

Arts & Letters Draw Step-by-Step Tutorials



About these Tutorials



Tutorial List



About Your Mouse

Tutorial List



1 Selecting and
Placing Objects



2 Manipulating
Objects and
Adding Text



3 Manipulating Text



4 Freeform Drawing



5 Using Style
Bundles

How To Use the Draw Step-by-Step Tutorials

Each Step-by-Step tutorial provides easy-to-read instructions that guide you through your first art projects in Draw one step at a time. Each new lesson reviews the last. The goal of these tutorials is to teach users of Draw basic techniques and resourceful ways of using the product.



Click on this icon at the bottom right to move to the next tutorial page.

Contents Button



Jumping to the Table of Contents

The Contents button always takes you back to the table of contents. You can reach this "home base" for the tutorials at any time. If you go to a different content menu, click on the owl to return to the tutorials.

Back Button



Back up to the last topic viewed

Back retrieves your last topic if you go to an unintended destination.

Browse Buttons



Turning the Tutorial Pages: Method 1

The browse buttons take you to the next or previous page in the author's sequence.

Page Up and Page Down

Turning the Tutorial Pages: Method 2

You can use the page up and page down keys on your keyboard to go to the next or previous pages in a tutorial.

Fold and Unfold



Making Room to Work

Doing the exercises in the Step-by-Step Tutorials requires using Draw. Since the tutorials window covers nearly half of the Draw work area, you will need to move it out of the way. After reading the steps and viewing the illustrations, click on the button labeled **Fold**. This "folds" the tutorial window up and out of the way. When its time to continue reading the steps, click on **Unfold** to restore the tutorial window to its original size. If another tutorial window remains in the way, double-click on its upper left corner to remove it.

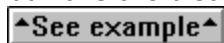
Review and Preview Buttons



Where You've Been

Where You're Going

The button labeled Preview displays an image of what your art should look like. The Review button will display a representation of what you created in the previous tutorial. These buttons are disabled or "gray" when there is nothing to preview or review. Watch for the



button in the text to display an illustration for the step immediately below it.

Bookmark Define  [Click here to see dialog box.](#)

The Bookmark menu allows you to insert a bookmark on any page that you would like to review later. Simply pull down the Bookmark menu and select define. In the Bookmark Define dialog type the name of the bookmark and press enter. Pull down the Bookmark menu again to see your bookmark listed as a menu item.

Annotate  [Click here to see dialog box.](#)

Another useful tool is Annotate. Place an annotation by pulling down Help's Edit menu and clicking on **Annotate....** After you type and save your remarks, a green paper clip icon will be placed in the upper left of that topic. Later, even in a future session, you can click on the paper clip to retrieve your notes.

Tutorials Menu  [Click here to see menu.](#)

The Tutorials Menu allows you to access any tutorial. Simply pull down the Tutorials menu from the Draw Step-by-Step Tutorials window and click on the desired tutorial.

About Your Mouse

Both Draw and its on-line Help and Tutorials use the mouse in the following ways:

- The buttons of your mouse are referred to as **primary** (or inside) and **content menu** (or outside). The primary mouse button is nearest your pointer finger. When you are asked to click on something and no button is specified, use the primary mouse button.
- Know how to **drag** with the primary mouse button.
- The same primary mouse dragging motion displays the **flyouts** in the toolbox.
- The outside mouse button is also called the secondary, or **content menu button**. Content menus display after selecting an object and holding down the secondary button. A quick click of this button selects the default item on the menu. In Draw Help, the content menu button serves to print or copy the topic you are viewing.

Bookmark Define

Bookmark Name:

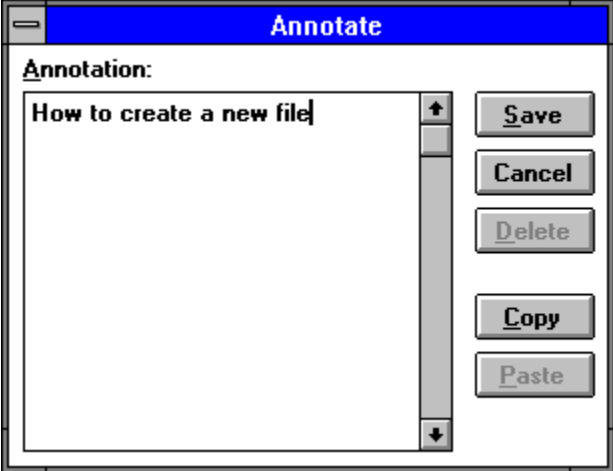
Exit Draw

Add text
Set target printer and page layout
Tutorial 4 Freeform Drawing

OK

Cancel

Delete



| | |
|--------------------------|------------------|
| | Tutorials |
| 1 Placing Objects | |
| 2 Manipulating Objects | |
| 3 Manipulating Text | |
| 4 Freeform Drawing | |
| 5 Style Bundles | |





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| File |
| <u>N</u>ew |
| <u>O</u> pen... |
| Save <u>A</u> s... |
| <u>S</u> ave F9 |
| Page Setup... |
| Printer Setup... |
| <u>P</u> rint... |
| <u>I</u> mport... |
| <u>E</u> xport... |
| <u>E</u> xit |

| View | |
|-------------------------|----|
| A ctual Size | ^1 |
| √ C <u>u</u> rrent Page | ^2 |
| A <u>l</u> l Pages | ^3 |
| <u>Z</u> oom In | ^Z |
| Sa <u>v</u> e/Recall | ▶ |
| Full <u>S</u> creen | ^X |
| <u>R</u> edisplay View | |
| Point <u>D</u> isplay | ▶ |
| <u>Q</u> uick Display | ▶ |
| <u>P</u> references... | |

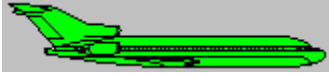


| Manipulate | |
|-----------------------------------|-----------|
| Group | ^G |
| M erge... | |
| B lend... | |
| B ind to Shape... | |
| B reak A part | ^U |
| A lign... | ^N |
| S tacking O rder | ▶ |
| T ransform... | ^W |
| T ransform Again | ^O |
| W arp/Perspective | ▶ |
| D uplicate | ^D |
| F lip | ▶ |
| M ake P roportional | |

| Draw | |
|--|----|
| S ymbol... | ^S |
| C l ip-Art Manager... | ^C |
| T ext... | ^T |
| C hart... | |
| A ctivity Manager... | |
| L ine | F2 |
| C urve | F3 |
| C vt Line <-> Curve | F4 |
| E dit Freeform | ^P |
| C vt to F reeform | F8 |
| Trace B itmap | |
| J oin Open Shapes | F7 |
| S plit | F6 |
| A dd H andle | F5 |
| S et S tart/ E nd Point | |
| S hape I nfo... | |
| P refer e nces... | |

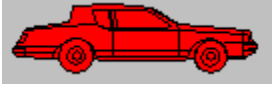


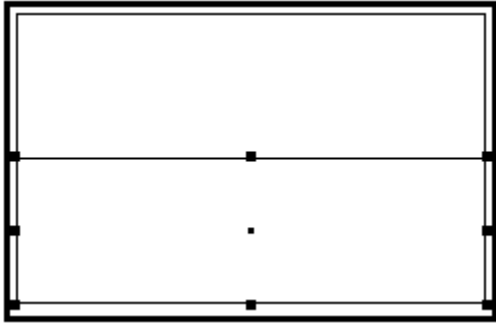
| Edit | |
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| Undo | Alt+BkSp |
| B lock Select | ^B |
| Select A ll | ^A |
| D eselect All | |
| L ock/Hide/Name... | ^H |
| C ut | Shift+Del |
| C opy | ^Ins |
| P aste | Shift+Ins |
| Paste O ptions | ▶ |
| Clipboard... | |
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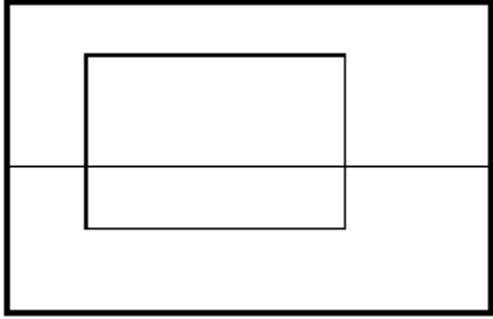


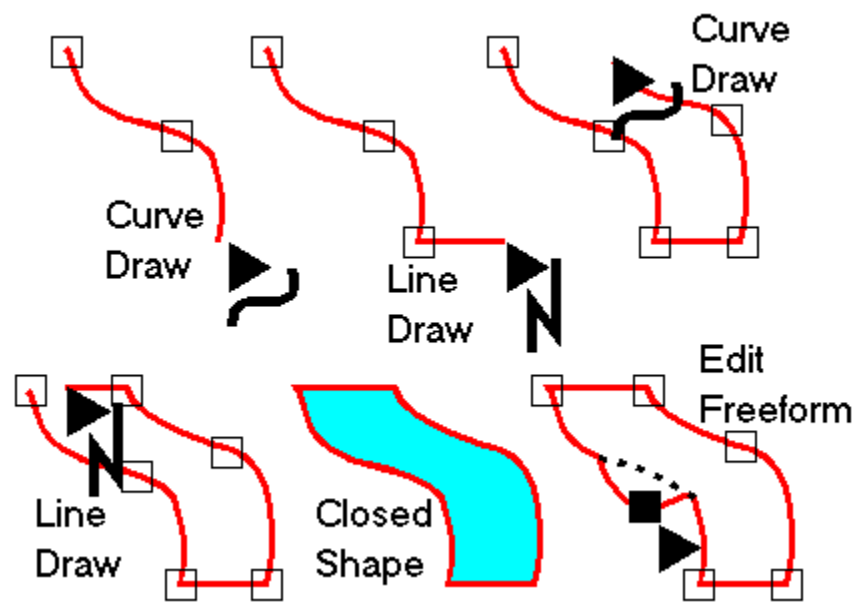


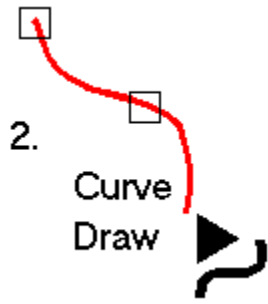


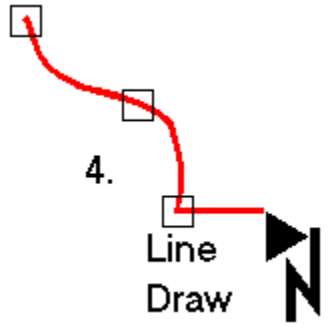


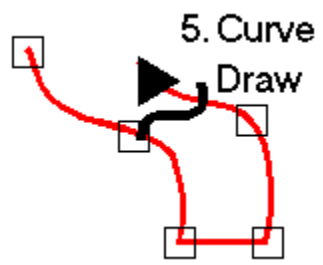


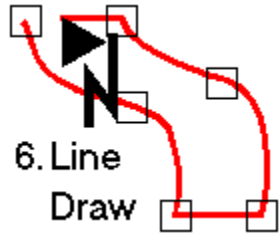


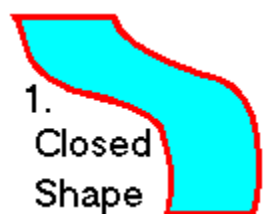




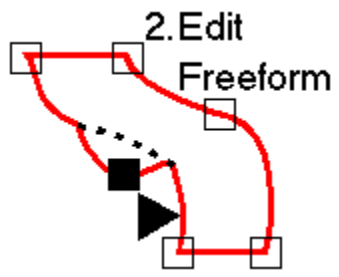


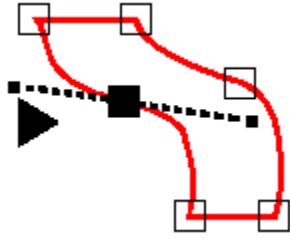


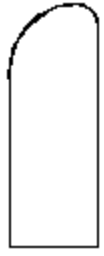




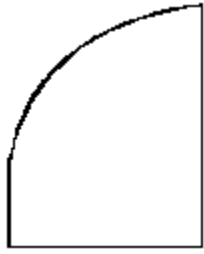
1.
Closed
Shape













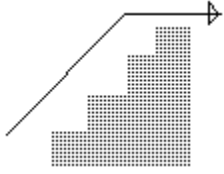






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| Gallery |
| Area |
| <input checked="" type="checkbox"/> Bar |
| <input type="checkbox"/> Line |
| <input type="checkbox"/> Pie |
| <input type="checkbox"/> Point |



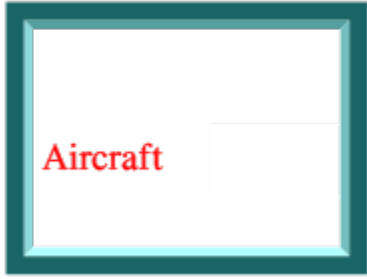






Sonny's
Lemonade
10 Cents a Glass





Aircraft Textiles

| | |
|-----------------|-----------------|
| Aircraft | Textiles |
| \$105,000,000 | \$35,000,000 |

| | |
|-----------------|-----------------|
| Aircraft | Textiles |
| \$105,000,000 | \$35,000,000 |

The Huge Company

First Quarter Revenues 1991

First Quarter Revenues 1994

Aircraft Textiles

Help

Contents...

