

Dear Candidate,

In preparation for the Graphic Design & Illustration Using Adobe Illustrator CC certification exam, we've put together a set of practice materials and example exam items for you to review. What you'll find in this packet are:

- Topic areas and objectives for the exam.
- Links to practice tutorials and files.
- Practice exam items.

We've assembled excerpted material from the <u>Adobe Illustrator CC Learn and Support page</u>, and the <u>Visual Design curriculum</u> to highlight a few of the more challenging techniques covered on the exam. You can work through these technical guides and with the provided image files (provided separately). Additionally, we've included the certification objectives so that you are aware of the elements that are covered on the exam. Finally, we've included practice exam items to give you a feel for some of the items.

These materials are meant to help you familiarize yourself with the areas of the exam so are not comprehensive across all the objectives.

Thank you,

**Adobe Education** 

# Adobe Certified Associate in Graphic Design & Illustration Using Adobe Illustrator CC (2015)

## **Exam Structure**

The following lists the topic areas for the exam:

- Setting project requirements
- Understanding Digital Graphics and Illustrations
- Understanding Adobe Illustrator
- Creating Digital Graphics and Illustrations Using Adobe Illustrator
- Archive, Export, and Publish Graphics Using Adobe Illustrator

## **Number of Questions and Time**

- 40 questions
- 50 minutes

# **Exam Objectives**

# **Domain 1.0 Setting Project Requirements**

- 1.1 Identify the purpose, audience, and audience needs for preparing graphics and illustrations.
- 1.2 Summarize how designers make decisions about the type of content to include in a project, including considerations such as copyright, project fit, permissions, and licensing.
- 1.3 Demonstrate knowledge of project management tasks and responsibilities.
- 1.4 Communicate with others (such as peers and clients) about design plans.

## **Domain 2.0 Understanding Digital Graphics and Illustrations**

- 2.1 Understand key terminology related to digital graphics and illustrations.
- 2.2 Demonstrate knowledge of basic design principles and best practices employed in the digital graphics and illustration industry.
- 2.3 Demonstrate knowledge of typography and its use in digital graphics and illustrations.
- 2.4 Demonstrate knowledge of color and its use in digital graphics and illustration.
- 2.5 Demonstrate knowledge of image resolution, image size, and image file format for web, video, and print.

## Domain 3.0 Understanding Adobe Illustrator

3.1 Identify elements of the Illustrator user interface and demonstrate knowledge of their functions.

- 3.2 Define the functions of commonly used tools, including selection tools, the Pen tool, and other drawing tools, shape tools, and transformation tools.
- 3.3 Navigate, organize, and customize the workspace.
- 3.4 Use non-printing design tools in the interface, such as rulers, guides, bleeds, and artboards.
- 3.5 Demonstrate knowledge of layers and masks.
- 3.6 Manage colors, swatches, and gradients.
- 3.7 Manage brushes, symbols, graphic styles, and patterns.
- 3.8 Demonstrate knowledge of how and why illustrators employ different views and modes throughout the course of a project, including vector/outline vs. display/appearance, isolation mode, and various Draw modes.
- 3.9 Demonstrate an understanding of vector drawing tools.

# Domain 4.0 Creating Digital Graphics and Illustrations Using Adobe Illustrator

- 4.1 Create a new project.
- 4.2 Use vector drawing and shape tools.
- 4.3 Transform graphics and illustrations.
- 4.4 Create and manage layers.
- 4.5 Import assets into a project.
- 4.6 Add and manipulate type using Type tools.
- 4.7 Create digital graphics and illustrations using 3D and perspective tools in Illustrator.

## Domain 5.0 Archive, Export, and Publish Graphics Using Adobe Illustrator

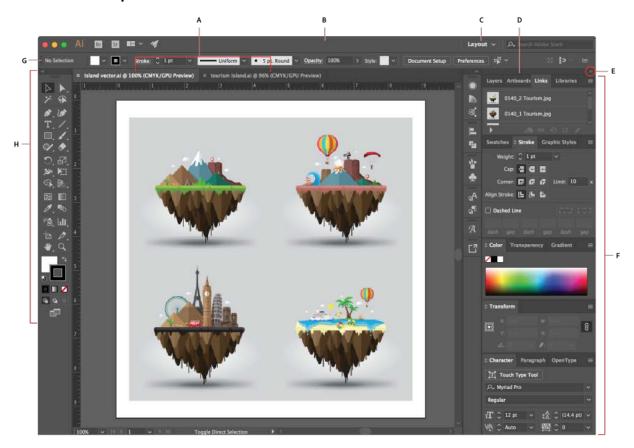
- 5.1 Prepare images for web, print, and video.
- 5.2 Export digital graphics and illustration to various file formats.

