INTRODUCING ILLUSTRATOR CS5

Adobe Illustrator CS5 is an illustration and drawing program, designed specifically for the creation and output of vector graphics. Illustrator is used widely in industries such as graphic design, web design, desktop publishing, illustration, in fact, wherever there is a need to create print-based and digital art.

Whether you're a graphic designer, illustrator, artist, desktop publisher, or just have a keen interest to learn, Illustrator CS5 offers many tools and features to help you to create professional-looking artwork and documents.

In this chapter you will take a tour of Illustrator CS5 so that you can become familiar with the Illustrator workspace. So, let's get started!

In this session you will:

- ✓ gain an understanding of vector graphics and bitmap images
- ✓ learn how to open an *Illustrator CS5* document
- ✓ gain an understanding of the *Illustrator CS5* workspace
- ✓ gain an understanding of artboards
- ✓ gain an overview of the tools on the *Tools* panel
- ✓ learn how to work with the *Tools* panel
- ✓ learn how to display hidden tools
- ✓ gain an understanding of the panel dock, panels and panel groups
- ✓ learn how to display and hide panels and panel groups
- ✓ learn how to dock and undock panels
- ✓ learn how to move and resize panels
- ✓ learn how to select and save a workspace
- ✓ learn how to work with the tools and options on the *Control* panel
- ✓ learn how to navigate the canvas using the *Hand* tool
- ✓ learn how to use the *Navigator* panel
- ✓ learn how to adjust the magnification of a document
- ✓ learn how to use the *Zoom* tool
- ✓ learn how to view and change preferences
- ✓ learn how to close a document and exit *Illustrator CS5*.

UNDERSTANDING VECTOR GRAPHICS

When you create artwork in Illustrator, you are creating vector art or graphics. Vector graphics are essentially geometric shapes based on mathematical equations. Shapes include lines, curves and points. Unlike bitmap graphics, which are made up of pixels (squares of colour), vector graphics can be resized infinitely without loss of image quality.

What Are Vector Graphics?

Vector graphics are shapes made up of *lines*, *curves* and *points* (called *anchor* points), to create artwork. Vector graphics are based on mathematical computations to determine their shape, dimension and position. For example, your art will be a certain size on the page (measured as *width* and *height*) and will be located at a specific position on a page (the *x* and *y* coordinates). Essentially, a vector graphic is a mathematical equation that makes up your image or artwork.

One distinct characteristic of vector graphics is that they can be scaled (resized) upwards infinitely without loss of image quality (see picture below). This makes vector graphics perfect for any artwork that needs to be resized. For example, you could create a company logo that is *3 cm x 3 cm* and scale that same art

Vector Vs. Bitmap

Bitmap graphics (or *raster* graphics) are images made up of a rectangular grid of *pixels*. A pixel is a tiny square or dot of colour, mapped to a specific location on the image. A photograph is an example of a bitmap image. A single bitmap graphic could be made up of thousands (or millions!) of pixels.

Because bitmap graphics are based on pixels, they lose sharpness when scaled upwards. You may have heard the term 'pixelated'. This occurs when the image is scaled upwards so that you can actually see the pixels that make up the image. Pixelated images usually look a little blurry and distorted. Image clarity is compromised when increasing the size of bitmap images (see picture below).

The original image (above) is sharp, while the scaled image (right) is quite pixelated and has lost clarity and detail

OPENING AN ILLUSTRATOR DOCUMENT

Before you can start using **Adobe Illustrator CS5**, you first need to open the program! To introduce you to Illustrator and the tools you'll be using throughout this course, you will open

Illustrator and then open an existing Illustrator document. When you open Illustrator, the **Welcome Screen** is displayed, and you can select the document type that you want to open or create.

Try This Yourself:

Open File

Before starting this exercise you MUST open the file [Primary File]...