Help for **I**tems F1

Search for Help on...

How to Use Help...

User's Guide...

Tutorials ▶

About Arts & Letters® Editor...

Step-by-Step Tutorial 1

Selecting and Placing Objects

This tutorial shows you how to:

- Set the Target Printer and Page Layout
- Set the Viewing Level
- Select and Place a symbol
- Enter and Place Text
- Save a Document and Exit Draw



**Selecting
and Placing
Objects
Preview**

TUTORIAL 1
PREVIEW



Koala

Set the Target Printer and Page Layout

TUTORIAL 1
PAGE 2

Each time you start Draw, you should check the page and printer setup and change them if desired. This ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the **File menu** and choose **Print Setup**. The **Print Setup** dialog box appears.
2. Click on the Default Printer or one from the Specific Printer list.
3. Choose Landscape (horizontal page) Orientation and Letter 8 1/2 x 11 (Paper Size) and click on **OK**.



4. At this point, you might see a message box that reads, "Printer page size does not match document page size. Respecify Page Setup?"

If you see this message, click on **Yes**.

5. Pull down the **File menu** and choose **Page Setup**. The Page Setup dialog box appears.



Click on **Use Printer Page** to reset the document page size and orientation to the same values you specified for the target printer in step 3.

At this point you can click on **Custom** to specify a page size of your own. If you plan to create an illustration larger than 22 inches on either side, choose **Banner**.

You can click on **Get Printer Minimums** to reset the page margins to the minimum allowed by the target printer, and then increase the margins if desired.

Click on **OK**.



Viewing Level


TUTORIAL 1
PAGE 4

The viewing level determines how much of your document is displayed in the work area. When you first start Draw, the viewing level is set to "Current Page." At Current Page, objects are displayed at a size that will fit on the current page layout. If needed, you can change the view level in the [View menu](#).



Select and Place Symbol

TUTORIAL 1
PAGE 5

1. Pull down the **Draw menu** and select **Clip-Art Manager** (or click on the  icon in the Toolbox, or just press **Ctrl+M**).
2. The **Clip-Art Manager** dialog box appears. In the upper **Collection:** window is an alphabetically-arranged selection of libraries. (Click on the down arrow to see the currently open Collections.) If there is no Collection shown, choose one from the Collections menu at the top of the dialog box.

In the lower **Image Name:** window, you will see the contents of the highlighted collection. Using the scroll bar in that window, you can see the numerous symbols that are ready to be selected and placed in your document.



3. Select the collection **Animals**. When you do so, the Image Name list changes to display the contents of the Animals' collection.
4. Click on either the name **Koala Bear** in the Image Name list, or on the thumbnail view of the image itself. The name is highlighted.
5. The Add Object cursor appears when you click on **Add to Document**, or double-click on the thumbnail image.

(The [Clip-Art Manager](#) dialog box disappears, the cursor turns into an Hourglass while Draw loads the symbol from the collection, and then it turns into the Add Object [cursor](#).)



6. Place the Add Object cursor at the upper left of the work area and click. A fully colored koala bear appears on the drawing area at the default size. You could have added it at a size of your own choice by [dragging](#) the cursor instead of clicking with it.




Enter and Place Text

TUTORIAL 1
PAGE 7

1. Pull down the Draw menu and choose **Words**.

-or-

Click on the Word tool  in the toolbox. The Enter/Edit Words dialog box appears.

2. Type **Koala** and click on **Add**.



The cursor turns into an Hourglass while Draw loads the typeface, and then turns into the Add Object cursor.

3. Place the Add Object cursor below the bear and click. The text is drawn using the current type settings.



Appearance of Color on Your Monitor

TUTORIAL 1
PAGE 8

If you have a color monitor, the bear is fully-colored and the text has a Cyan interior with a black line.

If you have a monochrome monitor, the interior of the objects appears on your screen as a black and white pattern. There is a unique pattern for each color you select, and each pattern varies from monitor to monitor.



Saving a Document and Exiting Draw

TUTORIAL 1
PAGE 9

It is always a good idea to name your documents so that you can easily understand what the documents contain.

1. To save a document in Draw, pull down the **File menu** and choose **Save**. The Save command opens the Save Document As dialog box.

The Save Document As dialog box contains several scrolling fields. The first, File Name, is where you type the name of your document. (Remember that a document is the same thing as a file.) Since Draw saves its documents under DOS conventions, enter the name **koala.ged** -- a name of no more than eight characters.

2. Ensure that the directory in the **Directories** dialog is where you want to save the document. Also check the **Drives** dialog to ensure that the correct disk drive is selected. (You cannot save to CD ROM drives. They are read only; hence, **Read Only Memory**.)
3. Under Save File as Type, choose Graphics Files (***.GED**).
4. Click on the toggle beside **Make Backup**. In the current directory, a duplicate of your document will be made with an extension of **.bak**.
5. Click on the toggle beside **Include Thumbnail**. When you open the document at a later time, a small image of your drawing will appear in the **Show Thumbnail** window.
6. Click on **OK** to save the document.



Exiting Draw

TUTORIAL 1
PAGE 10

To exit Draw, pull down the **File menu** and choose **Exit**. At the prompt "**Save Changes to (untitled)?**", click on **No**.

Do not exit at this time if you are continuing to the next Step-by-Step Tutorial page.



**Step-by-
Step
Tutorial 1
Review**

TUTORIAL 1
PAGE 11

This tutorial showed you how to:

- Set the Target Printer and Page Layout
- Set the Viewing Level
- Select and Place a symbol
- Enter and Place Text
- Save a Document and Exit Draw

In the next tutorial you will manipulate objects and add text.

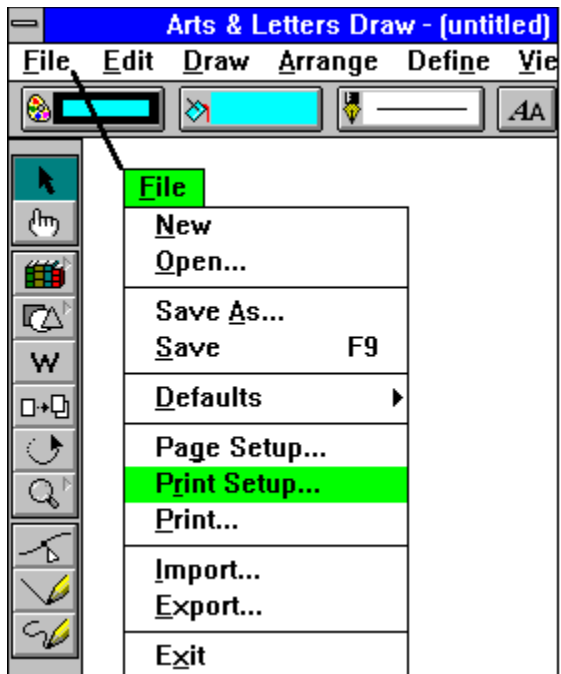
To begin the next tutorial, pull down the **Tutorials** menu and choose **2 Manipulating Objects**.

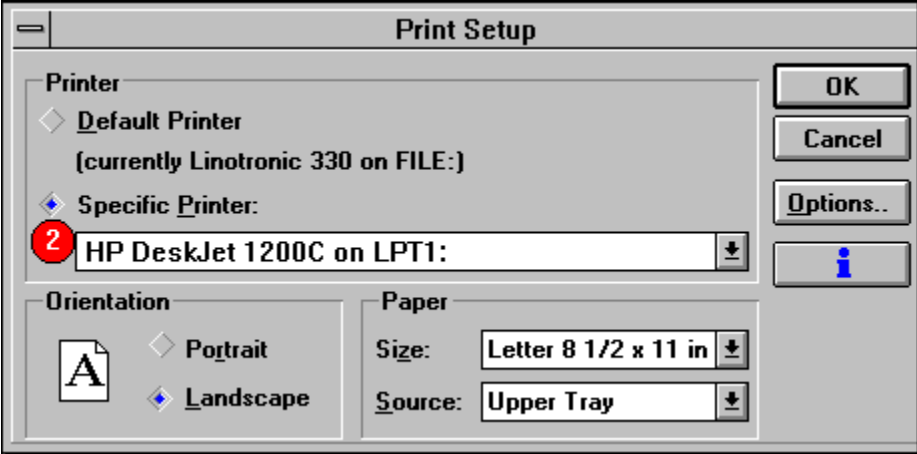


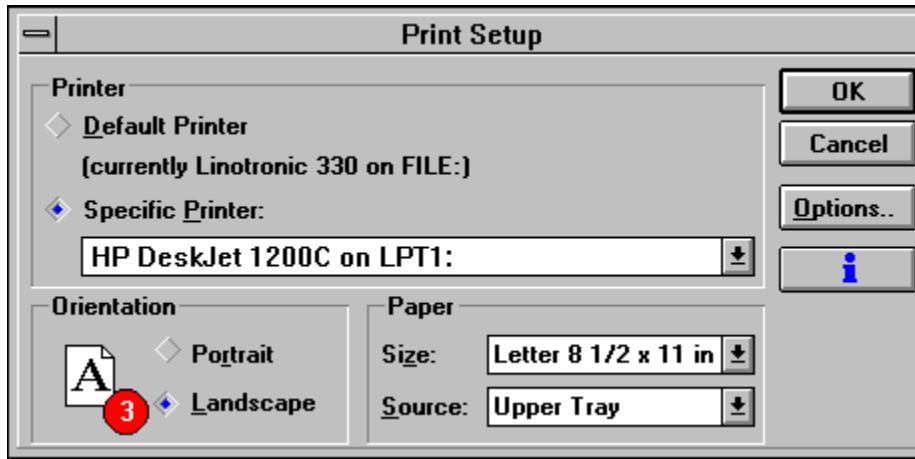
**Selecting
and Placing
Objects
Review**

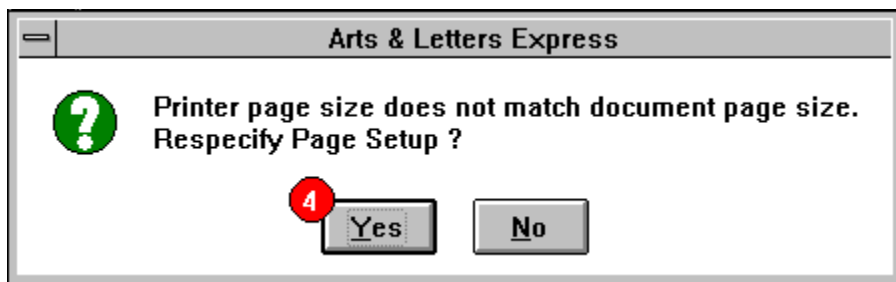
TUTORIAL 1
REVIEW











Page Setup

Target Printer:
Linotronic 330

on FILE:

Page

Tall Wide

8.5 x 11 in.

Letter
Legal
Tabloid
A3
A4

Custom

Use Printer Page

Margins

(Inches)

