

Lesson 1: Illustrator Basics

Getting Started

Illustrator can be used to create professional graphic images or to edit graphic images created in other programs, such as Photoshop. To **create a new Illustrator document**, open Illustrator and choose:

File > New

The **New Document** dialog box will pop up (see Figure 3.3-1). You will be prompted to enter a filename and select certain **Artboard Setup** options, such as the Artboard size, units of measurement, and orientation. The Artboard setup size options include standard paper sizes (e.g., letter, legal and tabloid), as well as standard Web graphic sizes (e.g., 640 x 480 and 800 x 600). In addition, you can select a color mode, either CMYK (for print output) or RGB (for Web output).

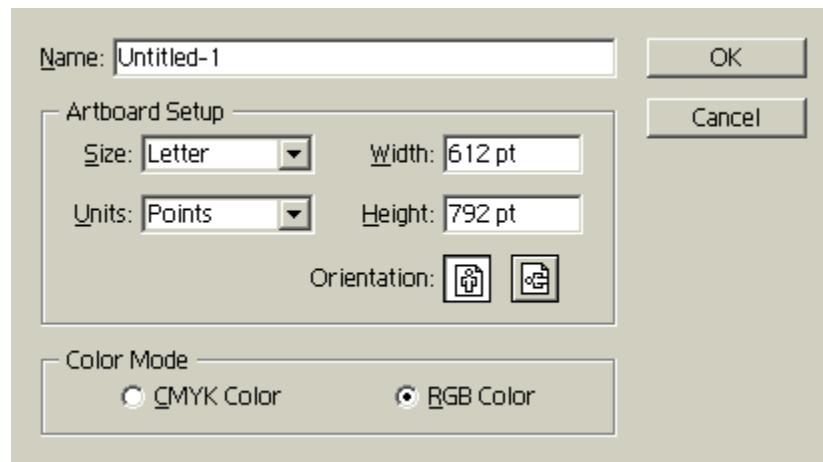


Figure 3.3-1: Illustrator New Dialog Box

To **change the Artboard size** after it is initially set, follow these basic steps:

File > Document Setup > edit Artboard Size field

Notice that the default unit of measurement is point size. To **change the units of measurement for the new file only**:

File > Document Setup > edit Units field

To **change the default units of measurement** for future documents:

Edit > Preferences > Units & Undo

The **Preferences** dialog box includes three fields for Units of measurement: General (used for rulers and dialog boxes), Stroke (used on the Stroke Palette), and Type (used on palettes associated with text such as the Character and Paragraph Palettes) (see Figure 3.3-2).