1 Select **Start** > **All Programs** > **Adobe Illustrator CS5**, or **Start** > **All Programs** > **Adobe Design Premium CS5** > **Adobe Illustrator CS5**
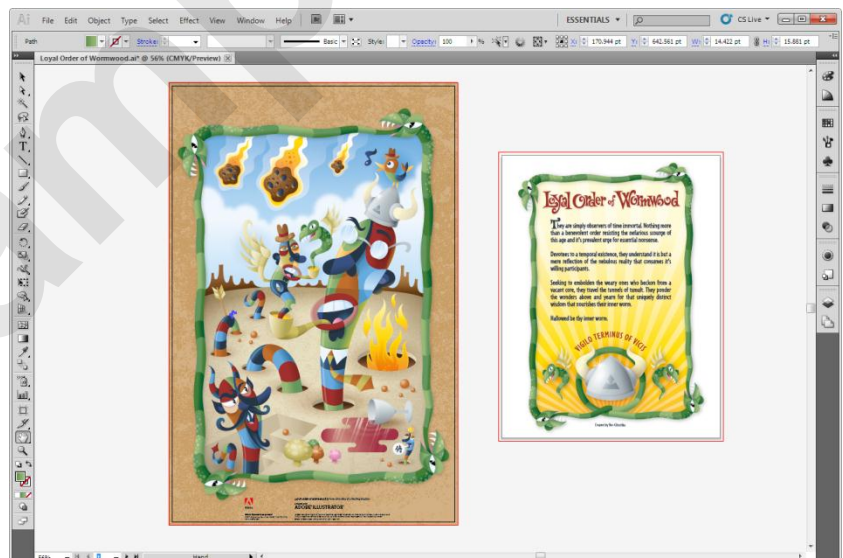
Illustrator will open and the Welcome Screen will be displayed. If the Welcome Screen is not displayed, select Help > Welcome Screen

2 Select **File** > **Open**

3 Navigate to **C:\Program Files\Adobe\Adobe Illustrator CS5\Cool Extras\en_GB\Sample Files\Sample Art** to open the **Sample Art** folder

4 Click on **Loyal Order of Wormwood.ai** to select it, then click on **[Open]**

After a few moments the artwork will open in the Illustrator window. This is one of several sample artworks available in the Sample Art folder

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For Your Reference…

To **open** an **Illustrator document**:

1. Open **Adobe Illustrator CS5**
2. Select **File** > **Open**
3. Navigate to and select the required **Illustrator** (**.ai**) file
4. Click on **[Open]**

Handy to Know…

- To ensure that the **Welcome Screen** is displayed each time you open Illustrator, display the Welcome Screen by selecting **Help** > **Welcome Screen**, then click on **Don't show again** at the bottom of the Welcome Screen to deselect this option.

THE ILLUSTRATOR CS5 WORKSPACE

If you're familiar with using Adobe products, you will notice that the layout of the Illustrator window is similar to other Adobe programs. There are several elements in the Illustrator workspace that you need to become familiar with so that you can use the program effectively. Here you will be given an overview of the Illustrator workspace and its various elements.

1	***Application bar***	Contains menus and options for arranging documents, and access to ***Adobe Bridge*** (Adobe's answer to image file management). Also contains the ***Workspace Switcher***, a tool for selecting and customising a workspace to suit your design needs.
2	***Control panel***	Displays options and tools for the currently selected object. So, if you have a shape selected, the ***Control*** panel will display a range of tools relevant to working with that shape.
3	***Panel dock***	Panels contain tools for editing objects and object ***attributes***. For example, the ***Gradient*** panel contains options for applying and editing gradients. The panel dock contains a number of default panels and panel groups (defined by the Workspace Switcher), but you can add or remove panels via the ***Window*** menu.
4	***Tools panel***	Contains many of the tools you will need to create your art and apply effects, such as drawing shapes or freehand drawing. You will learn more about these as you complete this course.
5	***Canvas***	This is the white area of the document surrounding the artboard/s. Art can be created on the canvas until you're ready to place it on your artboard. The canvas that you see is part of the ***document window***.
6	***Artboards***	Represent the areas of the canvas that contain printable regions, that is, your finished art. You can set up as many artboards in a document as you need. You will learn more about artboards as you complete this course.
7	***Status bar***	Displays information about the status of the current document, such as the current magnification (zoom) and which page (artboard) you are currently viewing (is active).
8	***Document tabs***	Each tab represents an open document and displays the name of the document (there is only one document open in the picture above). Click on a tab to display that document.