# **Overview of Adobe Illustrator**

Watch this quick video titled <u>see what you can create with Illustrator</u> and get to know the industry-standard vector graphics app that lets you create logos, icons, drawings, typography, and complex illustrations for any medium.

After watching this quick video with your students showing them what they can go on to create with Illustrator, you are going to want to introduce them to the workspace.

## **Illustrator Workspace Overview**



A. Tabbed Document windows B. Application bar C. Workspace switcher D. Panel title bar E. Collapse To Icons button F. Four panel groups in vertical dock G. Control panel H. Tools panel

• The Application frame groups all the workspace elements in a single, integrated window that lets you treat the application as a single unit. When you move or resize the Application frame or any of its elements, all the elements within it respond to each other so none overlap. Panels don't disappear when you switch applications or when you accidentally click out of the application. If you work with two or more applications, you can position each application side by side on the screen or on multiple monitors. If you are using a Mac and prefer the traditional, free-form user interface, you can turn off the Application frame. Select Window > Application

**Frame** to toggle it on or off.

- The Application bar across the top contains a workspace switcher, menus (Windows only), and
  other application controls. On Mac, the application bar is available only when Application
  frame is off. You can toggle it on or off using the Window menu.
- The Tools panel contains tools for creating and editing images, artwork, page elements, and so on. Related tools are grouped.
- The Control panel displays options for the currently selected object.
- The *Document window* displays the file you're working on. Document windows can be tabbed and, in certain cases, grouped and docked.
- Panels help you monitor and modify your work. Panels can be grouped, stacked, or docked.

Below you will find a list or resources from the Illustrator user guide that will walk you through the workspace, tools, and panels of the program.

- Workspace basics: Here's a description of the various areas, utilities, and tools you see when you start Adobe Illustrator.
- <u>Customize the workspace</u>: learn about customizing the Adobe Illustrator workspace.
- <u>Create documents</u>: While creating a document, choose from a wide variety of templates from Adobe Stock and blank presets.
- <u>Tools panel overview</u>: learn about selecting, using, and managing tools in Adobe Illustrator.
- <u>Tools gallery</u>: Illustrator provides many tools for creating and manipulating your artwork. These galleries provide a quick visual overview for each tool.
- <u>Setup multiple artboard</u>: learn how to create, edit, and delete artboards; customize artboard names; display rulers; and more.
- Rulers, grids, and guides: learn about working with rulers, grids, and guides

# Introduction to drawing in Illustrator

Learn about the basic drawing tools and techniques in Adobe Illustrator.

## **About vector graphics**

Vector graphics (sometimes called *vector shapes* or *vector objects*) are made up of lines and curves defined by mathematical objects called *vectors*, which describe an image according to its geometric characteristics.

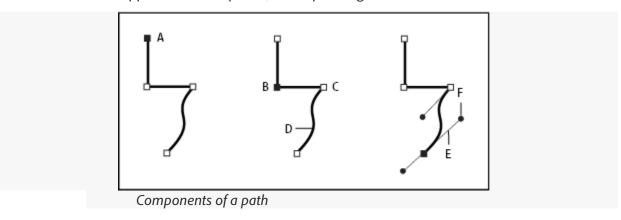
You can freely move or modify vector graphics without losing detail or clarity, because they are resolution-independent—they maintain crisp edges when resized, printed to a PostScript printer, saved in a PDF file, or imported into a vector-based graphics application. As a result, vector graphics are the best choice for artwork, such as logos, that will be used at various sizes and in various output media.

The vector objects you create using the drawing and shape tools in Adobe **Creative Suite** are examples of vector graphics. You can use the Copy and Paste commands to duplicate vector graphics between **Creative Suite** components.