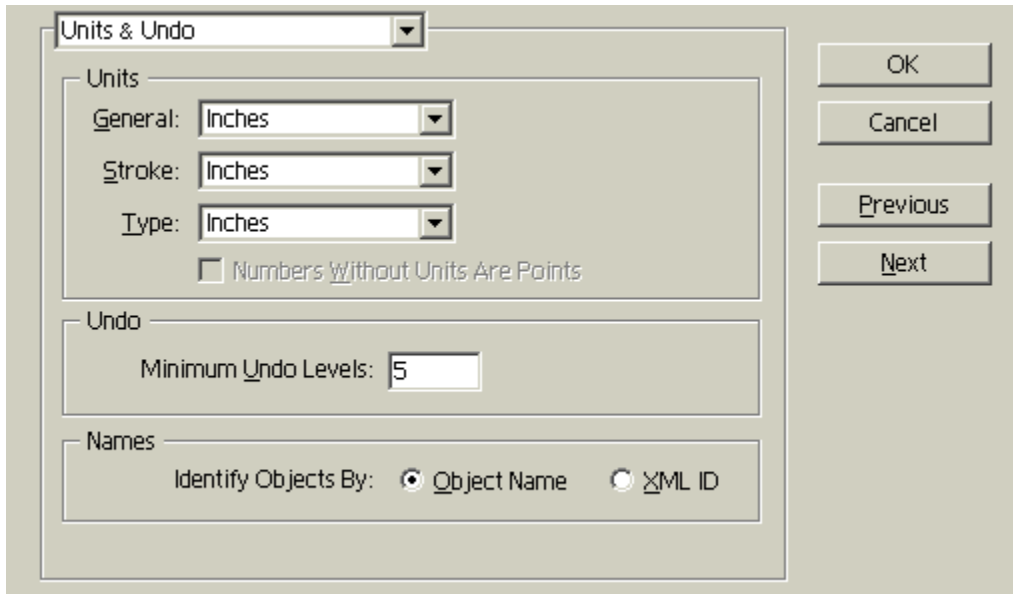


Figure 3.3-2: Illustrator Preferences Dialog Box

Notice that the Units & Undo preferences dialog box also includes a field to set the minimum number of undo levels.

Opening and Importing Graphic Images

There are two common ways to open images in Illustrator: the **Open** command and the **Place** command. Both options will import graphic images; however:

- The **Open** command creates a new Illustrator file containing the image (even if the image was created in a program other than Illustrator).

File > Open

- The **Place** command inserts the image into an open Illustrator document, i.e., the Place command only works when an Illustrator document is already open.

File > Place

Illustrator converts **vector graphics** (graphics made up of lines and curves defined by mathematical objects called vectors) into Illustrator **paths** (one or more straight or curved segments) that can be edited with any Illustrator tool. **Bitmap images** (images made up of pixels) can be opened in Illustrator and edited or modified with certain Illustrator tools.

In addition to the standard **File > Open** option, Illustrator includes a way to easily open any of the ten most recently opened files:

File > Open Recent > click filename

The Open Recent option displays the last 10 documents opened in Illustrator. Selecting a file from the list will automatically open that file in Illustrator. The nice thing about this feature is that you don't have to know the location or path of the file; you simply click on the filename and it opens.

As indicated above, the Place command only works when an Illustrator document is already open. Using the Place command allows the image to be embedded in or linked with the Illustrator file (see Figure 3.3-3).

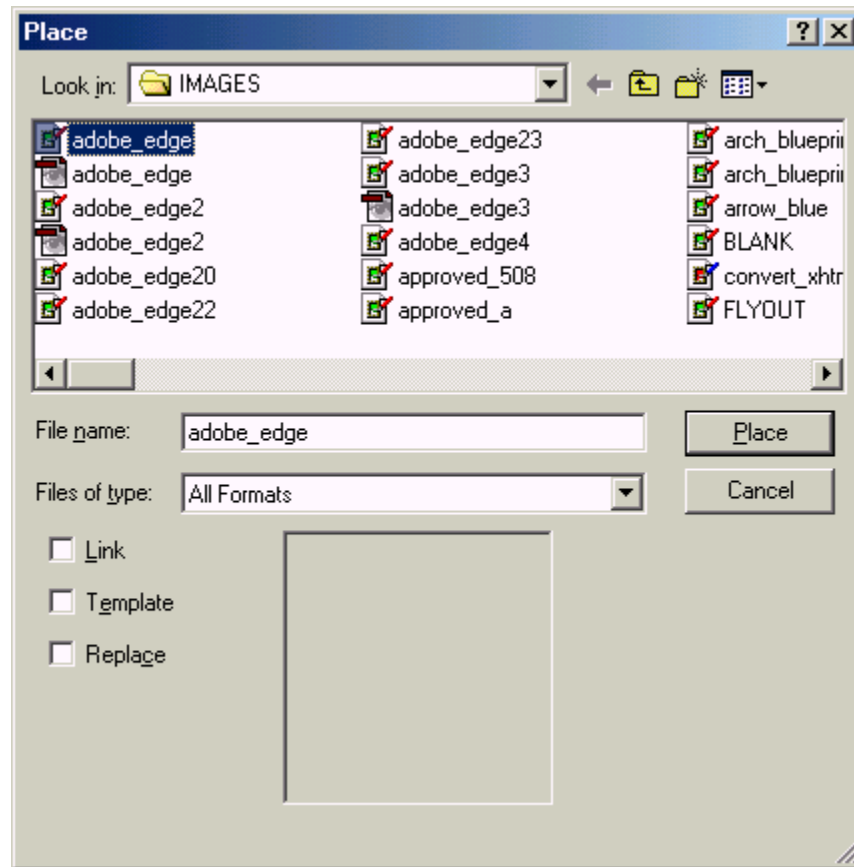
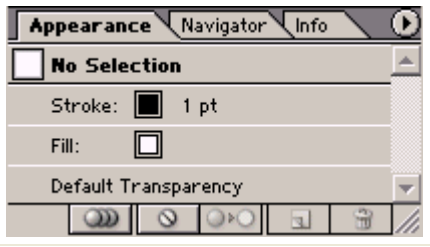
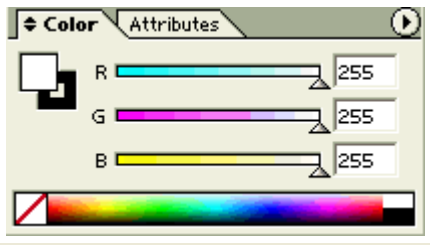