Top 0.5

Left 0.5 Right 0.5

Bottom 0.5

Get Printer minimums

Work Area

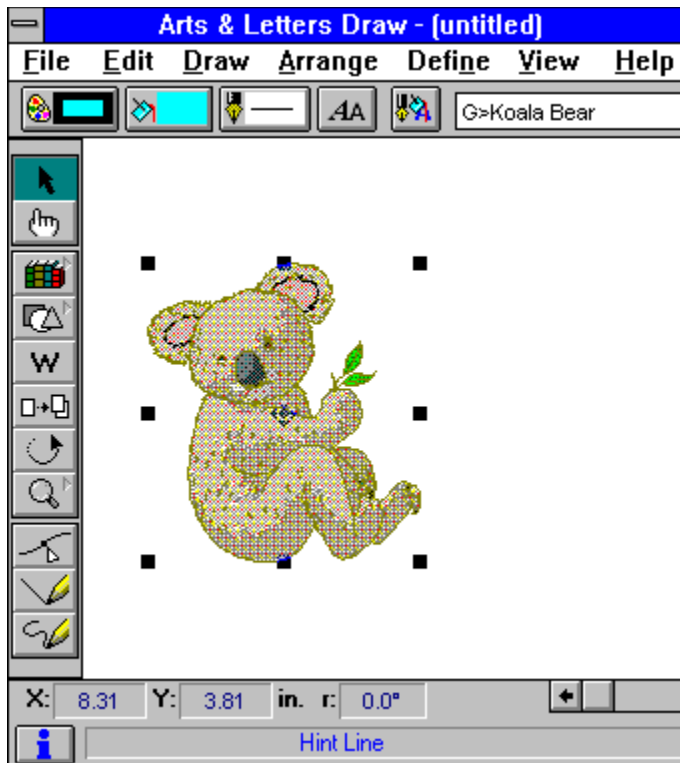
Normal Banner

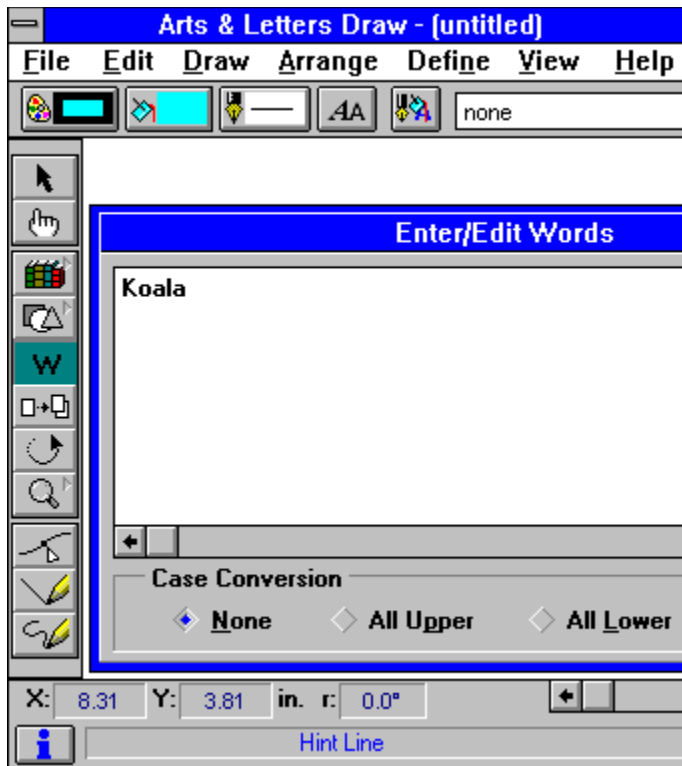
OK

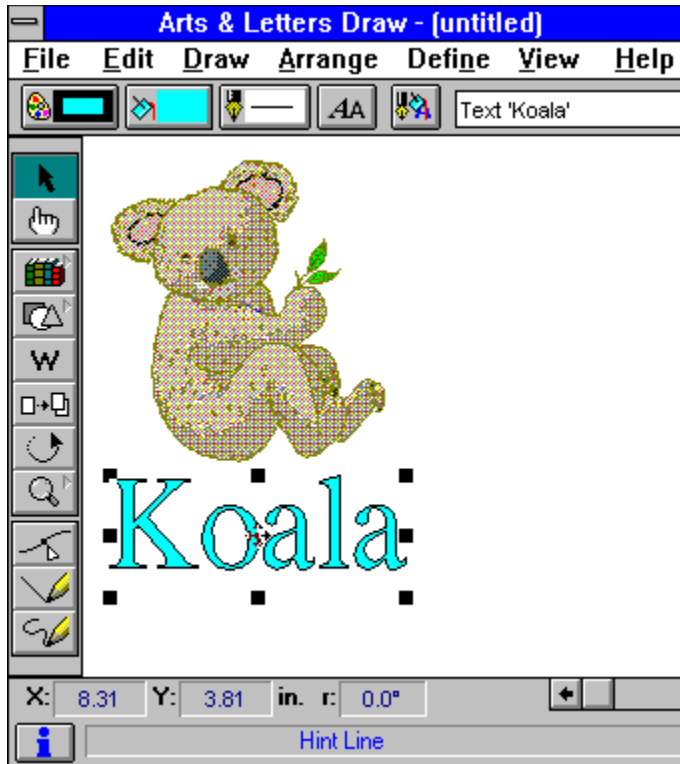
Cancel

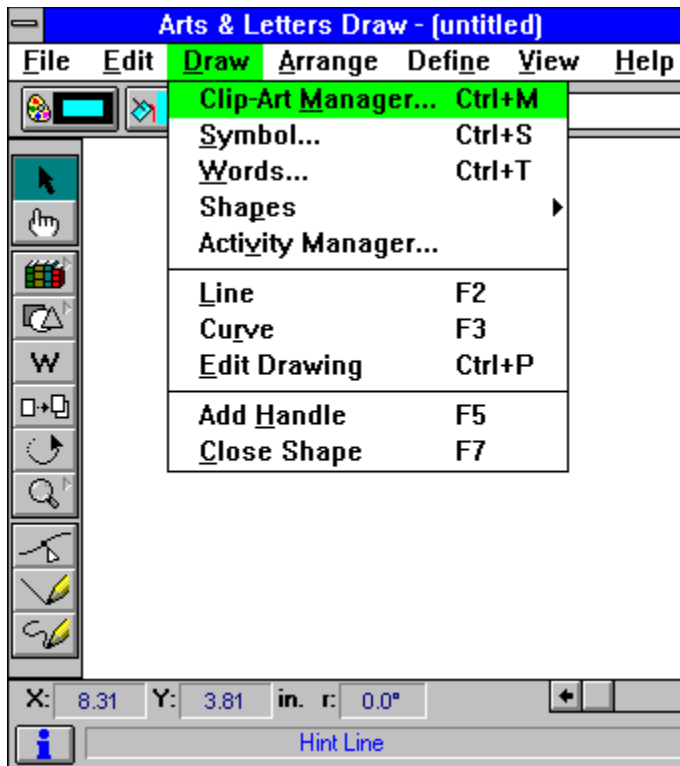






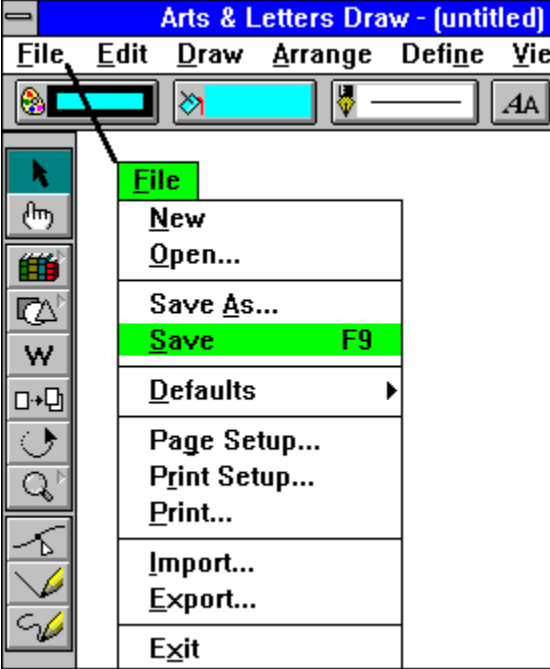












Arts & Letters Draw - (untitled)

File Edit Draw Arrange Define Vie



- File
- New
- Open...
- Save As...
- Save F9
- Defaults ▶
- Page Setup...
- Print Setup...
- Print...
- Import...
- Export...
- Exit

Step-by-Step Tutorial 2

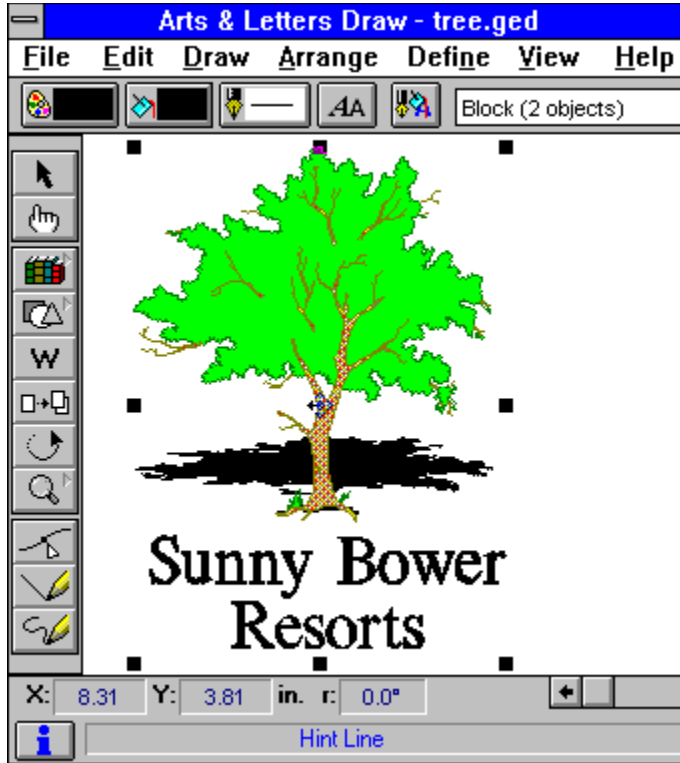
Manipulating Objects and Adding Text

This tutorial shows you how to:









- Color symbols
- Duplicate symbols
- Make a Drop Shadow
- Select, Move and Resize symbols
- Block Select, Group, and Ungroup symbols
- Align Text and Symbols
- Open an existing document
- Rotate symbols
-

Manipulating Objects and Adding Text Preview

TUTORIAL 2
PREVIEW



From the previous tutorial, you already know how to:

-  Specify the target printer
-  Specify a page size and orientation
-  Specify the viewing level
-  Place a symbol in a document
-  Place text in a document
-  Save a document
-  Exit Draw
- 

Open a New File

TUTORIAL 2
PAGE 3

If you are continuing from Tutorial 1, use the **New** command.

1. Pull down the [File menu](#) and choose **New**. You will be prompted to save any changes made to any open file since the last save.
2. The previous window is cleared, and a new blank work area is displayed.



Set Up Printer, Page, and Viewing Level

TUTORIAL 2
PAGE 4


1. Pull down the [File menu](#) and select **Print Setup**.
2. Change the orientation to **Landscape** and then click **OK**.
3. Then select **Page Setup** from the File menu and select **Use Printer Page, Get Printer minimums** and **Normal**. Then click **OK**.
4. Pull down the [View menu](#) and choose **Actual Size** view.



Review this idea in Tutorial 1.

Select and Place an Object (Symbol)

TUTORIAL 2
PAGE 5

1. Pull down the [Draw menu](#) and choose **Clip-Art Manager** (or click on the  icon in the Toolbox, or just hold down the **Ctrl** key and press **M** on your keyboard).
2. From the Collections list, choose the **Props & Skylines** collection.
3. From the Image Name list, choose **Prop-Tree**. Click on the **Add** button. With the resulting [Add Object](#) cursor, click in an open area of your screen.
4. To change any attribute of an object you must first [select](#) it. An object is selected when it is surrounded by handles.

The selected object's name appears in the [object viewer](#) window in the Status bar.



Color the Tree


TUTORIAL 2
PAGE 6

Images in the Clip-Art Manager are pre-colored. For the purpose of this exercise we will change the tree to a different color to show you how to use the Color Palette.

With the tree selected (surrounded by handles):

1. Press **Shift+G** on your keyboard. This keystroke breaks apart the group.
2. Click among the symbols until "Symbol #20305" appears in the object viewer in the Style bar. (You may need to hold down the Control key as you click.)



3. Click the Color style button  on the Styles bar. The Color palette appears.
4. Choose one of the available **Browns**.

Whenever you change the color of an object, you can apply the color to the interior fill of the object, the lines/outlines that define the object, or both. In this case, we only want to change the color of the **Beg(inning) Fill**.

(In Draw, End Fill applies only to the second color of gradients and raster and vector fills.)

You can toggle the Fill and Line option boxes on and off by clicking on them. Make sure that just **Beg Fill** is selected.

5. The color of the leaves changes from green to brown.




Duplicate an Object


TUTORIAL 2
PAGE 8

This exercise will teach you how to use the Duplicate tool. This tool is handy for making copies of objects quickly. For example, to make a shadow or a drop shadow, you need to duplicate the object then **drag** the duplicate. The Duplicate tool allows you to make copies and drop shadows.

To duplicate an object for use as a drop shadow:

1. Pull down the **Draw menu** and choose **Clip-Art Manager** (or click on the  icon in the Toolbox, or just press **Ctrl+M**).
2. From the Collections list, choose the **Props & Skylines** collection.
3. In the Image Name list, double-click on **Prop-Tree**. The Clip-Art Manager closes and a cursor for placement of the tree appears. Click once in an open area to place the tree on your screen.

4. From the **Arrange menu** choose **Duplicate**, or select the Duplicate tool  from the Toolbox.

 5. The duplicate cursor appears. Click on the tree with this cursor and **drag** it a short distance from the original.



Dismiss the duplicate cursor by clicking with the **content menu** mouse button.

6. With the duplicate selected, click the Color style button  on the Styles bar. Click on **Fill & Line** and then the color **black**.



7. Place the shadow behind the tree by **selecting** the shadow and pressing **Shift+F**. You may need to **drag** the shadow to position it properly behind the tree.



Resize Symbols

TUTORIAL 2
PAGE 9

You will often need to resize Draw's ready-made symbols for the effect you want. The shadow currently makes the tree look two-dimensional. This may be useful, but it's just as easy to give a three-dimensional effect.

1. With the shadow selected, point on the upper middle handle (the small black square) and hold the mouse button.
2. **Drag** the bounding box downward, making the shadow very flat.



Save your work at this point.

1. Pull down the [File menu](#) and choose **Save As**.

-or-

Press **F9**.

2. The [Save Document As](#) dialog box appears. Type **tree** in the upper left window. Before proceeding, place a checkmark in the box in front of **Include Thumbnail**. Doing so will display a small picture of the contents of the file before opening it in a future session.

