made up of a vertical line of dots

Hold down the **left mouse button** and **drag** the **Fontworks toolbar** up onto the page till it is **above the Text Box** (Fig. 3.50)

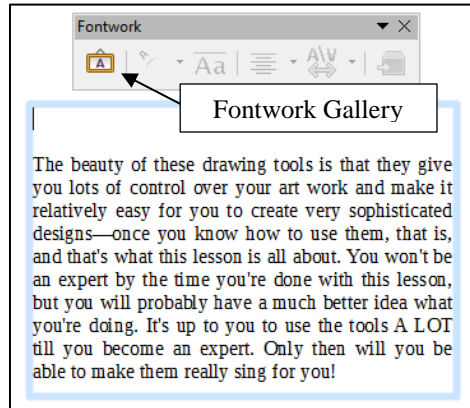


Fig. 3.50 The Fontwork toolbar

In the **Fontwork toolbar**, click on the **Fontwork Gallery icon** (Fig. 3.50 above)

This brings up the Fontwork Gallery from which you can choose whichever style of font graphics appeals to you (Fig. 3.51).

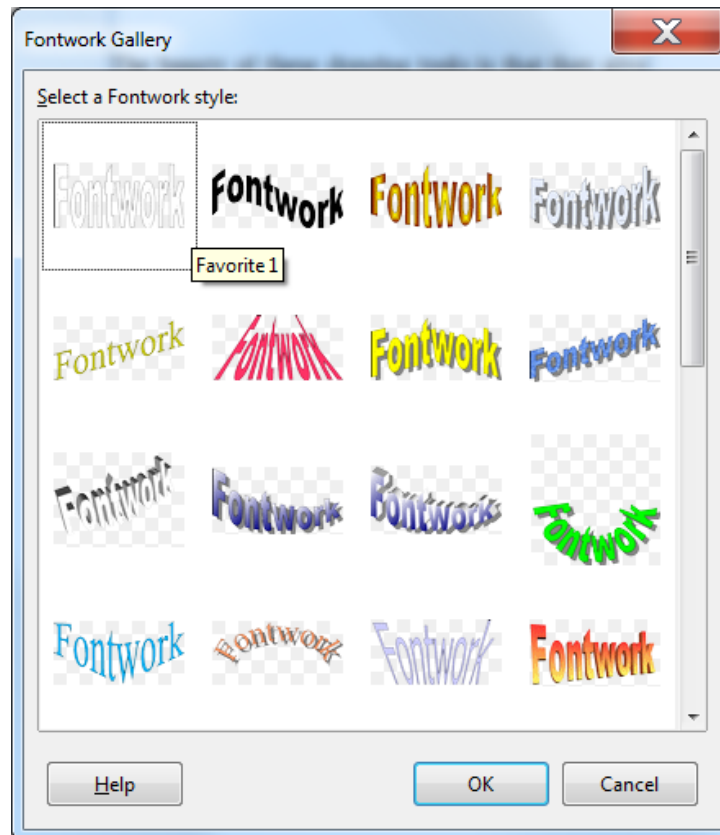


Fig. 3.51 The Fontwork Gallery

Take a look at the various **Fontwork styles** in the **Fontwork Gallery**, then select any one you like by **double clicking** on it (you can easily change it later if you change your mind)

The *Fontwork* design that you selected pops up on the screen (Fig. 3.52).