UNDERSTANDING ARTBOARDS

Artboards in Illustrator represent the areas of the document that contain your artwork and what will be printed. You can create as many artboards as you need in a document (up to 100!) for whatever you are working on. For example, if you are designing a letterhead and business card for a client, you might create two artboards—one for the letterhead and one for the business card.
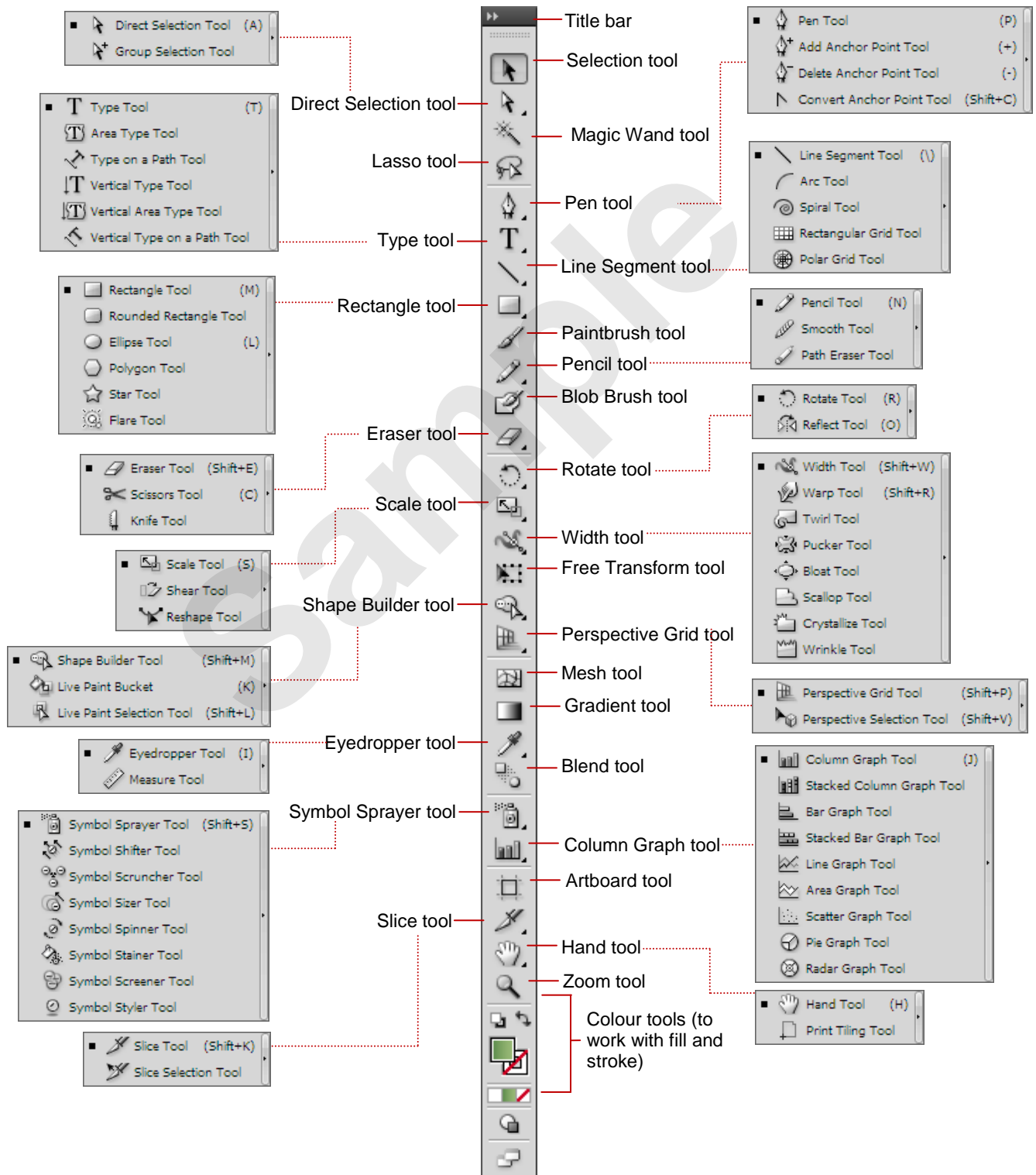

1	*Printable area*	Contains the printable area of your artwork (this takes into account that most printers cannot print to the edge of the page). Any artwork that falls within this area will be printed on your printer.
2	*Non-printable area*	The area between the printable area and the edge of the page that will not be printed. The printable and non-printable areas of your document will be determined by your printer and printer settings.
3	*Artboard*	Represents the entire area that contains printable artwork (even though the artboard also contains a non-printable area, remember that this is only defined by your printer; professional printers can print to the edge of the page). You define the size of the artboard/s during document setup.
4	*Bleed area*	**Bleed** is the artwork that extends outside the printable area or document edge. Bleed is often included as a margin of error: to ensure that the ink will still print to the edge of the page even once the document is trimmed.
5	*Canvas*	The area of the document that will not be printed. Use this canvas to place and edit objects until you are ready to include them in your artwork.