Click on **OK**.

The illustration is saved in a file called "tree.GED." (The .GED extension is the [default](#). You can specify any extension you want.) Note that the title bar on the top of the Draw screen changes from "(untitled)" to "tree.GED."

3. You can use this illustration with the following tutorials.




Text (or words) can also be considered graphic images, and can be manipulated as such on the drawing area. You can control line and fill as well as shape and position.

To add text:

1. Pull down the [Draw menu](#) and choose **Words**.

-or-



Click on the [Word tool](#)  in the toolbox. The [Enter/Edit Words](#) dialog box opens.

2. Type **Sunny Bower**. Press Enter to advance to the next line. (The enter key in this case does not add the text to your document.) Type **Resorts**.
3. Click on **Add**. The Pointer turns into the [Add Object](#) cursor. (The text is placed on your screen just like the clip art you found in the Clip-Art Collections.)
4. Move the cursor above and to the left of the tree and click. The text is placed above it. If you don't like the [default](#) size of the text, select it, point on a corner handle (small black square) and [drag](#) it to size.



The default alignment for multiple lines of text is flush left.

To center the two lines of text relative to the longest line of text:

1. Click on the Type style button  and then on the **Define** button. The [Define Type](#) dialog box appears.
2. Select **Centered** alignment, then click on **Apply**.


Block Select and Group Objects


TUTORIAL 2
PAGE 13

Block select allows you to select several objects at one time. It is like casting a lasso around the objects you want, binding them together as one object. The objects remain bound together only as long as they are selected. To keep them bound, form a **Group** of the block selected objects. Any group that you form can be ungrouped.

To Block Select and Group the objects on your screen:

1. Pull down the [Edit menu](#) and choose **Block Select**.

-or-

Click on the **Block Select** tool  in the toolbox. The Block Select cursor appears.

2. Point the cursor above and to the left of the tree and its shadow.
3. Hold the mouse button and **drag** the block select bounding box completely around the tree and its shadow to the opposite diagonal corner.

Release the mouse button. The status bar above the work area should display **Block (2 objects)**.



4. Pull down the Arrange menu and choose Group.

-or-

Hold down the **Ctrl** key and press **G** on your keyboard.

The tree and its shadow are grouped as a single object, and the Status Bar now displays **Group**.

5. Pull down the Arrange menu and choose **UnGroup**.

-or-

Hold down the **Shift** key and press **G** on your keyboard.

The tree and its shadow are now ungrouped and are two separate objects, and the Status Bar again displays **Block (2 objects)**.

For the purposes of the next exercise, regroup the tree and its shadow, as explained in step 4.



Center the trees under the text:

1. Pull down the [Edit menu](#) and choose **Select All**.

-or-

Hold down the **Alt** key and press **A**.

One set of handles appears around the title and the tree group. The object viewer in the Style bar should display **Block (2 objects)**.

2. Pull down the [Arrange menu](#) and choose **Align**. The [Align](#) dialog box appears.
3. Choose **Center** in the Left to Right orientation and click on **Apply**. The tree and its text are centered along the vertical axis.
4. With both objects still selected, point and [drag](#) to move the objects to the center of the document.



Exit Draw

TUTORIAL 2
PAGE 16

At times you will need to exit Draw before completing a document. A document can be saved and Draw closed at any time. Later, when you return to Draw, you can open your document (a GED) and pick up where you left off.

Pull down the [File menu](#) and choose **Exit**.

A message box will prompt you to save your work if you have not already done so. Click on **Yes** to save the document before exiting Draw. If needed, assign a name to the document.



Open an Existing File

TUTORIAL 2
PAGE 17


To resume work on the document:

1. Pull down the [File menu](#) and choose **Open**. The available document files are listed in the [Open dialog box](#) filename list.
2. Choose **tree.GED** and click on **Open**. Your illustration is displayed on the screen.



Rotating the shadow of the tree will make it appear to be on a slope.

1. Select the tree. If it is still grouped, hold down the **Shift** key and press **G** on your keyboard to ungroup it.
2. Select the shadow.

3. Select the Rotate tool  from the Toolbox.
4. Point with the mouse on the upper right corner and **drag** it downward. Watch values change in the **r:** box in the numeric bar at the bottom of your screen. When about 10 degrees appear, release the mouse button.



Tutorial 2 Review

TUTORIAL 2
PAGE 19

This tutorial showed you how to:

- Color symbols
- Duplicate symbols
- Make a Drop Shadow
- Select, Move and Resize symbols
- Block Select, Group, and Ungroup symbols
- Align Text and Symbols
- Open an existing document
- Rotate symbols

In the next Tutorial you will learn to Manipulate text.

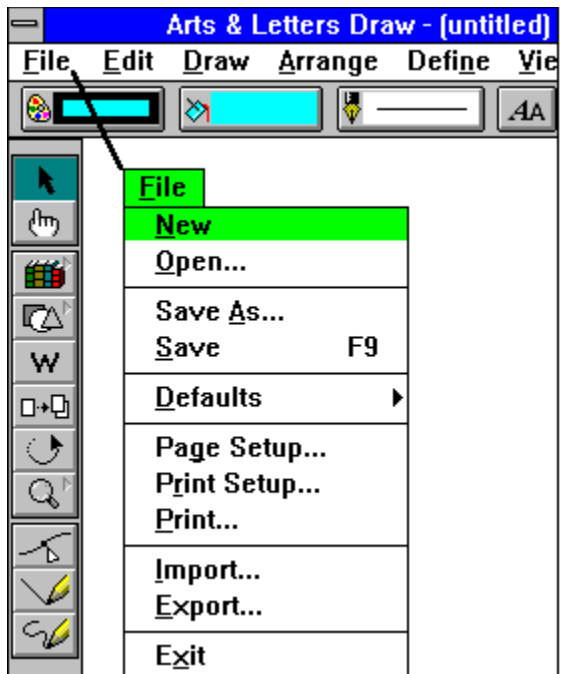
To begin the next tutorial, pull down the **Tutorials** menu and choose **3 Manipulating Text**.