#### **About Paths**

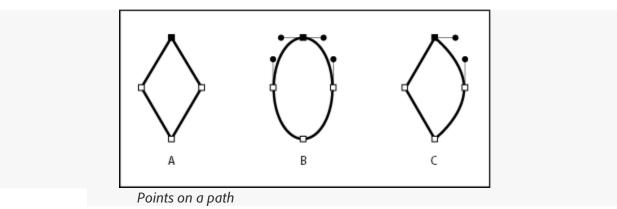
As you draw, you create a line called a *path*. A path is made up of one or more straight or curved *segments*. The beginning and end of each segment are marked by *anchor points*, which work like pins holding a wire in place. A path can be *closed* (for example, a circle), or *open*, with distinct *endpoints* (for example, a wavy line).

You change the shape of a path by dragging its anchor points, the *direction points* at the end of *direction lines* that appear at anchor points, or the path segment itself.



**A.** Selected (solid) endpoint **B.** Selected anchor point **C.** Unselected anchor point **D.** Curved path segment **E.** Direction line **F.**Direction point

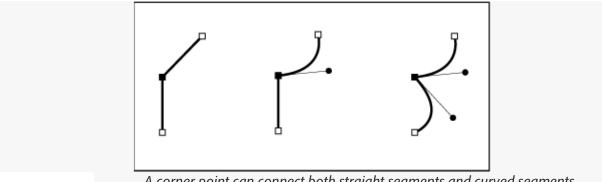
Paths can have two kinds of anchor points: corner points and smooth points. At a *corner point*, a path abruptly changes direction. At a *smooth point*, path segments are connected as a continuous curve. You can draw a path using any combination of corner and smooth points. If you draw the wrong kind of point, you can always change it.



A. Four corner points B. Four smooth points C. Combination of corner and smooth points

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A corner point can connect any two straight or curved segments, while a smooth point always connects two curved segments.



A corner point can connect both straight segments and curved segments.

Note: Don't confuse corner and smooth points with straight and curved segments.

A path's outline is called a stroke. A color or gradient applied to an open or closed path's interior area is called a fill. A stroke can have weight (thickness), color, and a dash pattern (Illustrator and InDesign) or a stylized line pattern (InDesign). After you create a path or shape, you can change the characteristics of its stroke and fill.

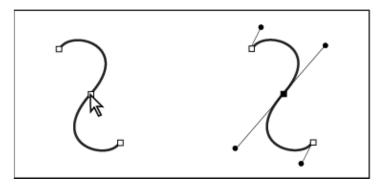
In InDesign, each path also displays a center point, which marks the center of the shape but is not part of the actual path. You can use this point to drag the path, to align the path with other elements, or to select all anchor points on the path. The center point is always visible; it can't be hidden or deleted.

# About direction lines and direction points

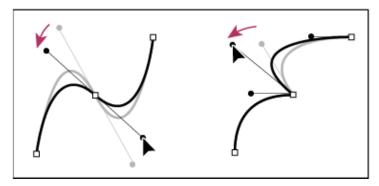
When you select an anchor point that connects curved segments (or select the segment itself), the anchor points of the connecting segments display direction handles, which consist of direction lines that end in direction points. The angle and length of the direction lines determine the shape and size of the curved segments. Moving the direction points reshapes the curves. Direction lines don't appear in the final output.

A smooth point always has two direction lines, which move together as a single, straight unit. When you move a direction line on a smooth point, the curved segments on both sides of the point are adjusted simultaneously, maintaining a continuous curve at that anchor point.

In comparison, a corner point can have two, one, or no direction lines, depending on whether it joins two, one, or no curved segments, respectively. Corner point direction lines maintain the corner by using different angles. When you move a direction line on a corner point, only the curve on the same side of the point as that direction line is adjusted.

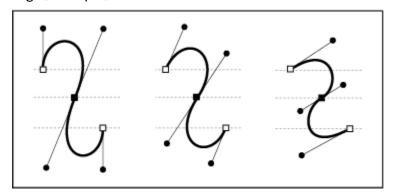


After selecting an anchor point (left), direction lines appear on any curved segments connected by the anchor point (right).



Adjusting direction lines on a smooth point (left) and a corner point (right)

Direction lines are always tangent to (perpendicular to the radius of) the curve at the anchor points. The angle of each direction line determines the slope of the curve, and the length of each direction line determines the height, or depth, of the curve.



Moving and resizing direction lines changes the slope of curves.

**Note:** In Illustrator, you can show or hide anchor points, direction lines, and direction points by choosing View > Show Edges or View > Hide Edges.