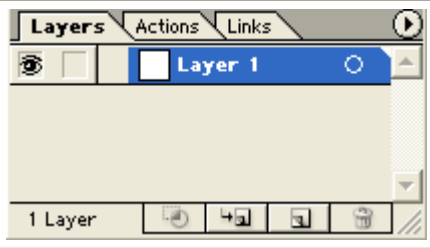


Figure 3.3-3: Illustrator Place Command Dialog Box

Embedding the image includes it in the Illustrator file. **Linked** files, on the other hand, are independent of the Illustrator file, therefore making the file size smaller. The Link checkbox is just below the Files of type field; check it to link the file rather than embed it. The **Links Palette** provides control to help manage linked images.

The Default Palettes

In addition to the Toolbox, the typical default palettes that open during the basic Illustrator startup are:

<p>Appearance — This palette shows the hierarchy of attributes applied to the artwork.</p>	
<p>Color — This palette applies color to an object's fill and stroke, as well as provides the ability to edit and mix colors. Notice the fill and stroke icons (as seen in the Toolbox previously) on the left side of the color palette.</p>	
<p>Transparency — This palette is used to specify the opacity and blending mode of objects.</p>	
<p>Styles — This palette lets you create, name, save, and apply sets of appearance attributes.</p>	
<p>Layers — This palette is used to add, delete, and select layers within the document.</p>	

Additional Information

- Illustrator palettes can be opened or closed by toggling them "on" and "off" via the Window Menu. Note that open palettes have a check mark to their left.
- Palettes in the work area can be closed by selecting the close button on the palette window.

Saving Images

As with many of the other Adobe applications included in this curriculum, Illustrator provides several save options from within the File menu:

1. **Save** — The Save option is typically used after a file has already been named and saved. Using the Save option integrates and saves any edits that occurred since the file was last saved. The Save option is available via keyboard shortcut (**Ctrl-S** for Windows and **Cmd-S** for Mac) or the File Menu:

File > Save

2. **Save As** — The Save As option is used to save: (1) a new file that has not been saved before; or (2) a file that has been saved previously but needs to be saved under a different name. When saving a file for the first time, there is no difference in using the Save option or the Save As option; they both bring up the Save As dialog box the first time a file is saved. To save a file using the Save As option, the menu steps are:

File > Save As

The Save As dialog box will ask you to identify the folder the file should be saved in, the filename, and the type or format of the file to be saved. The file type or format options include the default Illustrator format (.AI), Illustrator EPS format (.EPS), PDF format, as well as others. Each of file formats available within the Save As option can be re-opened and/or edited in Illustrator.