THE TOOLS PANEL

The *Tools* panel contains many of the tools you will need to create and edit objects and art, such as tools for selecting, drawing, painting, editing and navigating just to name a few! Tools with a

black arrow ◢ contain additional tools. These are displayed when you click and hold the left mouse button on the tool. Here is an overview of the tools on the *Tools* panel.

Direct Selection Tool (A)
Group Selection Tool

Type Tool (T)
Area Type Tool
Type on a Path Tool
Vertical Type Tool
Vertical Area Type Tool
Vertical Type on a Path Tool

Rectangle Tool (M)
Rounded Rectangle Tool
Ellipse Tool (L)
Polygon Tool
Star Tool
Flare Tool

Eraser Tool (Shift+E)
Scissors Tool (C)
Knife Tool

Scale Tool (S)
Shear Tool
Reshape Tool

Shape Builder Tool (Shift+M)
Live Paint Bucket (K)
Live Paint Selection Tool (Shift+L)

Eyedropper Tool (I)
Measure Tool

Symbol Sprayer Tool (Shift+S)
Symbol Shifter Tool
Symbol Scruncher Tool
Symbol Sizer Tool
Symbol Spinner Tool
Symbol Stainer Tool
Symbol Screener Tool
Symbol Styler Tool

Slice Tool (Shift+K)
Slice Selection Tool

Direct Selection tool
Lasso tool
Pen tool
Type tool
Rectangle tool
Eraser tool
Scale tool
Shape Builder tool
Eyedropper tool
Symbol Sprayer tool
Slice tool

Title bar
Selection tool
Magic Wand tool
Pen tool
Line Segment tool
Paintbrush tool
Pencil tool
Blob Brush tool
Rotate tool
Width tool
Free Transform tool
Shape Builder tool
Perspective Grid tool
Mesh tool
Gradient tool
Blend tool
Column Graph tool
Artboard tool
Hand tool
Zoom tool
Colour tools (to work with fill and stroke)

Pen Tool (P)
Add Anchor Point Tool (+)
Delete Anchor Point Tool (-)
Convert Anchor Point Tool (Shift+C)

Line Segment Tool (\)
Arc Tool
Spiral Tool
Rectangular Grid Tool
Polar Grid Tool

Pencil Tool (N)
Smooth Tool
Path Eraser Tool

Rotate Tool (R)
Reflect Tool (O)

Width Tool (Shift+W)
Warp Tool (Shift+R)
Twirl Tool
Pucker Tool
Bloat Tool
Scallop Tool
Crystallize Tool
Wrinkle Tool

Perspective Grid Tool (Shift+P)
Perspective Selection Tool (Shift+V)

Column Graph Tool (J)
Stacked Column Graph Tool
Bar Graph Tool
Stacked Bar Graph Tool
Line Graph Tool
Area Graph Tool
Scatter Graph Tool
Pie Graph Tool
Radar Graph Tool

Hand Tool (H)
Print Tiling Tool

WORKING WITH THE TOOLS PANEL

The **Tools** panel contains many of the tools you will need to create art and work with objects. The **Tools** panel, as with any panel in Illustrator, can be moved and resized to suit your needs. It can also be **docked** and **undocked**. Docked panels are positioned along the sides of the screen, while undocked panels can sit anywhere on-screen.

Try This Yourself:

Continue using the previous file with this exercise...

1 Hover over each tool on the **Tools** panel to display a **tool tip** showing the name of the tool

2 Click on the **Selection** tool in the **Tools** panel or press V to make the tool active

Many tools have keyboard shortcuts...

3 Click and hold the left mouse button on the **Direct Selection** tool to reveal a menu of additional tools

4 Repeat step **3** for the **Line Segment** tool

5 Click on the double arrow in the **Tools** panel **title** bar to view the tools in two columns

6 Click on the double arrow again to view the **Tools** panel in a single column

7 Click and hold the left mouse button on the **Tools** panel **title** bar and drag to the centre of the screen, then release the mouse button

Panels can be undocked (floating), that is, sit wherever you'd like...