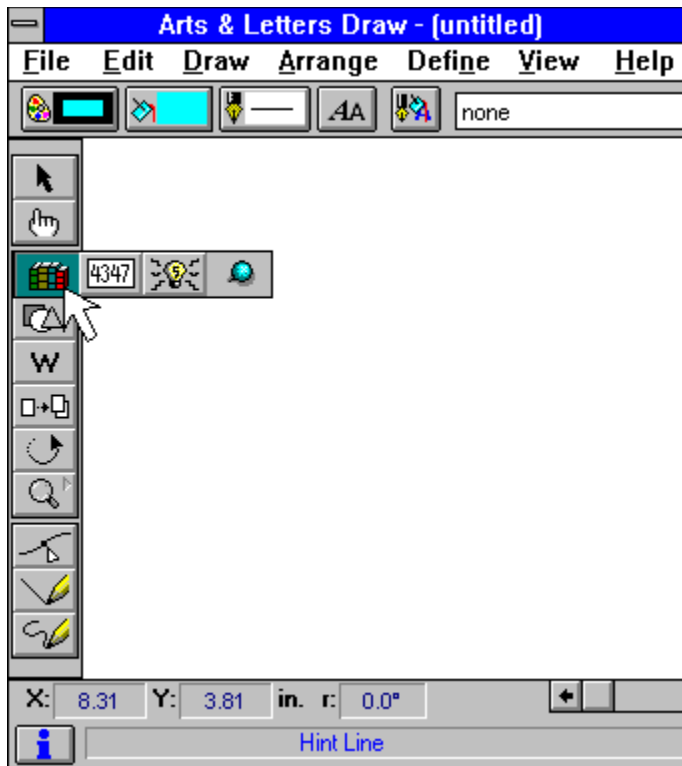


**Manipulating Objects
and Adding
Text Review**

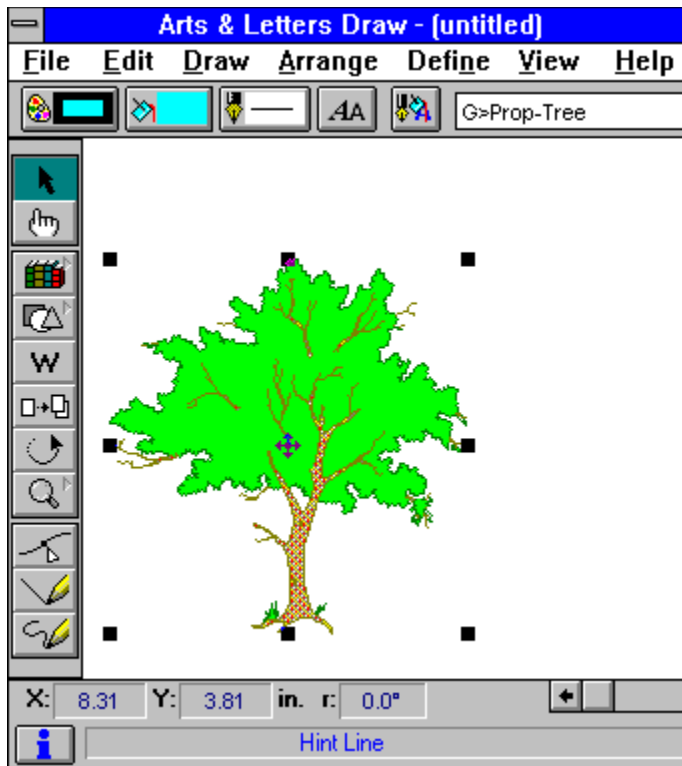
TUTORIAL 2
REVIEW

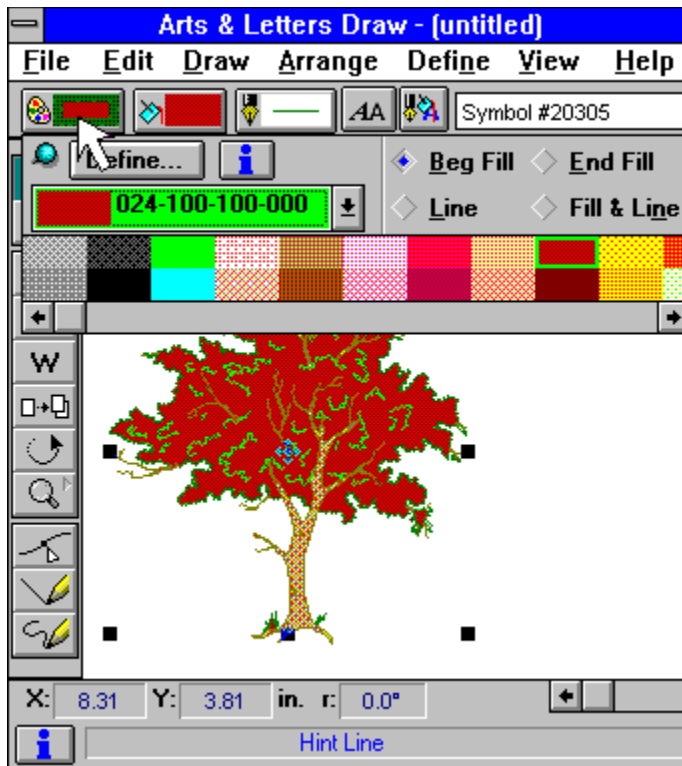


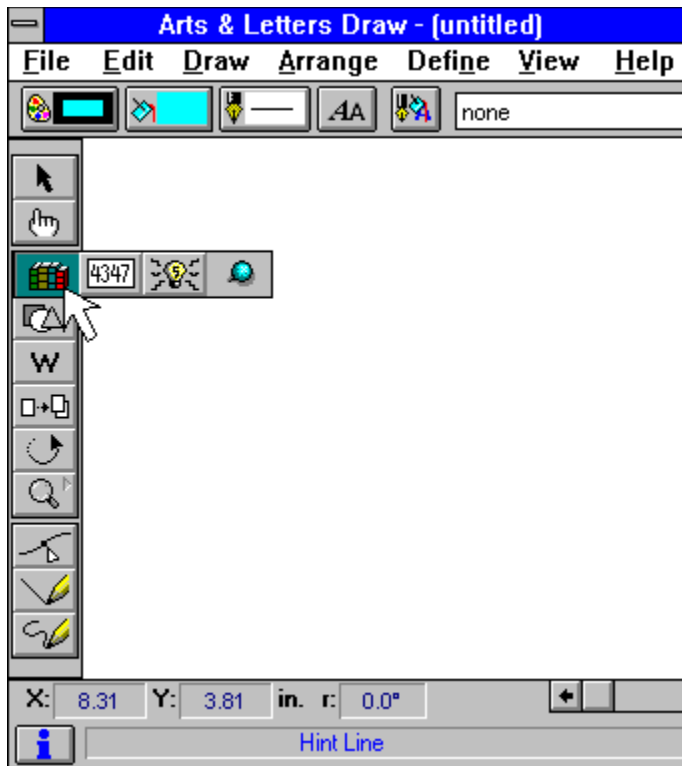


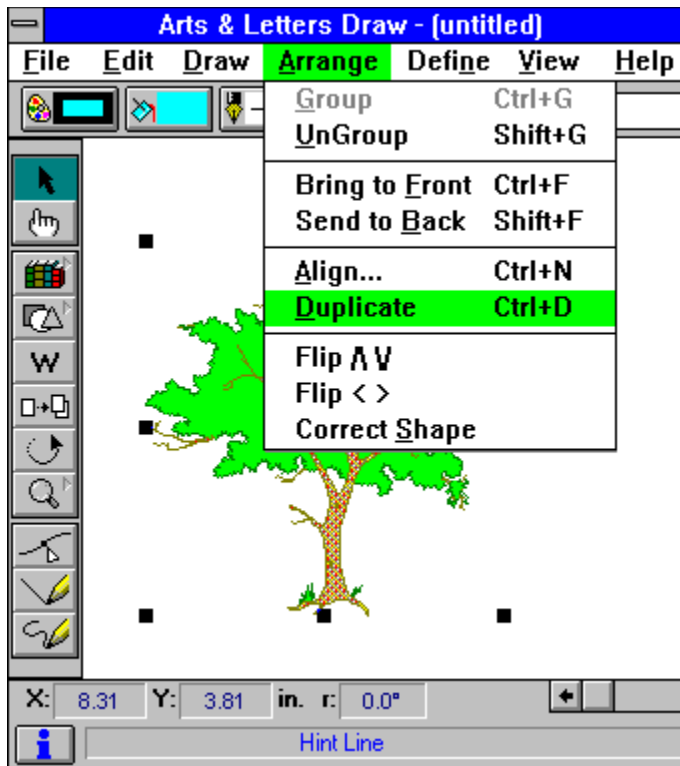


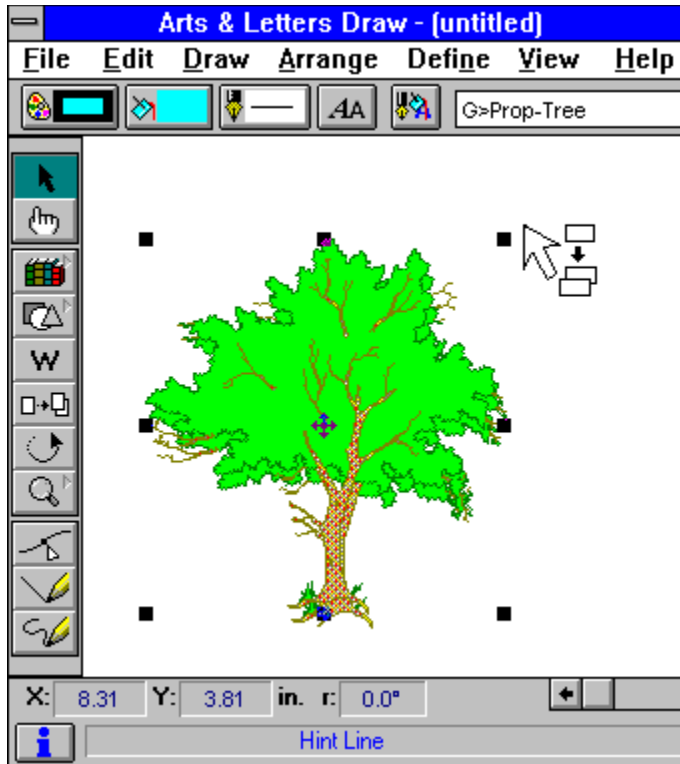


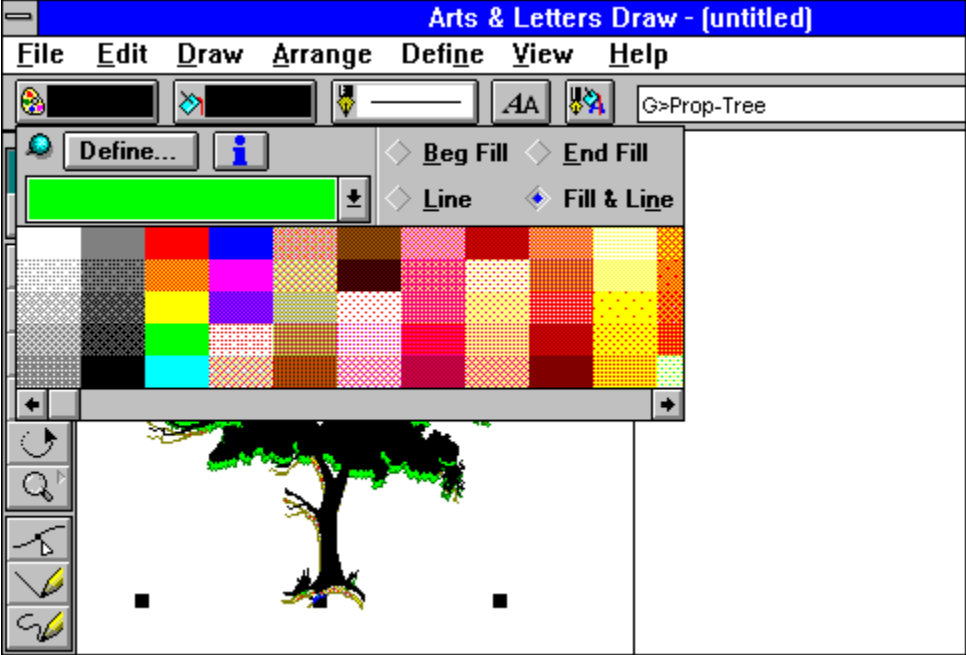


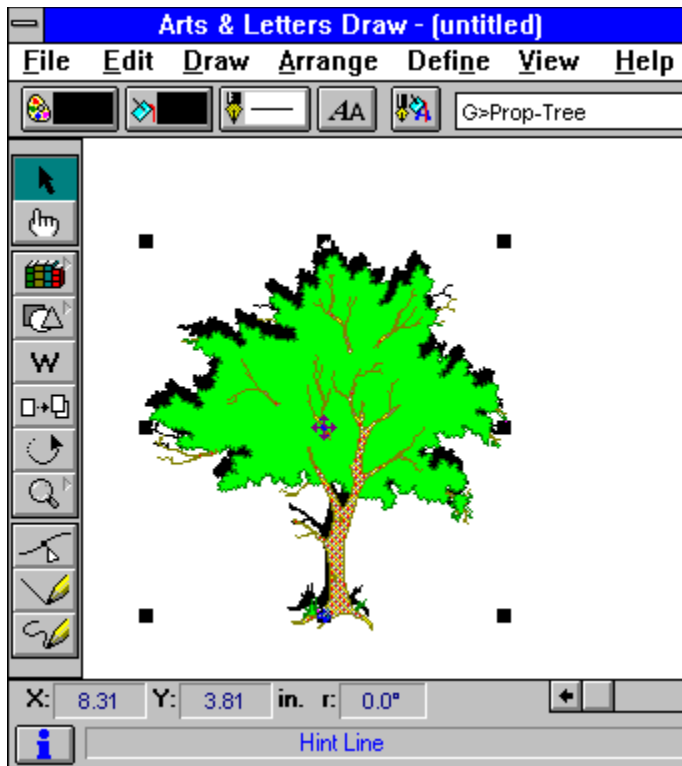


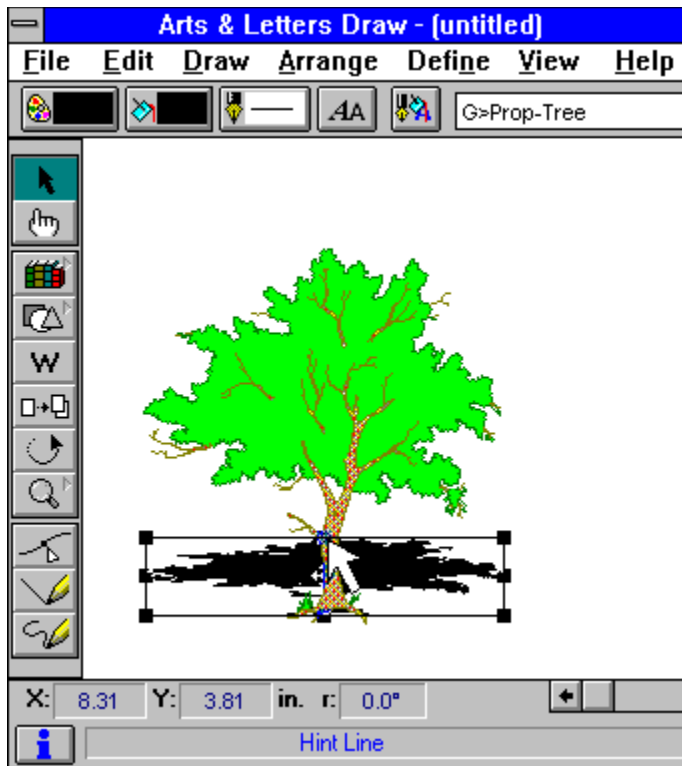


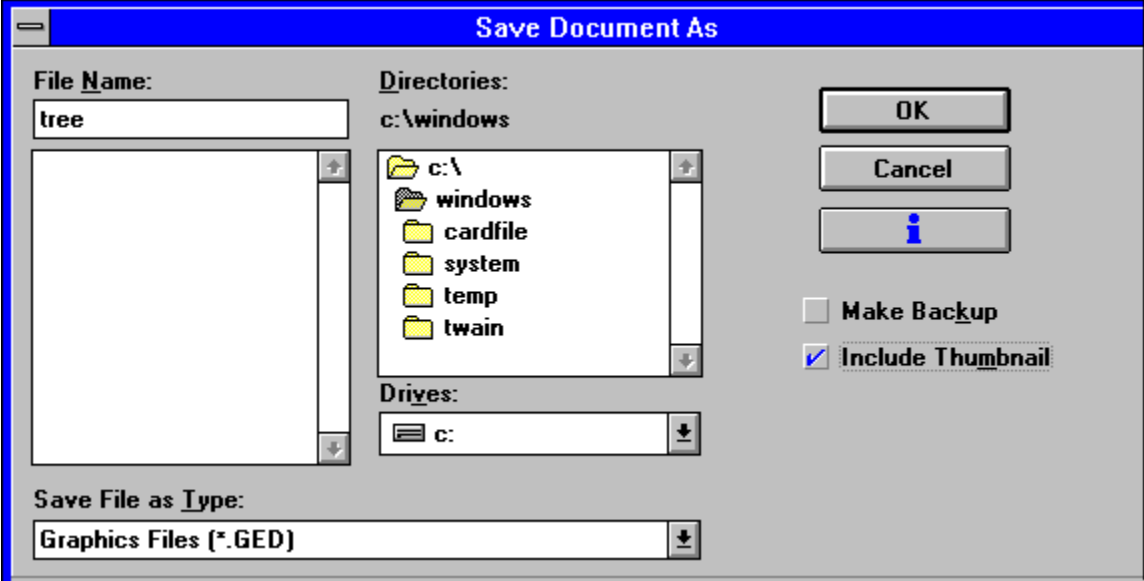


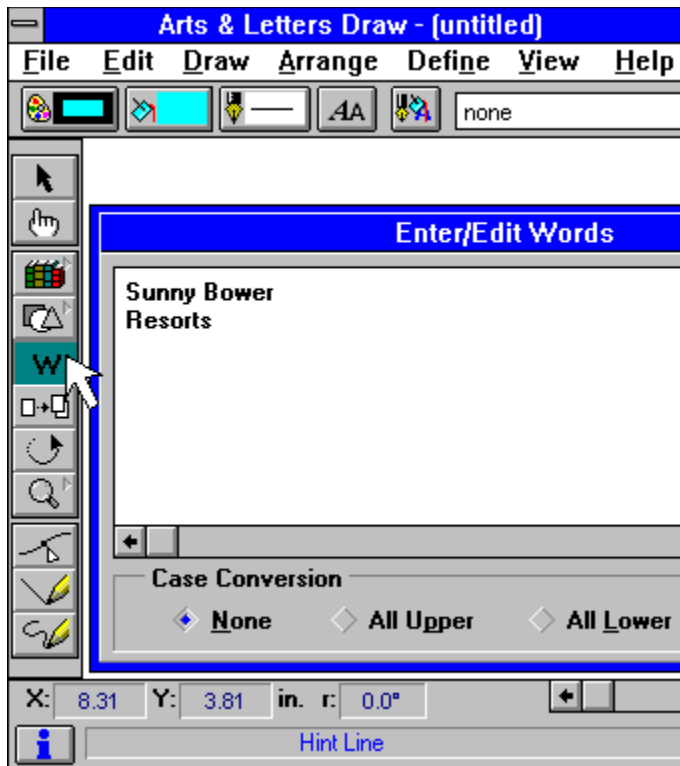


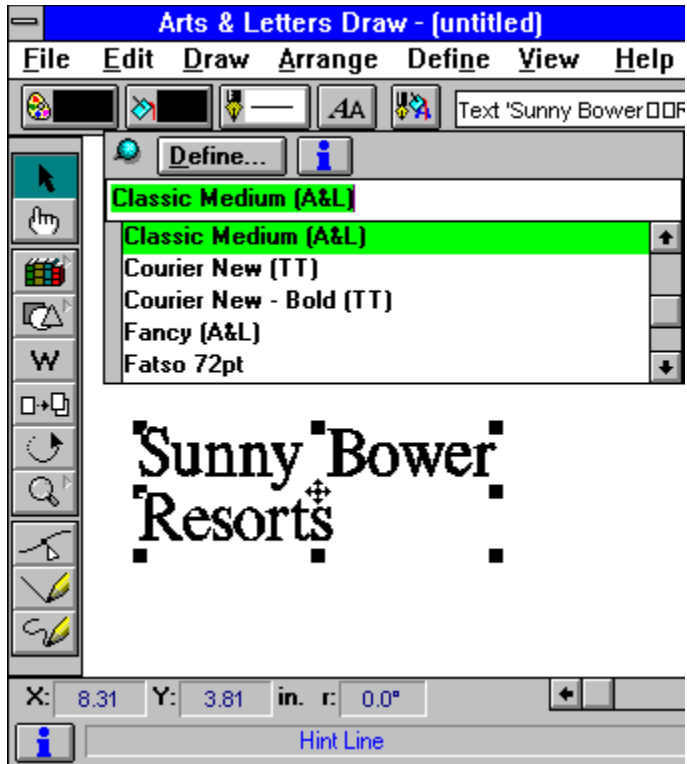


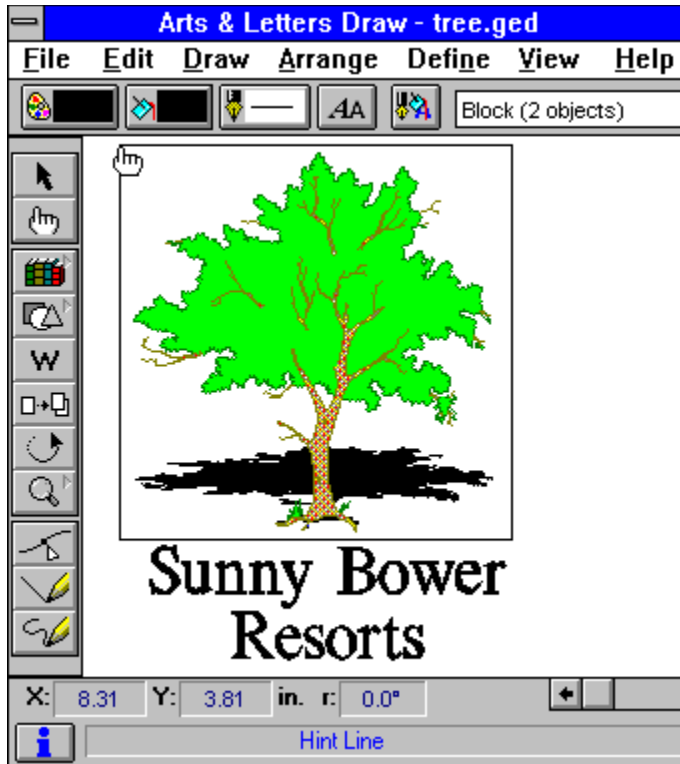




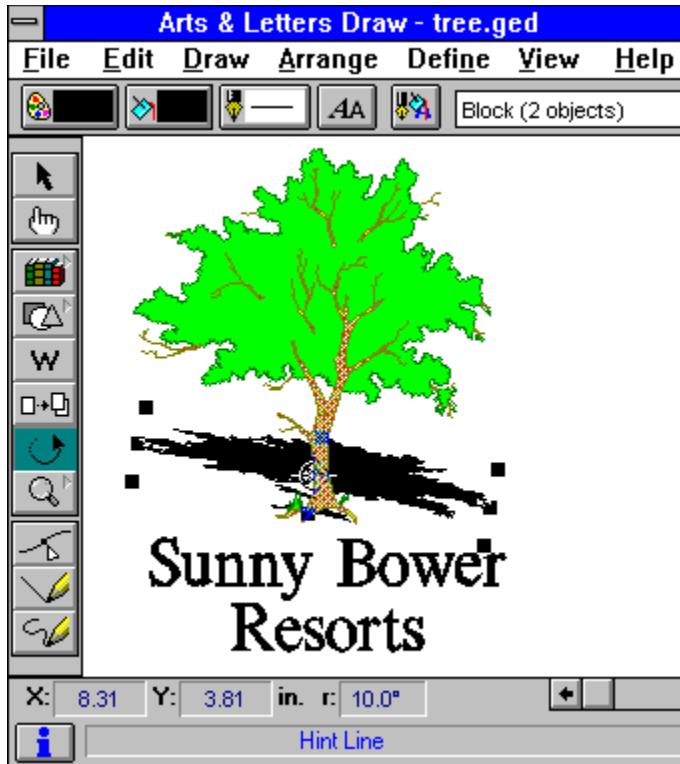

















Step-by-Step Tutorial 3

Manipulating Text

This tutorial shows you how to:









-  Change typeface, type size, and letter spacing
-  Edit type attributes
-  Italicize type
-  Use the Clip-Art Manager creatively
- 

**Manipulating Text
Preview**

TUTORIAL 3
PREVIEW

| Aircraft | Textiles |
|----------------------|---------------------|
| \$105,000,000 | \$35,000,000 |

From the previous tutorials, you already know how to:

-  Specify the viewing level
-  Place symbols and text in a document
-  Size a symbol
-  Color an object
-  Align objects
-  Block Select objects
-  Group objects
- 

Open a New File

TUTORIAL 3
PAGE 2

If you are continuing from the previous tutorial, use the New command.

1. Pull down the **File menu** and choose **New**. You will be prompted to save any changes made to the open document since the last save.
2. The previous window is cleared, and a new blank work area is displayed.



Set the Target Printer and Page Layout

TUTORIAL 3
PAGE 3

Each time you start Draw, you should check the page and printer setup and change them if desired. This ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the [File menu](#) and select **Print Setup**.
2. Change the orientation to **Landscape** and then click **OK**.
3. Then select **Page Setup** from the File menu and select **Use Printer Page, Get Printer minimums** and **Normal**. Then click **OK**.
4. Pull down the [View menu](#) and choose **Current Page** view for the purposes of this tutorial.








 **Review this idea in Tutorial 1.**



Place the Background





TUTORIAL 3
PAGE 4

It's important to stay alert to the possibilities of clip art available in the Clip-Art Manager. Remember that clip art in Draw is not static -- you can delete the parts you don't want and alter the image in other ways to suit your needs. In this case we will take a clip-art image and discard the part not useful to the total image that we want to create.

1. Click on the Clip-Art Manager icon  in the Toolbox, or just hold down the **Ctrl** key and press **M** on your keyboard.
2. From the Collections list, choose the **Scenery/Landscapes** collection.

3. From the Image Name list, double-click on **Seascape-Carrier**.
4. **Select** the clip art, and break apart the **group** by holding down the **Shift** key and pressing **G**. The **object viewer** shows **Block (4 objects)**.

5. Click among the objects until you see **G>The Eisenhower** displayed in the object viewer. Press the **delete** key. The remaining objects will form the background for the work to follow.

6. Make a single object of all the objects on your screen by pressing **Ctrl+A** (to **select all** objects) then pressing **Ctrl+G** (to form a single **group**).

7. To help in future selection of objects on your screen, use the cursor to highlight the word **Group** in the object viewer. Type the words **my background**. Press **Enter** on your keyboard. This name will now be displayed whenever the background object is selected.



Add Text

TUTORIAL 3
PAGE 5


1. Choose **Words** from the [Draw menu](#) or click on the Word tool  in the toolbox. Type **Aircraft** and place it on the background that you labeled **my background** in the previous steps.
2. Move the text to the left-hand side of the background.

3. Place the word **Textiles** on the background.
4. Move the text to the right-hand side of the background.



5. Add the text **\$105,000,000** to your document.
6. Place the text under Aircraft.
7. Add the text **\$35,000,000** to your document.
8. Place the text under Textiles.





Block Select TUTORIAL 3 PAGE 7

You can select several objects and change their attributes simultaneously.

1. Choose **Block Select** from the [Edit menu](#), or click on the [Block Select](#) tool  in the toolbox.
2. Position the cursor above the word Aircraft, and to the left of both Aircraft and \$105,000,000. Hold the mouse button and [drag](#) the block select bounding box so that all four text objects are selected.
3. Release the mouse button, and the window in the Style bar should read **Block (4 objects)**.