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You can also learn how to specify direction line, direction point, and anchor point appearance, and more about the drawing modes in the <u>drawing basics</u> section of the Illustrator User Guide.

For more specific information about the various drawing tools in Illustrator, refer to the links below:

- <u>Draw simple lines and shapes</u>: learn about drawing basic lines and shapes in Adobe Illustrator, including rectangles, squares, polygons, ellipses, stars, grids, and more.
- <u>Draw pixel-perfect art</u>: learn how to seamlessly align your artwork with the pixel grid.
- <u>Draw with the Pen, Pencil, and Flare tools</u>: learn the basics of drawing in Adobe Illustrator using the Pen, Pencil, and Flare tools.
- <u>Draw, edit, and re-edit shapes easily</u>: this tutorial shows you how to Dynamically adjust Live Shapes and Live Lines in Adobe Illustrator using control widgets that let you modify the width, height, and corner radius properties.
- Edit paths: learn about editing or reshaping paths using various tools in Adobe Illustrator.

## **About color in Illustrator**

Applying colors to artwork is a common Adobe Illustrator task, and one that requires some knowledge of color models and color modes. When applying color to artwork, keep in mind the final medium in which the artwork will be published, so that you can use the correct color model and color definitions. Experimenting and applying color is easy using the feature-rich Swatches panel, Color Guide panel, and Edit Colors/Recolor Artwork dialog box in Illustrator.

Color models describe the colors we see and work with in digital graphics. Each color model, such as RGB, CMYK, or HSB, represents a different method for describing and classifying color. Color models use numeric values to represent the visible spectrum of color. A *color space* is a variant of a color model and has a specific *gamut* (range) of colors. For example, within the RGB color model are a number of color spaces: Adobe® RGB, sRGB, and Apple® RGB. While each of these color spaces defines color using the same three axes (R, G, and B), their gamuts are different.

# About colors in digital graphics

We use color models to describe the colors we see and work with in digital graphics. Each color model, such as RGB, CMYK, or HSB, represents a different method for describing and classifying color. Color models use numeric values to represent the visible spectrum of color. A *color space* is a variant of a color model and has a specific *gamut* (range) of colors. For example, within the RGB color model are a number of color spaces: Adobe® RGB, sRGB, and Apple® RGB. While each of these color spaces defines color using the same three axes (R, G, and B), their gamuts are different.

When you work with the colors in a graphic, you are actually adjusting numerical values in the file. It's easy to think of a number as a color, but these numerical values are not absolute colors in themselves—they only have a color meaning within the color space of the device that is producing the color.

Because each device has its own color space, it can reproduce colors only in its gamut. When an image moves from one device to another, image colors may change because each device interprets the RGB or CMYK values according to its own color space. For example, it is impossible for all the colors

viewed on a monitor to be identically matched in a print from a desktop printer. A printer operates in a CMYK color space, and a monitor operates in an RGB color space. Their gamuts are different. Some colors produced by inks cannot be displayed on a monitor, and some colors that can be displayed on a monitor cannot be reproduced using inks on paper.

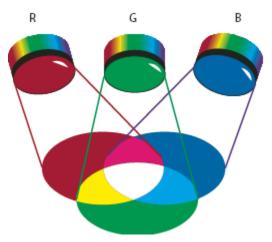
Even though it is impossible to perfectly match all colors on different devices, you can use color management to ensure that most colors are the same or similar enough so they appear consistent.

## RGB, CMYK, HSB, and Lab color models

#### **RGB**

A large percentage of the visible spectrum can be represented by mixing red, green, and blue (RGB) colored light in various proportions and intensities. Where the colors overlap, they create cyan, magenta, and yellow.

RGB colors are called *additive colors* because you create white by adding R, G, and B together—that is, all light is reflected back to the eye. Additive colors are used for lighting, television, and computer monitors. Your monitor, for example, creates color by emitting light through red, green, and blue phosphors.



Additive colors (RGB)

R. Red G. Green B. Blue

You can work with color values using the RGB color mode, which is based on the RGB color model. In RGB mode, each of the RGB components can use a value ranging from 0 (black) to 255 (white). For example, a bright red color might have an R value of 246, a G value of 20, and a B value of 50. When the values of all three components are equal, the result is a shade of gray. When the value of all components is 255, the result is pure white; when all components have values of 0, the result is pure black.