8 Click and hold the left mouse button on the **Tools** panel **title** bar and drag to the very left of the screen; when you see a blue line appear along the left side of the screen, release the mouse button to restore the panel to its original position

1 Loyal Order of Wormwood.ai*
Direct Selection Tool (A)

3 Loyal Order of Wormwood.ai*
Direct Selection Tool   (A)
Group Selection Tool

5

For Your Reference…

To **display** the **Tools panel** in one or two columns:

1. Click on the double arrow on the **title** bar of the **Tools** panel

Handy to Know…

- Many of the tools on the **Tools** panel can be activated by pressing the relevant keyboard shortcut key. This is displayed when you hover over the tool to display the **Tool Tip**. The letter that appears after the tool name is the shortcut key that you can press to activate the tool.
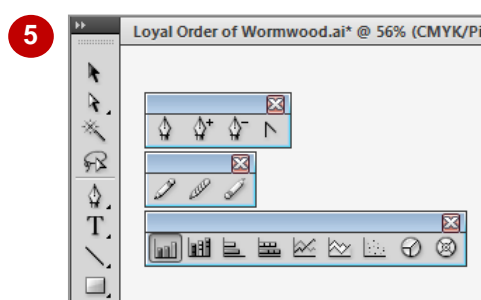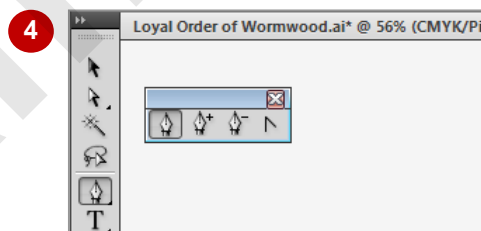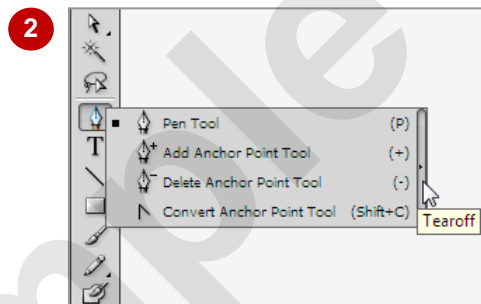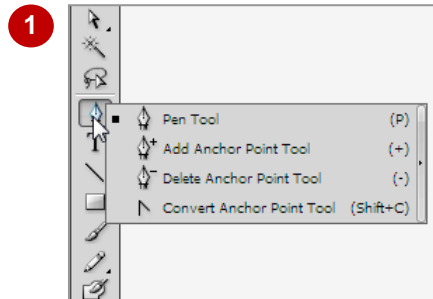
DISPLAYING HIDDEN TOOLS

The **Tools** panel contains many tools. But what you see is just the start, really. Some of the tools on the **Tools** panel contain a black arrow ◢ at their bottom right corner. This means that you can expand the tool to reveal even more tools! You can also 'tear off' the hidden tools to be displayed on a mini toolbar. Perfect for when you need to access the same tools repeatedly.

Try This Yourself:

Continue using the previous file with this exercise...

1 Click and hold the left mouse button on the **Pen** tool to reveal a menu of hidden tools

2 Continue holding down the left mouse button and drag the pointer to the right edge of the hidden tools menu

3 When the bar along the right edge is depressed (selected), release the mouse button

The Pen toolbar will appear with all of the Pen tools...

4 Click on the *title* bar of the **Pen** toolbar and drag the toolbar to near the top of the document window, as shown, then release the mouse button

5 Repeat steps *1* to *3* to display the **Pencil** and **Column Graph** toolbars

6 Drag the **Pencil** and **Column Graph** toolbars to sit below the **Pen** toolbar, as shown

Each toolbar should now be sitting one under the other...

7 Click on **close** on each toolbar to close all toolbars

For Your Reference…

To **display hidden tools** in the **Tools panel**:

1. Click and hold down the left mouse button on the tool that appears with a black arrow ◢
2. Drag the pointer to the right edge of the menu
3. When the bar is depressed (selected) release the mouse button

Handy to Know…

- Double-click on the title bar of a toolbar to minimise the toolbar.
- To turn **Tool tips** off and on, select **Edit** > **Preferences** > **General**, then select or deselect **Show Tool Tips**. Click on **[OK]**.