3. **Save a Copy** — The Save a Copy option allows the user to save a copy of the current file under a different name. What makes this option different from the others presented above is that when the Save a Copy option is used, the *copy* is saved while the user continues to work on the *current* file.

File > Save a Copy

4. **Save For Web** — The Save for Web option provides various options relevant for optimizing graphic images for use on the Web. We will review these options in detail in the graphics unit.

File > Save for Web

As with InDesign, Illustrator includes an option to revert to the previously saved version of a file. This feature comes in handy when you make a mistake and want to "get back" the last saved version of the file. The **Revert** option closes the file and re-opens the previously saved version of that file:

File > Revert

To **close** an open Illustrator document, use the following menu steps:

File > Close

Illustrator's Document Window and Artboard

The Illustrator **Document Window** (see Figure 3.3-5) includes the **Artboard/Page Boundary** (solid black border; thus the Artboard refers to the area inside this boundary) and the **Imageable Area** (dotted black border inside the solid black border). These borders are most important when dealing with images to be printed. For now, the important thing to know is that the Artboard is where all the action takes place in Illustrator; this is where you will create your graphics.

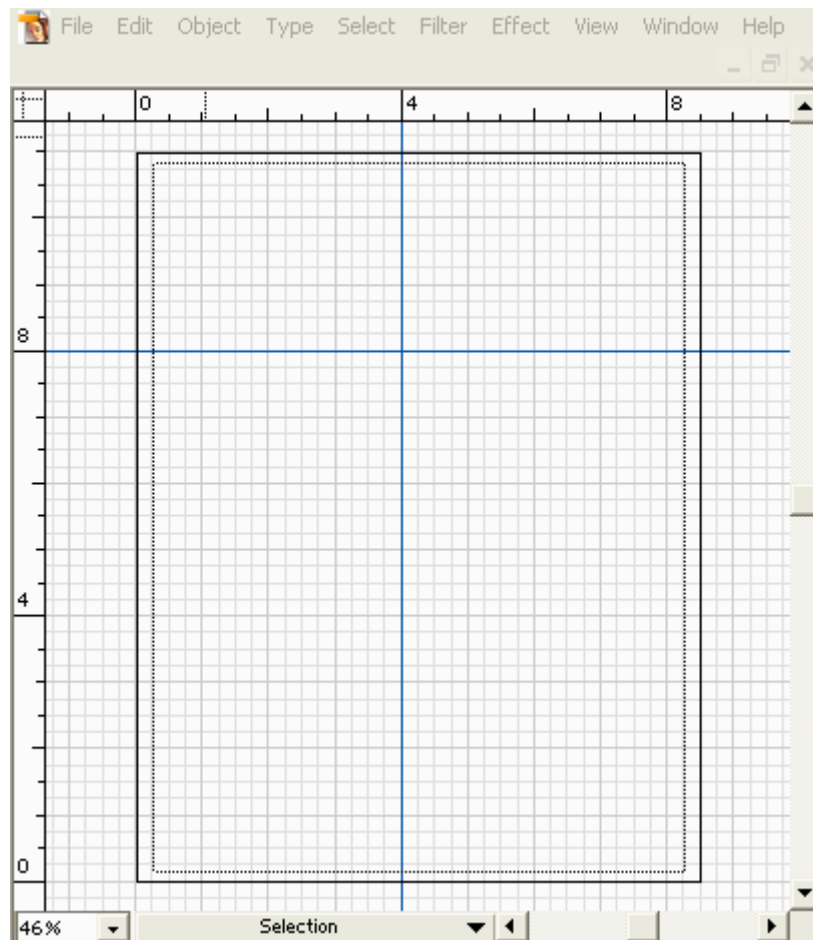


Figure 3.3-5: Illustrator Document Window

Like InDesign, Illustrator has a **Pasteboard Area/Scratch Area** (area outside the Artboard's borders) used to temporarily place objects. Any images within this area will be saved with the document, but will not show up when printing. The Artboard is always centered within the Pasteboard.