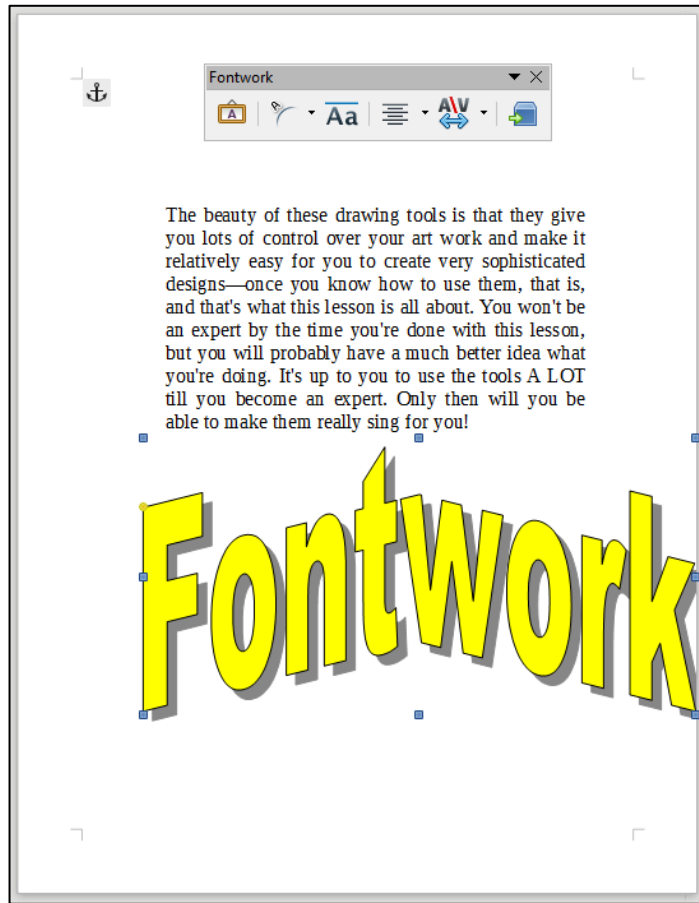


Fig. 3.52 Fontwork design before processing

Double click on the **Fontwork design** and the **boldface** word **Fontwork** will appear in the middle of the design (Fig. 3.53)



Fig. 3.53 You need to remove the boldface text

Double click on the boldface word **Fontwork** to highlight it, then use the **Delete** or the **Backspace key** to remove it from the middle of the design

In its place, at the cursor type your **First and Last name**, then click **anywhere on the page** and your name will become the text for the *Fontwork* design

Click on **your name** and you'll see **handles** appear around the edges of the design

Now you can use the Fontwork toolbar (which should still be above the Text Box) to make changes to the *Fontwork* design of your name.

Try out some of the tools in the Fontwork toolbar now to see what effect they have on the design of your name; when you see something that looks good to you, **grab any of the handles and reduce the size of the Fontwork text** till it can **fit inside the space you made for it in the textbox** (Fig. 3.54)

Use the mouse to drag your name so that it's **centered** in the box over the paragraph of text

Fig. 3.53 shows how your name might look when you are done.

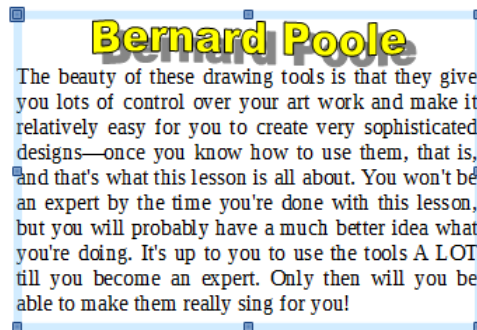


Fig. 3.54 Fontwork example

Using the Fontwork tools, and with very little effort on your part, you can create class handouts, banners, certificates, and other visual materials which can be eye-catching, tasteful, and, above all, instructive.

There are a couple of other things you need to learn about the Fontwork tools.

Click again on the **Fontwork** of **your name**, then right click on your name and, from the context menu, select the **Area...** tool

In the **Area dialog box**, click to select any **Fill color** for your name, try out some **shadow effects** and **gradients**

Have fun with it; see what you can come up with. You might end up with something like Fig. 3.55.

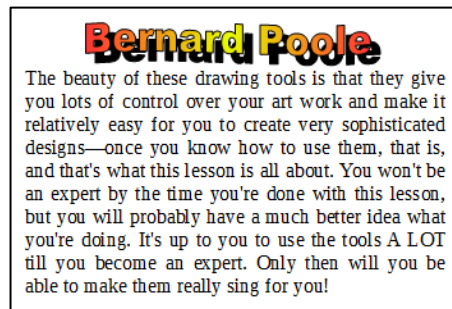


Fig. 3.55 Final version of the Text Box with Fontwork

Save the final version of this exercise (**Practice Drawing 10**)

LOOKING BACK

You have practiced using the drawing tools that are built into *Writer*. If this has been the first time you've used these tools, you may have found them awkward at first, since manipulating them involves a new set of skills. But like everything else, the more you use the tools, the more skilled you will become. This lesson is merely an introduction and overview.