Change Typeface

TUTORIAL 3
PAGE 8


1. Click on the Type style button  in the Style bar, then on the **Define** button. The **Define Type** dialog box appears.
2. Choose **Modern Medium** from the list and click on **Apply**. The text objects redraw in Modern Medium.
3. Make the type stand out from the background by clicking on the Color style button  and changing both the fill and line color to **Red**.



Specify Type Size and Letter Spacing


TUTORIAL 3
PAGE 9

To change the size of a text object; either drag a handle or:

1. Make sure the four text objects are still selected. Click on the Type style button  in the Style bar, then on the **Define** button. The Define Type dialog box appears.
2. Enter **26** (point size) in the Size field.
3. Click on **Spacing**.



The Type Spacing dialog box appears.





4. Enter **2** in the Letter (spacing) field and click on **Apply**. Click on **Apply** in the **Define Type** dialog box. The selected text objects redraw using the values specified.
5. Block Select \$105,000,000 and \$35,000,000. Click on the Type style button  then on the **Define** button. Change the size to **18** points.



To align Aircraft and \$105,000,000 flush left:

1. Use the **Block Select** tool  to select Aircraft and \$105,000,000.
2. Choose **Align** from the **Arrange menu** (or hold down the **Ctrl** key and press **N** on your keyboard). The Align dialog box appears. Choose **Left** in the Left to Right orientation.
3. Click on **Apply**. The text is redrawn, flush left.
4. If necessary, move the block-selected text to position it in the background box.



To align Textiles and \$35,000,000 flush right:

1. **Block Select** (with ) Textiles and \$35,000,000.
2. Choose **Align** from the **Arrange menu** (or hold down the **Ctrl** key and press **N** on your keyboard). Choose **Right** in the Left to Right orientation. Click on **Apply**.
3. If necessary, move the block-selected text to position it in the background box.


Bottom Align

TUTORIAL 3
PAGE 13

To align the text on the same baseline:



1. Use the **Block Select** tool  to select Aircraft and Textiles.
2. Choose **Align** from the **Arrange menu** (or hold down the **Ctrl** key and press **N** on your keyboard). Choose **Bottom** from the Top to Bottom orientation, and click on **Apply**. The text redraws with the objects aligned along a common baseline.
3. Block Select \$105,000,000 and \$35,000,000.
4. Choose **Align** from the Arrange menu. Choose **Bottom** from the Top to Bottom orientation, and click on **Apply**. The text redraws along a common baseline.



Add Titles




TUTORIAL 3
PAGE 14

Add the main title and a subtitle:

1. With no objects selected, click on the Words tool  and add the text **The Huge Company** at the top of your document.
2. Add the text **First Quarter Revenues** under the title.



Adjust Type Size and Color

TUTORIAL 3
PAGE 15

1. Use the **Block Select** tool  to select the sub title, First Quarter Revenues and the title The Huge Company.
2. Click on the Type style button  in the Style bar, then on the **Define** button. Change the type size to **14** points.
3. Click the Color style button  and change the fill color to **Blue**.



To italicize the subtitle:


1. Select the subtitle, then click on the Type style button  then on the **Define** button.
2. Click on **Italic** in the Styles box.
4. Enter **10** in the Italic field and click on **Apply**.

The subtitle redraws in italics slanted 10 degrees right.

Note: you could have entered a negative number to slant the text to the left.



To group the background and its text:

1. Use the [Block Select](#) tool  to select The Huge Company and First Quarter Revenues.
2. To group the objects, hold down the **Ctrl** key and press **G** on your keyboard. Now the symbol and the text objects will be treated as one object.
3. Make one group of all the other text in the same way. You now have three objects on the screen: the title lines, the other grouped text, and the background.



Centering objects

TUTORIAL 3
PAGE 18

To center the titles above the grouped object:

1. Choose **Select All** from the Edit menu menu.
2. Choose **Align** from the Arrange menu.
3. Choose **Center** in the Left to Right orientation. Click on **Apply**. The titles redraw, centered above the grouped object.
4. Save the completed illustration to the filename **Revenues.GED**.



Tutorial 3 Review

TUTORIAL 3
PAGE 19

This tutorial showed you how to:

- Change typeface, type size, and letter spacing
- Edit type attributes
- Italicize type
- Use the Clip-Art Manager creatively

In the next Tutorial you will learn freeform drawing.

To begin the next tutorial, pull down the **Tutorials** menu and choose **4 Freeform Drawing**.