The Document Window also includes:

- The **Zoom** field, located at the bottom left of the Document Window, can be used to zoom the Artboard in or out. (In Figure 3.3-5, the zoom is set to 46%.)
- The **Status** bar, located to the right of the Zoom field, provides several categories that can be displayed, such as Current Tool, Current Date and Time, etc. (In Figure 3.3-5, the Status bar is set to Current Tool; it says "Selection" because the Selection Tool was the active tool at the time the screenshot was taken.)

There are several options available within the **View** menu that can come in pretty handy when working in the Artboard:

1. **Rulers** — Rulers are located on the top and left sides of the Document Window. They can help with precise positioning of objects within the Artboard. (The rulers are turned *on* in Figure 3.3-5.) To toggle rulers on and off:

View > Show Rulers *or* View > Hide Rulers

2. **Grid** — The grid appears in light gray within the Document Window and can also help with precise positioning of objects. (The grid is turned *on* in Figure 3.3-5.) To toggle the grid on and off:

View > Show Grid *or* View > Hide Grid

3. **Guides** — Guides are useful for aligning objects within the Artboard. They are created by dragging from the horizontal or vertical rulers to the desired location. For example, to create a horizontal guide, click and drag from the top ruler until the desired position is reached, then release the mouse button. Guides appear in blue when used within the Document Window. (Note that there is one horizontal and one vertical guide utilized in Figure 3.3-5.) Guides do not have to be toggled on via the View menu; however, they can be "locked" (unmovable after being initially placed) or "unlocked" (movable after being initially placed) by toggling the Lock Guides option on or off:


View > Guides > Lock Guides

In addition, guides can be hidden or cleared via the View menu:

View > Guides > Hide Guides *or* View > Guides > Clear Guides

Drawing and Selecting Basic Objects

Drawing Rectangles ↑

The **Rectangle Tool**  is located in the Toolbox, just under the Type Tool. Although the directions below specify how to create a rectangle, the same basic steps are used to create *any* of the objects available within the Rectangle Tool fly-out option. To **draw a rectangle** with no color, but a black edge, follow these steps:

1. Click the **Stroke** box in the Swap Fill/Stroke area of the Toolbox. The Fill and Stroke boxes with the red line through them in the upper left portion of the **Color Palette** indicate that no color is currently selected (see Figure 3.3-6).
2. Click in the Black color box at the bottom right of the Color Palette. Notice the cursor turns into an **eyedropper** when hovering over the RGB color spectrum as shown in Figure 3.3-6. Whatever color is currently selected for the fill color will fill the rectangle when it is drawn.
3. Click the Rectangle Tool.
4. Place the cursor within the Artboard.
5. Press the mouse button and drag diagonally to draw the rectangle.
6. Release the mouse button when the rectangle is the desired size.
7. Click a Selection Tool from the Toolbox.
8. Click in a blank area of the Artboard to deselect the rectangle.



Figure 3.3-6: Color Palette with Eyedropper Tool

To **create a rectangle with specific dimensions**, follow these steps:

1. Click the Stroke box in the Swap Fill/Stroke area of the Toolbox.
2. Click in the Black color box at the bottom right of the Color Palette.
3. Click the Rectangle Tool.
4. Click the Artboard where the upper left corner of the rectangle should appear.
5. Enter the desired width and height dimensions in the Rectangle dialog box.
6. Click OK.
7. Click a Selection Tool from the Toolbox.
8. Click in a blank area of the Artboard to deselect the rectangle.

To **change the stroke weight** from the default weight (thickness) of 1 point, follow these steps:

1. Follow steps 1-3 above.
2. Open the **Stroke Palette** by clicking the Stroke tab next to the Transparency Palette (see Figure 3.3-7).
3. Adjust the weight of the stroke by increasing or decreasing the stroke point size.
4. Now draw the rectangle.