Illustrator also includes a modified RGB color mode called *Web Safe RGB*, which includes only those RGB colors that are appropriate for use on the web.

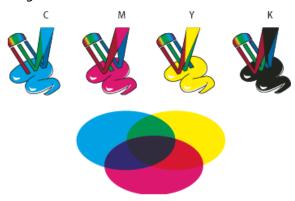
#### **CMYK**

Whereas the RGB model depends on a light source to create color, the CMYK model is based on the light-absorbing quality of ink printed on paper. As white light strikes translucent inks, a portion of the

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spectrum is absorbed. Color that is not absorbed is reflected back to your eye.

Combining pure cyan (C), magenta (M), and yellow (Y) pigments would result in black by absorbing, or subtracting, all colors. For this reason they are called *subtractive colors*. Black (K) ink is added for better shadow density. (The letter K came into use because black is the "key" color for registering other colors, and because the letter B also stands for blue.) Combining these inks to reproduce color is called *four-color process printing*.



Subtractive colors (CMYK)

C. Cyan M. Magenta Y. Yellow K. Black

You can work with color values using the CMYK color mode, which is based on the CMYK color model. In CMYK mode, each of the CMYK process inks can use a value ranging from 0 to 100%. The lightest colors are assigned small percentages of process ink colors; darker colors have higher percentage values. For example, a bright red might contain 2% cyan, 93% magenta, 90% yellow, and 0% black. In CMYK objects, low ink percentages are closer to white, and high ink percentages are closer to black.

Use CMYK when preparing a document to be printed using process inks.

# **HSB**

Based on the human perception of color, the HSB model describes three fundamental characteristics of color:

### Hue

Color reflected from or transmitted through an object. It is measured as a location on the standard color wheel, expressed as a degree between 0° and 360°. In common use, hue is identified by the name of the color, such as red, orange, or green.

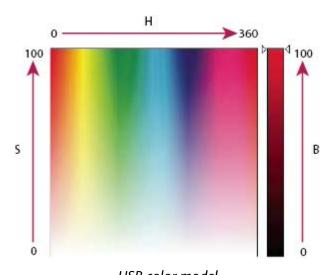
#### **Saturation**

Strength or purity of the color (sometimes called *chroma*). Saturation represents the amount of gray in proportion to the hue, measured as a percentage from 0% (gray) to 100% (fully saturated). On the standard color wheel, saturation increases from the center to the edge.

## **Brightness**

Relative lightness or darkness of the color, usually measured as a percentage from 0% (black) to 100% (white).

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HSB color model

H. Hue S. Saturation B. Brightness

#### Lab

The CIE Lab color model is based on the human perception of color. It is one of several color models produced by the Commission Internationale d'Eclairage (CIE), an organization dedicated to creating standards for all aspects of light.

The numeric values in Lab describe all the colors that a person with normal vision sees. Because Lab describes how a color looks rather than how much of a particular colorant is needed for a device (such as a monitor, desktop printer, or digital camera) to produce colors, Lab is considered to be a *device-independent* color model. Color management systems use Lab as a color reference to predictably transform a color from one color space to another color space.

In Illustrator, you can use the Lab model to create, display, and output spot color swatches. However, you cannot create documents in Lab mode.

## Grayscale

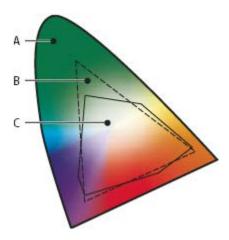
Grayscale uses tints of black to represent an object. Every grayscale object has a brightness value ranging from 0% (white) to 100% (black). Images produced using black-and-white or grayscale scanners are typically displayed in grayscale.

Grayscale also lets you convert color artwork to high-quality black-and-white artwork. In this case, Adobe Illustrator discards all color information in the original artwork; the gray levels (shades) of the converted objects represent the luminosity of the original objects.

When you convert grayscale objects to RGB, the color values for each object are assigned that object's previous gray value. You can also convert a grayscale object to a CMYK object.

# Color spaces and gamuts

A *color space* is a range of colors in the visible spectrum. A color space can also be a variant of a *color model*. Adobe RGB, Apple RGB, and sRGB are examples of different color spaces based on the same color model.