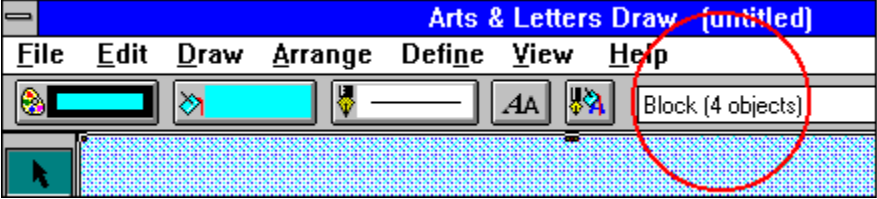


**Manipulating Text
Review**

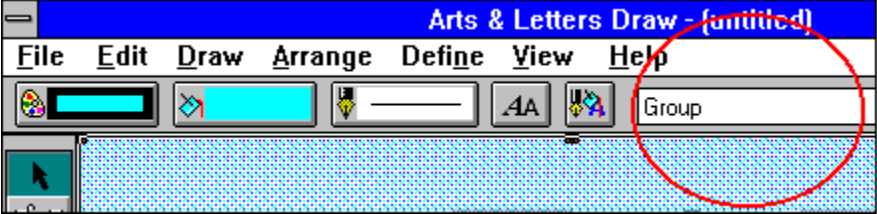
TUTORIAL 3
REVIEW

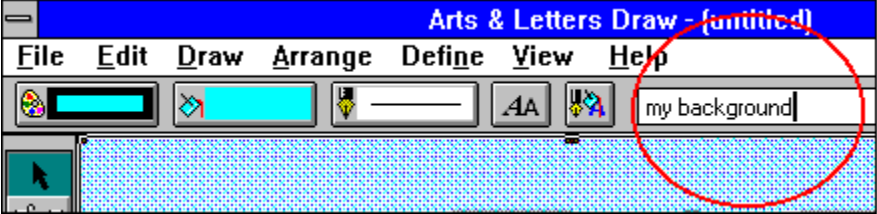
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|----------------------|---------------------|
| \$105,000,000 | \$35,000,000 |

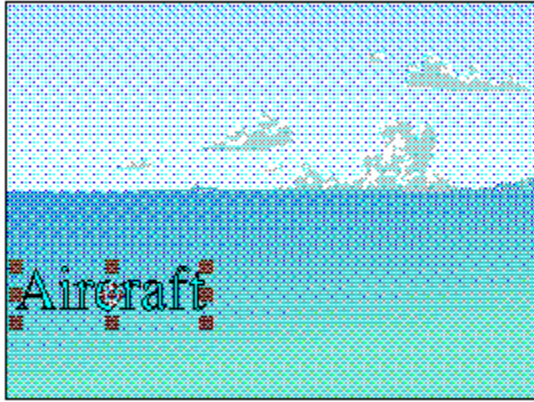






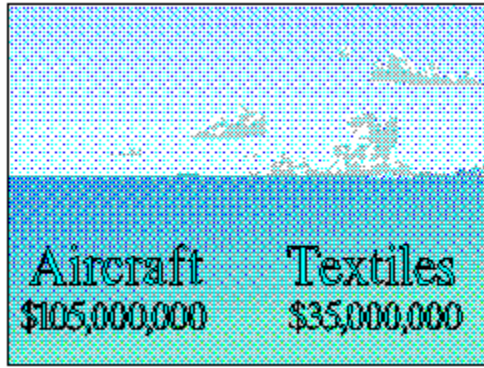


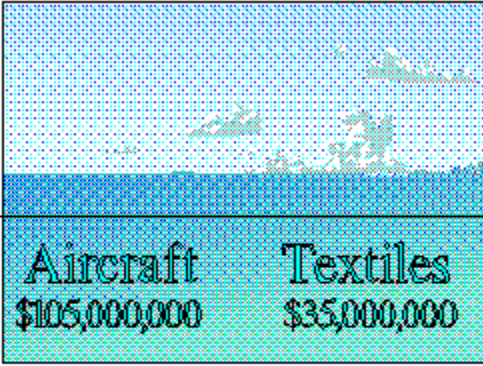






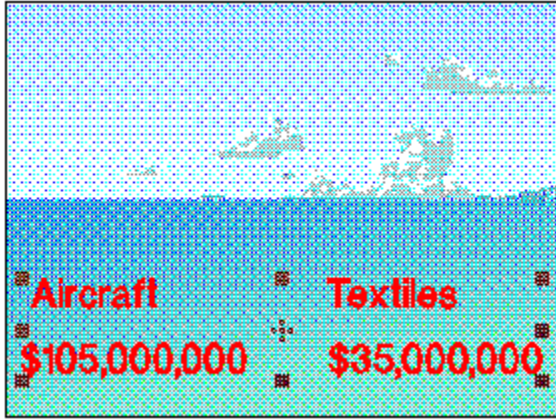


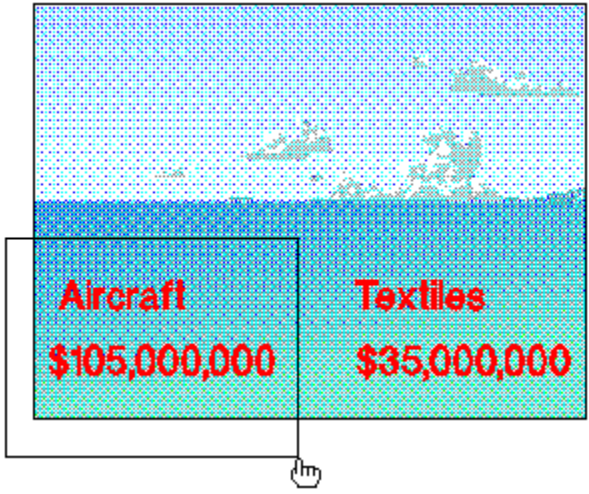


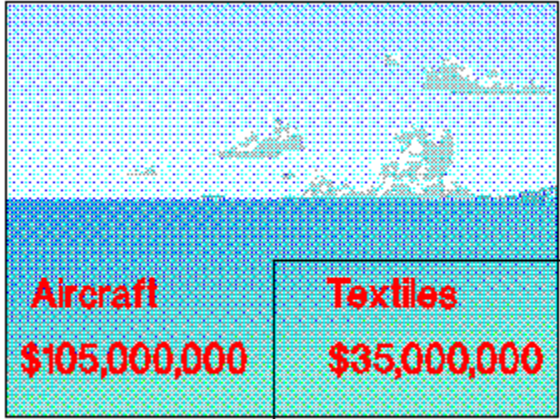


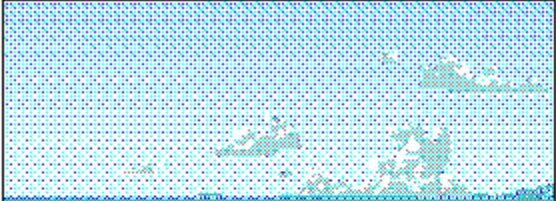
| | |
|---------------|--------------|
| Aircraft | Textiles |
| \$105,000,000 | \$35,000,000 |











| Aircraft | Textiles |
|---------------|--------------|
| \$105,000,000 | \$35,000,000 |



The Huge Company

First Quarter Revenues

| Aircraft | Textiles |
|---------------|--------------|
| \$105,000,000 | \$35,000,000 |

The Huge Company







First Quarter Revenues

| | |
|----------------------|---------------------|
| Aircraft | Textiles |
| \$105,000,000 | \$35,000,000 |

Step-by-Step Tutorial 4

Freeform Drawing

This three-part tutorial will show you how to:








-  Use the Line and Curve tools to draw freeform objects
-  Stack freeform objects to create a finished image
-  Change the line width of an object
-  Mix colors using the Hues mixing method
-  Flip an object
- 

**Freeform
Drawing
Preview**

TUTORIAL 4
PREVIEW



From the previous tutorials, you already know how to:

-  Place and size objects
-  Duplicate objects
-  Rotate objects
-  Color objects
-  Block select and Group objects
-  Align objects
- 

Open a New File

TUTORIAL 4
PAGE 2

If you are continuing from the previous tutorial, use the New command.

1. Pull down the **File menu** and choose **New**. You will be prompted to save any changes made to the open document since the last save.
2. The previous window is cleared, and a new blank work area is displayed.



Set the Target Printer and Page Layout

TUTORIAL 4
PAGE 3

Each time you start Draw, you should check the page and printer setup and change them if desired. This ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the [File menu](#) and select **Print Setup**.
2. Change the orientation to **Portrait** and then click **OK**.
3. Then select **Page Setup** from the File menu and select **Use Printer Page, Get Printer minimums** and **Normal**. Then click **OK**.
4. Pull down the [View menu](#) and choose **Actual Size** view for the purposes of this tutorial.

 **Review this idea in Tutorial 1.**



Divide and Conquer

TUTORIAL 4
PAGE 4

As you begin to work on more complex documents, you may find it useful to create individual segments of the document and then place them together to produce the finished illustration. In this tutorial, we've divided the document into three parts: creating the backdrop, drawing the ship, and adding the finishing elements.



Part 1:
Create the
Backdrop

TUTORIAL 4
PAGE 5


The backdrop for the illustration shows the sea and sky.

It is composed of three clip-art symbols: a rectangle for the sky, a rectangle for the sea, and a rectangle used as a frame around the image.



Add and Size a Rectangle Using the Shapes Tool


TUTORIAL 4
PAGE 6

1. In the Toolbox click on the Shapes tool . The rectangle drawing cursor appears. Watching the numeric bar at the bottom of your screen, drag it to about **3.75** inches Width and **1.25** inches Height.
Click once with the outside mouse button to dismiss the cursor.
2. Once drawn, the size of the rectangle can be made more precise. Selecting one of the middle object handles allows you to size in one dimension.
Select a middle handle. Then, while holding down the mouse button, use the arrow keys. Each time you touch the arrow key, the size changes by one-hundredth of an inch.
3. Move the rectangle to the top center of the work area.



Color Symbol Using Color Mixing

TUTORIAL 4
PAGE 7


1. Click on the Color style button  in the Style bar.
2. Click on the **Define** button. The Define Color dialog box appears.
3. Choose **Blue** from the Named Colors list.
4. The color mixing bars at the upper right of the dialog box should be labeled 240 Hue, 0% White, and 0% Black.
5. **Drag** the scroll button in the % White mixing bar to set the percentage to **88%**. You can click on the arrows at the end of the mixing bar to increase and decrease the percentage in 1% increments. You can also type the value in the window.
6. Since we want to apply the mixed color only to the interior of the rectangle, make sure the **Bev Fill** is checked and the Line attribute is not checked. Click on **Apply**. The rectangle acquires the new color.




Duplicate and Position the Symbol

TUTORIAL 4
PAGE 8



1. Select the Duplicate tool  from the Toolbox.
2. Click on the light blue rectangle and **drag** the duplicate slightly away from the original. Click once with the outside mouse button to dismiss the cursor.
3. Hold down the **Shift** key and click on both rectangles. Both objects are now selected.
4. Hold down the **Ctrl** key and press **N** on your keyboard. The Align dialog box appears. Place a check in the **Center** align box of both **Top to Bottom** and **Left to Right**. Click on **Apply**. One rectangle now completely conceals the other.
5. Since both rectangles are identical, select either one of them. "Shape-rectangle" appears in the **object viewer** in the Style bar. Move the **duplicate** by dragging it so that its top about marries the bottom of the other rectangle.



6. With the lower rectangle selected, pull down the [Define menu](#) menu, choose **Color**, and change the fill color to **Blue**. (You may need to scroll far up to reach this color.)
7. Choose the Block Select tool  from the Toolbar and drag the resulting cursor around both rectangles. Hold down the **Ctrl** key and press **G** on your keyboard to group the objects.
8. Use the cursor to highlight the word **Group** in the [object viewer](#) window in the Style bar. Type **sea and sky** and press **Enter**. The group is renamed, with **G>sea and sky** appearing in the viewer window.



Part 2: Draw the Ship

TUTORIAL 4
PAGE 10


Although computer graphics can be drawn like traditional paper-and-ink graphics, it is common to create a computer image as a set of separate and distinct objects that are then sized and positioned relative to each other. In the case of the ship, there are six different pieces:



Draw the Smoke

TUTORIAL 4
PAGE 11

To make room for drawing, choose **Current Page** from the [View menu](#).


1. Select the Curve tool  from the Toolbox. The Pointer changes to the Curve tool.
2. Drag the curve tool to draw a curved line similar to the one shown, then release the mouse button.

[Special Note](#)



TUTORIAL 4 SPECIAL NOTE

If you are unfamiliar with computer drawing or with using a mouse, your sketch may not closely match the illustration. Don't panic. As you become more experienced, you'll be able to draw quickly and accurately. Until then, there's still no problem: you can easily adjust any line or curve to the shape desired.


3. Select the Line tool  from the Toolbox. The Pointer changes to the Line tool.
4. Place the Line tool on the endpoint of the curved line. Hold the **Shift** key and drag the Line tool to draw a horizontal line to the right. Release the mouse button and the Shift key.

Holding down the Shift Key




TUTORIAL 4 SHIFT KEY

Holding the Shift key while you draw a line lets you draw exact horizontal and vertical lines. If you do not hold the Shift key, you can draw straight lines in any direction.