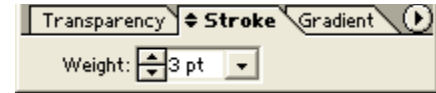



Figure 3.3-7: Stroke Palette

Drawing Lines

The **Line Segment Tool**  is in the Toolbox, just to the left of the Rectangle Tool. To **draw a black line**, follow these steps:

1. Click the Stroke box in the Swap Fill/Stroke area of the Toolbox.
2. Click in the Black color box at the bottom right of the Color Palette.
3. Click the Line Segment Tool.
4. Place the cursor within Artboard where the line should begin.
5. Press the mouse button and drag to draw the line.
 - o Hold down the Shift key while dragging to constrain the line to 45-degree angles (which includes horizontal and vertical lines as well as other multiples of 45).
 - o Hold down the Opt (Macintosh) or Alt (Windows) key while dragging if you prefer to draw the line from its center outward.
6. Release the mouse button where the line should end.
7. Click a Selection Tool from the Toolbox.
8. Click in a blank area of the Artboard to deselect the line.

To **create a line with specific dimensions** (length and angle), follow these steps:

1. Click the Stroke box in the Swap Fill/Stroke area of the Toolbox.
2. Click in the Black color box at the bottom right of the Color Palette.
3. Click the Line Segment Tool.
4. Click within the Artboard where the line should begin.
5. Enter the desired length and angle dimensions in the Line dialog box.
6. Click OK.
7. Click a Selection Tool from the Toolbox.
8. Click in a blank area of the Artboard to deselect the line.

The thickness of the line can be adjusted by using the Stroke Palette, as described above for drawing a rectangle.

Additional Information

You can view your drawing in any of the three viewing options available via the **View** menu:

- **Preview** (all fill and stroke colors are visible)
- **Outline** (displays the outline of the drawing and the anchor points)


- **Pixel Preview** (displays vector drawings as though they were rasterized for the Web)





Selecting Basic Objects




There are *four selection tools* available in the top section of the Illustrator Toolbox — *six*, really, because two of them have fly-out menus (see Figure 3.3-8).





Figure 3.3-8:
Toolbox Selection
Tools

1. **Selection Tool**  — This tool is used to select or move entire paths. It is also used to rotate or resize a path or object. All points within the object are selected and enclosed in a bounding box when this tool is used.

To do this:	Follow these steps:	Image:
Select a path	<ol style="list-style-type: none"> 1. Click the Selection Tool. 2. Click the path to be selected. Selection handles will appear. 	
Move a path	<ol style="list-style-type: none"> 3. Click the Selection Tool. 4. Move the cursor until the Move Cursor is visible. 5. Click and drag to move the object. 	
Rotate a path	<ol style="list-style-type: none"> 6. Click the Selection Tool. 7. Move the cursor to a corner of the path until a double arrow appears. 8. Click and rotate the object. 	
Resize a path	<ol style="list-style-type: none"> 9. Click the Selection Tool. 10. Move the cursor to a selection handle until a straight double arrow appears. 11. Click and drag to resize. 	

- 2.
3. **Direct Selection Tool**  — This tool is used to select individual points of a path or object.
4. **Group Selection Tool**  — This tool is used to select nested groups of points or objects.
5. **Lasso Tool**  — This tool is used to select paths. When this tool is selected, the cursor will turn into a lasso. Simply drag the freeform marquee created by the lasso around the desired paths.

6. **Direct Select Lasso Tool**  — This tool is used to select points on one or more objects. Simply drag the freeform marquee created by the lasso around the desired areas of the object(s).
7. **Magic Wand Tool**  — This tool selects objects based on their similarity to several different options, including fill color, stroke color, stroke weight, etc.