UNDERSTANDING PANELS

Much of the work you do in Illustrator will involve accessing panels and using panel options to edit your art and work with objects. The most commonly-used panels are accessed via the *panel dock* along the right side of the document window. However, you can also add and remove panels as required. All panels can be displayed by selecting the panel from the **Window** menu.

The Panel Dock

The *panel dock*, located along the right edge of the document window, contains some of the most commonly-used *panels* and *panel groups*. A panel group is a group of like panels that appear together. For example, if you open the *Swatches* panel you will see two *panel tabs* on the *tab bar*, which match the panels in this panel group (panels below).

The Window Menu

If you need to use a panel that is not sitting in the *panel dock*, you can access it from the **Window** menu. When you select a panel from the **Window** menu, the panel will appear undocked (or 'floating') in your document window.

The Anatomy Of A Panel

Each panel contains a range of options for editing your artwork in some way. For example, the *Stroke* panel contains options for modifying and working with strokes (outlines).

While the appearance of each panel differs depending on the options available, there are some common elements (as shown below) you need to be aware of so you can work with panels and panel options effectively.

The panel dock contains commonly-used panels and panel groups

Panel tool

Panel group

Panel tabs: click on a panel tab to display the panel within that panel group

Tab bar   Title bar

Show/Hide panel

Panel options menu

Resize panel
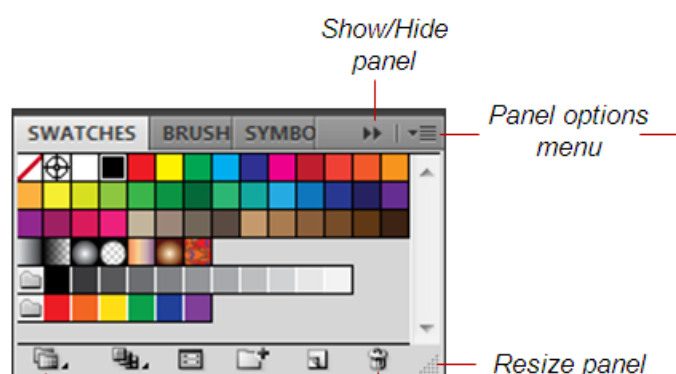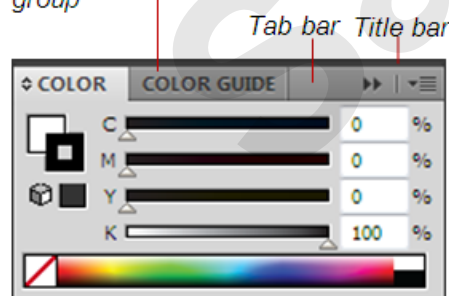
Further options and tools relevant to the panel

	Hide Options
	Edit Colors...
	Save Colors as Swatches
	Color Guide Options...
✓	Show Tints/Shades
	Show Warm/Cool
	Show Vivid/Muted

DISPLAYING AND HIDING PANELS

The *panel dock* sits along the right side of the screen, and contains a number of panels and panel groups for commonly-used editing tools. A *panel group* consists of two or more related panels. Each panel on the panel dock is grouped with other panels. Each panel group is divided by a black line. You can display and hide panels via the panel dock or the **Window** menu.

Try This Yourself:

Continue using the previous file with this exercise...

1 Click on *Colour* 🎨 on the *panel dock*

The Colour panel will be displayed (expanded)...

2 Click on the *Colour Guide* tab on the *tab bar* of the *Colour* panel

The Colour Guide is another panel that is part of this panel group. Notice that Colour Guide ▲ in the panel dock will also be selected...

3 Click on the double arrow ▶▶ on the title bar of the *Colour Guide* panel to collapse (hide) the panel
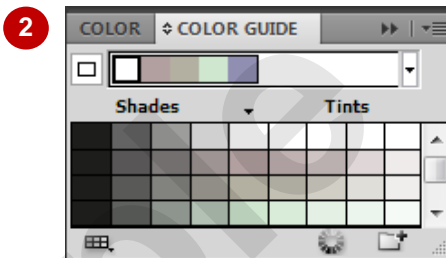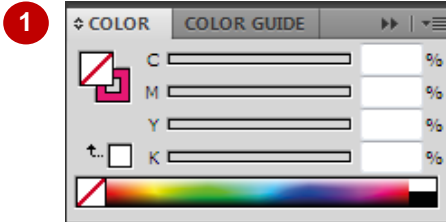
4 Select **Window** > **Navigator** to display the *Navigator* panel

The Navigator panel will be displayed on screen as a floating panel, that is, it is not docked to a toolbar...