The beauty of these drawing tools is that they give you significant amounts of control over any kind of object on a computer screen. Very few people ever actually learn about the kind of skills you have learned in this lesson. Yet there are many, many other computer drawing/graphics skills that you have yet to learn. These tools make it easy to create sophisticated designs—once you know how to use them. That's what this tutorial is all about. You won't be an expert by the time you're done, but you will have at least some idea what you're doing. It's up to you to use the tools till you become an expert, and then you'll make them really sing!

LOOKING FORWARD

Lesson 7 will give you the opportunity to further practice your word processing skills by integrating them with other *LibreOffice* components, including mail merge. But first, in Lessons 4 and 5, you will learn about the *Calc* Spreadsheet component of *LibreOffice*—where you will also learn about the tools for creating Graphs and Charts.

No doubt you find some of the work tedious, especially that process of backing up all your data. This is because you are learning the computing skills. When you become proficient with *LibreOffice*, you will find that you can complete your work quickly and be more productive with regard to many of the activities of your profession. You should indeed by now be striking out on your own, already using *Writer* to support your work in the classroom.

You have a responsibility to establish the best possible learning environment for your students. The best teachers lead by example. If you have worked your way through the first two of these tutorials, you have increased the chances that your students will benefit from an enriched learning experience, because of your increased facility with, and enthusiasm for, the computer. Your use of the computer as a learning tool will overflow into your classroom. Well done!

SKILL CONSOLIDATION

Complete as many exercises as you can so as to reinforce what you have learned in Lesson 3.

1. Make a list of at least 10 handouts or other documents that are relevant to the school environment for the creation of which you would use the drawing tools.
2. Team up with a group of your classmates and use the *Writer* drawing tools to create at least 5 of the documents from the list you drew up in Exercise 1. Save them on disk.
3. Open a new blank page and in Page Setup select **Landscape** orientation. Complete the following tasks:
 - Start a new page and draw a perfect square, fill it with color, and make the line color the same as the fill color.
 - Draw a perfect circle, fill it with a different color from the square, and make the line color the same as the fill color.

- Move the circle on top of the square and adjust the size of the circle so it fits exactly inside the square where the border of the circle touches the border of the square at four points, north, south, east, and west.
 - Group the circle and the square, then rotate the grouped object 45 degrees, so that the shape resembles a diamond.
 - Use the AutoShape of an Octagon to draw an octagon large enough to completely cover the diamond, fill it with a different color from either the square or the circle, and make the line color the same as the fill color.
 - Move the Octagon shape to the back. Select all the objects and center them on the page. Group the objects.
 - Use Word Art to write the following title for the drawing: A Circle inside a Square inside an Octagon. Save the drawing with the name **Geometric Shapes**.
4. Open a new blank page and in Page Setup select **Landscape** orientation. Draw a picture of a house (yours if you want), including the following items (with colors and effects of your choosing):
- Draw the house itself with at least two windows and a front door and a separate roof (you'll need to use the freeform drawing tool for the angled roof so that you can fill it with color and a pattern). The roof must have shingles, the walls must be of brick or siding (unless you want to draw a log cabin!).
 - A front lawn with shrubs and flowers here and there
 - At least two trees
 - The sky with a couple of clouds scudding by...
 - Save the drawing with the name **House**.
5. Open a new blank page and in Page Setup select **Landscape** orientation. Draw a picture of a technology-ready classroom. Use clip art, if you want, for the objects in the classroom, including the items in the list that follows (with colors and effects of your choosing). Arrange the desks and so forth according to your own concept of the ideal classroom. Save the drawing with the name **House**.
- Desks for 20 students
 - At least 6 computer workstations (position them so the teacher can easily see the screens)
 - A desk for the teacher
 - A separate computer workstation for the teacher
 - A reading center
 - Any other items you would want to include in your ideal classroom.
6. Use the AutoShapes menu to draw at least ten (10) Basic Shapes and use an associated Callout to name each of them. Fit everything on one side of an 8 ½" by 11" page. Use either Portrait or Landscape orientation. Color the shapes, fonts and callouts with Fill Colors, Font Colors, and Line Colors.
7. Open a new blank page and in Page Setup select **Landscape** orientation. Then complete the following tasks:
- In the top left corner of the page, draw a self-portrait as best you can, using colors and so forth
 - Add a callout that looks like it's coming from your mind (see figure below)
 - Select all the parts of your drawing and group them together as one object
 - Copy the object, then duplicate it 8 times as illustrated in the figure below

- In the callouts, add the text of any story you like
- Save the strip cartoon with the name **Strip Cartoon**