To **deselect** a path or object:

Select > Deselect

Working with Type

The Type Tools

Illustrator offers six tools to integrate type into an image. There are two **standard** type tools, two type tools used to fill a specified **area**, and two type tools to follow a **path**. You can also group the type tools according to whether they create **horizontal** or **vertical** type (three of each). The six type options are described in the table below:

	Horizontal	Vertical
Standard	 Standard Type Tool — Creates type in a standard type block	 Vertical Type Tool — Creates a vertical type block
Area	 Area Type Tool — Creates type on the inside of an opened or closed path	 Vertical Area Tool — Creates vertical type on the inside of an opened or closed path
Path	 Path Type Tool — Creates type that follows the outer edge of a path	 Vertical Path Tool — Creates vertical type that follows the outer edge of a path

Creating Type

Creating type in Illustrator is similar to creating type in other Adobe applications. We'll start with how to create type within an Illustrator file and then discuss how to modify the character and paragraph attributes of the entered text.

Creating Standard Type

1. Click the desired standard type option (i.e., Type Tool or Vertical Type Tool).
2. Click in the Black color box at the bottom right of the Color Palette.
3. Click on the Artboard where the text should begin.
4. Enter desired text.
5. Click a Selection Tool from the Toolbox.
6. Click in a blank area of the Artboard to deselect the type.

Creating Area Type

1. Click the desired area type option (i.e., Area Type Tool or Vertical Area Type Tool).
2. Click in the Black color box at the bottom right of the Color Palette.
3. Click on the edge of the object to be filled with type.
4. Enter desired text.
5. Click a Selection Tool from the Toolbox.
6. Click in a blank area of the Artboard to deselect the type.

Creating Path Type

1. Click the desired path type option (i.e., Path Type Tool or Vertical Path Type Tool).
2. Click in the Black color box at the bottom right of the Color Palette.
3. Click on the edge of the path to be followed.
4. Enter desired text.
5. Click a Selection Tool from the Toolbox.
6. Click in a blank area of the Artboard to deselect the type.

The Character and Paragraph Palettes

The Character Palette ↑

The Illustrator **Character Palette** (see Figure 3.3-9) contains controls similar to those found in InDesign's Character Palette: Font, Style, Size, Leading, Kerning, and Tracking. In addition, clicking the Palette Menu button in the upper right of the palette provides a Show Options/Hide Options toggle. When additional character options are shown, they include: Vertical Scale, Horizontal Scale, and Baseline Shift.

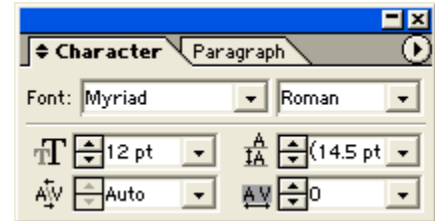


Figure 3.3-9: Character Palette

What text actually *changes* when these controls are set? We answered this question in our discussion of the InDesign Character Palette. Type in Illustrator works the same way:

- To affect *all* the text within the text frame, select the text block with the Selection Tool, then make the character setting changes.
- To change the character settings for a *specific portion* of text already entered, click the Type Tool, select the text, and then make the character setting changes.
- To assign character settings *before* entering text into a text frame, place the cursor where you want the changes to begin, make the desired character setting changes, and then enter the desired text.

The Paragraph Palette ↑

Like the Character Palette, the Illustrator **Paragraph Palette** (see Figure 3.3-10) contains controls similar to those found in InDesign's Paragraph Palette: the five horizontal alignment buttons, Left Indent, Right Indent, First Line Left Indent, and Space Before Paragraph. There are additional options available when the Palette Menu's Show Options toggle is turned on: Word Spacing and Letter Spacing.

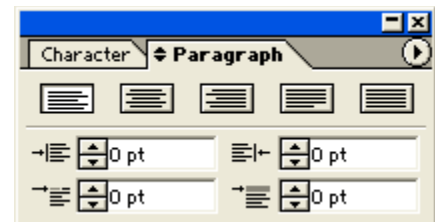


Figure 3.3-10: Paragraph Palette