5 Repeat step *4* to display the *Pathfinder* panel

Panels will stay open until you hide them...

6 Double-click on the *tab bar* of the *Pathfinder* panel (as shown) to reduce the size of the panel

1

2

4

5

6
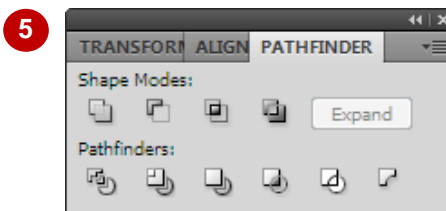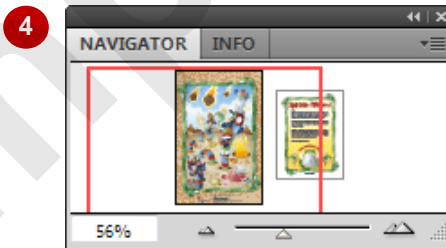
For Your Reference…

To *display* a *panel*:
1. Click on the panel on the *panel dock*, or Select **Window**, then select a panel

To *hide* a *panel*:
1. Click on the double arrow ▶▶ in the title bar of the panel

Handy to Know…

- Press `Tab` to display or hide all panels, including the *Tools* and *Control* panels.
- To hide or display only the *panel dock*, press `Shift` + `Tab`.
- Click on the double arrow in the title bar of the *panel dock* to display or hide all panels.

DOCKING AND UNDOCKING PANELS

You will find that as you work with Illustrator you will want to customise the workspace to suit your needs. This might include ensuring that only the panels that you use often sit permanently on the

panel dock, thus speeding up document production. As well as displaying and hiding panels, you can also dock panels to the panel dock, and undock panels.

Try This Yourself:

Continue using the previous file with this exercise...

1. Click and hold the left mouse button on the title bar of the *Pathfinder* panel

2. Drag the panel below the last tool on the *panel dock*

3. When a blue line appears below the last panel release the mouse button

   The Pathfinder tool will now be docked...

4. Repeat steps *1* to *3* to dock the *Navigator* panel below *Artboards* on the *panel dock*
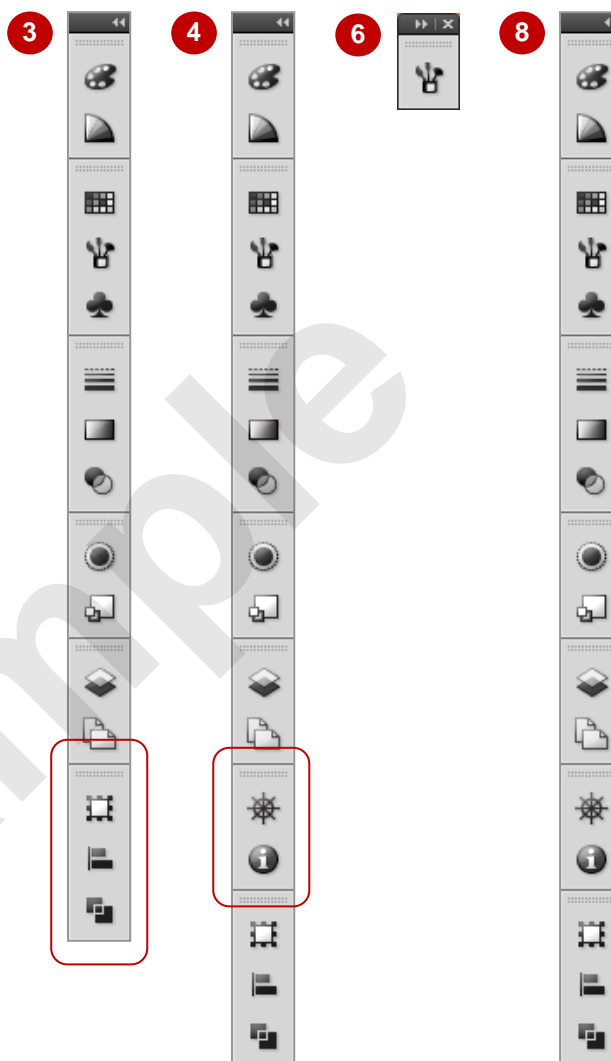
5. Click and hold the left mouse button on *Brushes* in the *panel dock*

6. Drag the panel onto the *canvas* (document window) and release the mouse button

   The collapsed Brushes panel will now be floating...