5. Choose the Curve tool  again. Draw a curved line from the end-point of the horizontal line.



6. To complete the smoke, choose the Line tool again  and draw a line between the two remaining endpoints.



Edit the Smoke

TUTORIAL 4
PAGE 14

1. Check the Style bar. It should read "Closed shape." If it does not, select the Edit tool



1. Select one endpoint and drag it on top of the other end-point to join them.



2. Click the [content menu mouse button](#) once to cancel the drawing tool and start editing the shape. The cursor changes from the Line tool to the Edit tool.



3. You can select any point handle and drag it to reshape the object if needed.


[Using Point Handles](#)



TUTORIAL 4 POINT HANDLES

If there is no point handle where you would like to make an adjustment, choose **Add Handle** from the Draw menu. The Edit tool changes to the Add Handle tool; point on a line or curve and click to add a handle. Pressing **F5** is a shortcut that does the same thing.






4. Click on a point handle. (If you don't see any handles, click on  to show them. You can drag control points to reshape curves.
5. If there are unneeded point handles on the shape, you can delete them. Click on a point handle to select it and choose **Clear** from the [Edit menu](#) or just press the **Delete** key on the keyboard.
6. When you are done adjusting the shape, click the [content menu mouse button](#). The cursor changes from the Edit tool to the Pointer, and object handles appear around the object.



Set Object Attributes

TUTORIAL 4
PAGE 16

1. Click the Fill style button  with the [content menu mouse button](#) and change the fill to **Solid**.
2. Click the Color style button  and change the fill color to **White**.
3. Click the Line style button  with the content menu mouse button and change the line width to **0.5** points.





HINT: One way to change the appearance of type is to change the line width. Select the text and change the line width just as in this step.



Create the Remaining Ship Component s





TUTORIAL 4
PAGE 17

Using the techniques learned by drawing the smoke, draw the rest of the shapes that make up the ship. Draw the shapes at any size desired; later you will resize the shapes in relation with each other.

1. Use the Line tool  and Curve tool  to draw the **smokestack shape.**
2. Use the Curve tool to draw the **deck shape.**
3. Use the Line and Curve tools to draw the **starboard hull shape.**
4. Use the Line and Curve tools to draw the **port hull shape.**
5. Create the waterline mark by clicking once on the rectangle from the Shapes flyout . Drag the lower right handle down to create a long, narrow rectangle. 

Color the Ship Component s

TUTORIAL 4
PAGE 18

1. Select the [smokestack shape](#) and change the fill color (under ) to **Black**.
2. Select the [starboard hull](#) shape and change the fill color to **Black**.
3. Select the [port hull shape](#). Select the Color style button  and change the fill color to **Blue** with **37% Black** added.
4. Select the [waterline mark](#) shape. Select the Color style button  and change the fill color to **Red** with **50% Black** added.


Size the Ship Component s

TUTORIAL 4
PAGE 19

Resize the shapes by selecting them and dragging corner handles. Don't worry about precision at this point; just approximate the size of each shape in relation to the others.



Position the Ship Components

TUTORIAL 4
PAGE 20


Move the shapes into their correct positions relative to each other. When in place, resize shapes as needed to make them fit properly.

You will likely need to make use of the following two commands in the Arrange menu:

Bring to Front **Ctrl+F**

Send to Back **Shift+F**





Bring to Front places the selected object on the top of all other objects. **Send to Back** places the selected object behind all others.

When the ship is complete, use the Block Select tool  to select all of the shapes and Group them (press **Ctrl+G**). Size and position the ship on the backdrop.



**Part 3: Add
Finishing
Elements:**

TUTORIAL 4
PAGE 21

1. Add the birds by drawing one with the Curve tool .
 2. Change the fill color to **White**, using the Color Style button .
 3. Size the object and place it on the backdrop. Add other birds by using the Duplicate tool .
- .


Add the Trees

TUTORIAL 4
PAGE 22

Remember that the Clip-Art Manager is the primary resource for the images you want. If the image you want is part of a larger clip-art image, it can be extracted from it.

1. Call up the Clip-Art Manager by clicking on the Clip-Art Manager tool .
2. Scroll through the **Collections** to find **Scenery/Landscapes**. Choose the **Scene-Jungle** image from that collection.

Add the image to a blank part of your drawing area. Ungroup it by holding down the **Shift** key as you press **G** on your keyboard.

3. Click among the images until you see **G>Coconut Tree** in the object viewer. Drag this image to the lower left of your drawing and delete the rest of the **Scene-Jungle** images.
4. Use the **Duplicate** tool  to create a second tree.


For the part of the tree that extends beyond the background frame, you can either select the bottom middle object handle and pull it upward, or you can place a rectangle with a Fill and Line of white over the extending part.

5. If you don't like the direction the tree is facing, you can flip it. Pull down the Arrange menu and select **Flip <>** to flip the tree horizontally.
(The other Flip command inverts objects vertically.)



Add the Text

TUTORIAL 4
PAGE 23

1. Click on the **Word tool**  in the toolbox. The **Enter/Edit Words** dialog box appears.
2. Type

Island Cruise Lines

The Best Vacation Ever!

Click on **Add**. The Pointer changes to the **Add Object cursor**.

3. Hold the mouse button and drag a bounding box at the lower right of the illustration to size the text.
4. Release the mouse button to add the text, then change the fill color to **Black**.
5. Save your completed illustration by pressing **F9**. In the resulting **Save Document As** dialog box, give your work the filename **cruise.GED**.

Be sure to place a checkmark in the Include Thumbnail box. Doing so will provide a small "preview" picture in the Open dialog box the next time you highlight the filename.



Tutorial 4 Review

TUTORIAL 4
PAGE 24

This tutorial showed you how to:

- Use the Line and Curve tools to draw freeform objects
- Stack freeform objects to create a finished image
- Change the line width of an object
- Mix colors using the Hues mixing method
- Flip an object

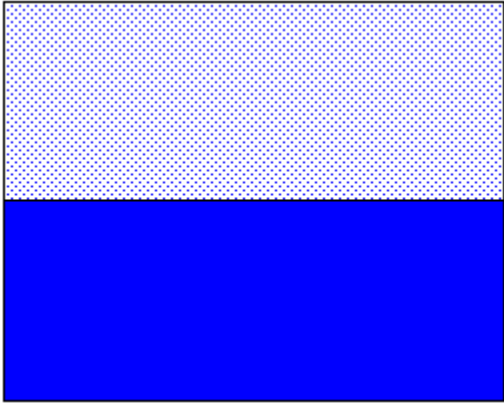
To begin the next tutorial, pull down the **Tutorials** menu and choose **5 Style Bundles**.

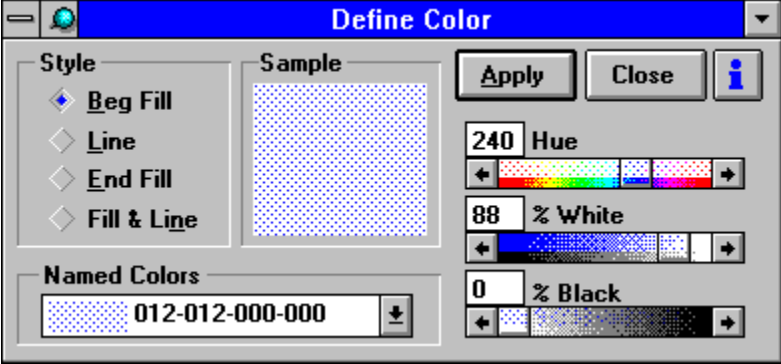


**Freeform
Drawing
Review**

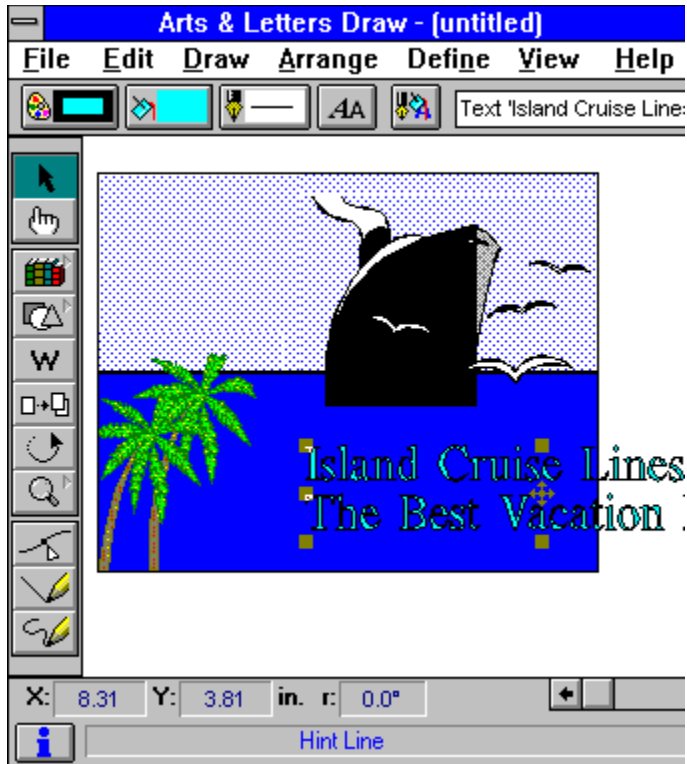
TUTORIAL 4
REVIEW














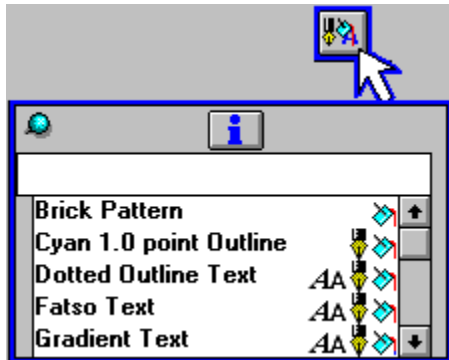
Step-by-Step Tutorial 5 Using Style Bundles

This tutorial shows you how to:

-  Use Style Bundles
-  Save and Apply styles to objects
- 

Using Style Bundles Preview

TUTORIAL 5
PREVIEW



From previous tutorials, you should know how to:

- Open Draw documents
- Add symbols and text to a document
- Choose a fill pattern
- Choose line types and widths
-

Open a New File

TUTORIAL 5
PAGE 2

Open the drawing from the last tutorial.

1. Pull down the **File menu** and choose **Open**.
2. Select the filename **cruise.GED** and click on **OK**. The file opens and its images display on your screen.



Set the Target Printer and Page Layout

TUTORIAL 5
PAGE 3

When you open a document in Draw, the page settings saved with that document become effective.

However, you should make a habit of checking the page and printer setup and changing them if desired. Doing so ensures that your document is properly sized and configured for the output device you are using.

1. Pull down the **File menu** and select **Print Setup**.
2. Change the orientation to **Portrait** and then click **OK**.
3. Then select **Page Setup** from the File menu and select **Use Printer Page, Get Printer minimums** and **Normal**. Then click **OK**.
4. Pull down the **View menu** and choose **Actual Size** view for the purposes of this tutorial.

 **Review this idea in Tutorial 1.**



Set Viewing Level


TUTORIAL 5
PAGE 4

Pull down the [View menu](#) and verify that the viewing level is **Actual Size**.



Understanding Style Bundles

TUTORIAL 5
PAGE 5

The Style bundles button  provides a number of ready-made effects that you can quickly add to objects in your Draw document.


All that is necessary is to select an object, then click on the Styles button. The effects in the scrolling list are applied to the selected object when you click on the style name.


Although ready-made, you should not think of these styles in a fixed way. Rather, use the style as a starting idea. For example, apply a style for its gradient of color, then go back to the object and change the line thickness using the Line style button.



Apply Styles

TUTORIAL 5
PAGE 6

If you are not using the drawing created in the previous tutorial, any object added to your screen (using the Shapes tool , for example) can illustrate Style changes.

1. In the cruise ship drawing, select the "sea and sky" object. **G>sea and sky** appears in the [object viewer](#).
2. Break apart the group by holding down the **Shift** key and pressing **G** on your keyboard.
3. Select the rectangle representing the sky. **Shape-rectangle** appears in the object viewer.
4. Click on the Style bundles button  and scroll in the list to the **Sunset background** style. The pouring bucket icon tells you that it is a Fill style. Click on the name and the image of the sky acquires the new fill pattern.

 [Click here to identify all object viewer icons.](#)



Saving and Applying Styles

TUTORIAL 5
PAGE 7

The styles of one object are easily applied to other objects.

1. Select the rectangle with the **Sunset background** Fill style.
2. From the [Define menu](#) click on **Save** to save all its style attributes.

-or-

Hold down the **Ctrl** key and press **R** on your keyboard.

3. Select another object. Click on **Recall** in the **Define** menu, or just hold down the **Shift** key and press **R**.




The style is applied to the object.



Tutorial 5 Review

TUTORIAL 5
REVIEW

This tutorial showed you how to:

-  Use Style Bundles
-  Save and Apply styles to objects
- 

Using Style Bundles TUTORIAL 5
Review REVIEW



Congratulations!
You have completed
the Draw Step-by-Step Tutorials.