Gamuts of different color spaces

A. Visual gamut B. RGB color space C. CMYK color space

The range of color encompassed by a color space is called a gamut. The different devices (computer monitor, scanner, desktop printer, printing press, digital camera) throughout your workflow operate within different color spaces and each with different gamuts. Some colors within the gamut of your computer monitor are not within the gamut of your inkjet printer, and vice versa. When a color cannot be produced on a device, it's considered to be outside the color space of that particular device. In other words, the color is *out of gamut*.

# About spot and process colors

You can designate colors as either spot or process color types, which correspond to the two main ink types used in commercial printing. In the Swatches panel, you can identify the color type of a color using icons that appear next to the name of the color.

When applying color to paths and frames, keep in mind the final medium in which the artwork will be published, so that you apply color using the most appropriate color mode.

**Note:** If your color workflow involves transferring documents among devices, you may want to use a color-management system (CMS) to help maintain and regulate colors throughout the process.

## **About spot colors**

A spot color is a special premixed ink that is used instead of, or in addition to, process inks, and that requires its own printing plate on a printing press. Use spot color when few colors are specified and color accuracy is critical. Spot color inks can accurately reproduce colors that are outside the gamut of process colors. However, the exact appearance of the printed spot color is determined by the combination of the ink as mixed by the commercial printer and the paper it's printed on, not by color values you specify or by color management. When you specify spot color values, you're describing the simulated appearance of the color for your monitor and composite printer only (subject to the gamut limitations of those devices).

Keep the following guidelines in mind when specifying a spot color:

 For best results in printed documents, specify a spot color from a color-matching system supported by your commercial printer. Several color-matching system libraries are included with the software.

- Minimize the number of spot colors you use. Each spot color you create will generate an
  additional spot color printing plate for a printing press, increasing your printing costs. If you
  think you might require more than four colors, consider printing your document using process
  colors.
- If an object contains spot colors and overlaps another object containing transparency,
  undesirable results may occur when exporting to EPS format, when converting spot colors to
  process colors using the Print dialog box, or when creating color separations in an application
  other than Illustrator or InDesign. For best results, use the Flattener Preview or the Separations
  Preview to soft proof the effects of flattening transparency before printing. In addition, you can
  convert the spot colors to process colors by using the Ink Manager in InDesign before printing
  or exporting.
- You can use a spot color printing plate to apply a varnish over areas of a process color job. In
  this case, your print job would use a total of five inks—four process inks and one spot varnish.

## **About process colors**

A *process color* is printed using a combination of the four standard process inks: cyan, magenta, yellow, and black (CMYK). Use process colors when a job requires so many colors that using individual spot inks would be expensive or impractical, as when printing color photographs.

Keep the following guidelines in mind when specifying a process color:

- For best results in a high-quality printed document, specify process colors using CMYK values printed in process color reference charts, such as those available from a commercial printer.
- The final color values of a process color are its values in CMYK, so if you specify a process color using RGB (or LAB, in InDesign), those color values will be converted to CMYK when you print color separations. These conversions differ based on your color-management settings and document profile.
- Don't specify a process color based on how it looks on your monitor, unless you are sure you
  have set up a color-management system properly, and you understand its limitations for
  previewing color.
- Avoid using process colors in documents intended for online viewing only, because CMYK has
  a smaller color gamut than that of a typical monitor.
- Illustrator and InDesign let you specify a process color as either global or non-global. In Illustrator, global process colors remain linked to a swatch in the Swatches panel, so that if you modify the swatch of a global process color, all objects using that color are updated. Non-global process colors do not automatically update throughout the document when the color is edited. Process colors are non-global by default. In InDesign, when you apply a swatch to objects, the swatch is automatically applied as a global process color. Non-global swatches are unnamed colors, which you can edit in the Color panel.

**Note:** Global and non-global process colors only affect how a particular color is applied to objects, never how colors separate or behave when you move them between applications.

# Using spot and process colors together

Sometimes it's practical to use process and spot inks in the same job. For example, you might use one spot ink to print the exact color of a company logo on the same pages of an annual report where photographs are reproduced using process color. You can also use a spot color printing plate to apply a varnish over areas of a process color job. In both cases, your print job would use a total of five inks—four process inks and one spot ink or varnish.

In InDesign, you can mix process and spot colors together to create mixed ink colors.