7. Click on the double arrow on the collapsed *Brushes* panel to expand the panel

8. Repeat steps *1* to *3* to dock the *Brushes* panel below *Swatches* on the *panel dock*

For Your Reference…

To *undock* a *panel*:

1. Click and hold the left mouse button on a panel on the *panel dock* and drag to the desired location, then release the mouse button

To *dock* a *panel*:

1. Click and hold the left mouse button on the panel title bar and drag onto the *panel dock*

Handy to Know…

• Hover over the left edge of the *panel dock*, and when the pointer changes to a double-headed arrow, click on and drag the panel dock to the left. The names of each panel are revealed! Use the same method to drag the panel dock to its original state.

MOVING AND RESIZING PANELS

Panels can be positioned anywhere in the document window. As well as being able to move panels to suit your needs, you can also resize panels, that is, increase the height and width of a panel. This might be necessary where the content of the panel is greater than its default size. Panels must first be undocked before they can be moved or resized.

Try This Yourself:

Continue using the previous file with this exercise...

1 Expand the *Pathfinder* panel, then click on the *tab bar* and drag so that it sits next to the *Tools* panel

2 Repeat the above step to move the *Layers* panel below the *Pathfinder* panel, and when a blue line appears along the top of the *Layers* panel, release the mouse button

*These two panels will now be docked together and will move as one. Now you'll increase the size of the Layers panel…*

3 Hover over the bottom edge of the *Layers* panel until the mouse pointer becomes a double-headed arrow

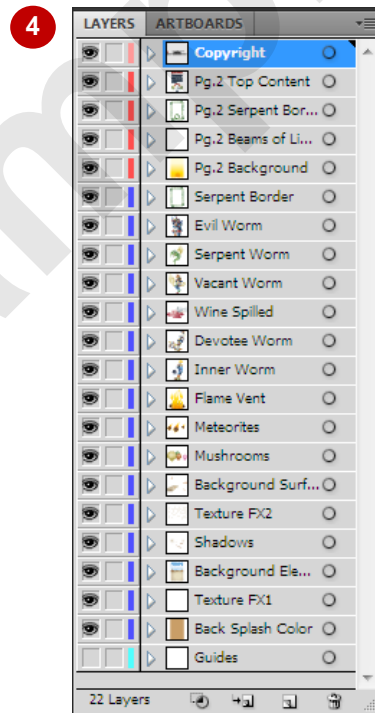4 Click and drag down until you can see all of the content in the *Layers* panel, then release the mouse button

5 Click and hold the left mouse button on the *title bar* of the *Pathfinder* panel, and drag it below the last panel tool in the *panel dock*, and then release the mouse button
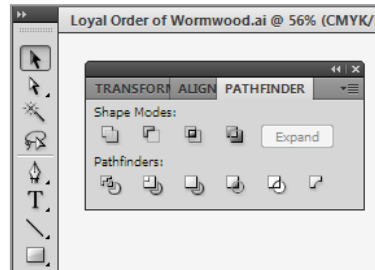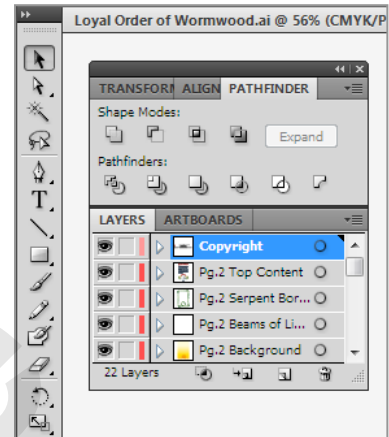
For Your Reference…

To *move* a *panel*:
1. Undock the panel from the *panel dock* and drag to the desired location

To *resize* a *panel*:
1. Hover over the bottom border of the panel until the pointer changes to a double-headed arrow, then drag down

Handy to Know…

- Some panels can be resized by clicking and dragging on the panel handle at the bottom right corner of the panel.

- If you close a panel that sits on the *panel dock* by default, you will need to select it from the *Window* menu to view it again, and then drag it back onto the panel dock.