# Comparing colors in InDesign and Illustrator

Adobe InDesign and Adobe Illustrator use slightly different methods for applying named colors. Illustrator lets you specify a named color as either global or nonglobal, and InDesign treats all unnamed colors as nonglobal, *process colors*.

The InDesign equivalents to global colors are *swatches*. Swatches make it easier to modify color schemes without having to locate and adjust each individual object. This is especially useful in standardized, production-driven documents like magazines. Because InDesign colors are linked to swatches in the Swatches panel, any change to a swatch affects all objects to which a color is applied.

The InDesign equivalents to nonglobal swatches are unnamed colors. Unnamed colors do not appear in the Swatches panel, and they do not automatically update throughout the document when the color is edited in the Color panel. You can, however, add an unnamed color to the Swatches panel later.

Named and unnamed colors only affect how a particular color updates in your document, never how colors separate or behave when you move them between applications.

To learn more about color themes and related color options in Adobe Illustrator, we have provided links to the color sections of the Illustrator User Guide below.

- Adjust colors: learn about adjusting, shifting, blending, and changing colors (including the tint
  of a global process color) in Adobe Illustrator.
- <u>Select colors</u>: learn all about selecting colors for your artwork using a variety of tools, panels, and dialog boxes in Adobe Illustrator.
- <u>Use and create swatches</u>: learn all about working with, creating, and managing swatches in Adobe Illustrator.
- <u>Color groups (harmonies)</u>: learn how to create color groups, and edit, assign, and reduce colors in Adobe Illustrator.

# Painting-related tools in Illustrator

Check out the following sections of the Illustrator User Guide to learn how to use the painting-related tools in Illustrator.

- <u>Paint with fills and strokes</u>: Learn about assigning, applying, or removing fill and stroke attributes when painting in Adobe Illustrator.
- <u>Live Paint groups</u>: Learn all about converting your artwork to Live Paint groups in Adobe Illustrator.

- <u>Gradients</u>: learn how to use gradients in Adobe Illustrator.
- <u>Brushes</u>: Learn all about using, creating, and managing various brushes in Adobe Illustrator: calligraphic brushes, scatter brushes, pattern brushes, and more.
- <u>Transparency and blending modes</u>: Learn about blending colors and adding transparency to artwork in Adobe Illustrator.

For more information on painting-related tools scroll down to the "Learn More" section of the <u>painting</u> documentation.

# **Select and Arrange Objects**

Listed below are the sections of the user guide that will teach you how to select and arrange objects in Illustrator.

- <u>Select objects</u>: learn about making object-oriented selections using various tools in Adobe Illustrator.
- Move, align, and distribute objects: learn about moving, aligning, and distributing objects in Adobe Illustrator.
- <u>Layers</u>: learn about working with layers to organize and edit artwork in Adobe Illustrator.
- <u>Stack objects</u>: learn about stacking objects in Adobe Illustrator.
- Group and expand objects: learn about combining objects into groups in Adobe Illustrator.
- Lock, hide, and delete objects: learn about locking, hiding, and deleting objects in Adobe Illustrator.
- <u>Duplicate objects</u>: learn how to duplicate objects and selections.
- Rotate and reflect objects: learn to change the orientation by rotating, reflecting, or flipping one or more objects in Adobe Illustrator.

# **Reshape Objects**

This section covers the basics of reshaping and transforming objects in illustrator.

- <u>Transform objects</u>: Learn about moving, rotating, reflecting, scaling, and shearing objects in Adobe Illustrator.
- <u>Combine objects</u>: Learn about combining or merging vector objects to create shapes in Adobe Illustrator.
- <u>Scale, shear, and distort objects</u>: Learn about scaling, shearing, and distorting objects using various tools and commands in Adobe Illustrator.
- Edit clipping masks: Learn how to create and edit clipping masks and sets in Adobe Illustrator. A video tutorial is also included on this page.
- Cut, divide, and trim objects: Learn about the different methods for cutting, dividing, and

trimming objects in Illustrator.

- <u>Blend objects</u>: Learn about creating and working with blends in Adobe Illustrator.
- Work with Live Corners: learn how to quickly reshape one or more corners of an object.
- <u>Create shapes using the Shape Builder tool</u>: learn about making shapes with the Shape Builder tool.
- <u>Build new shapes with Shaper and Shape Builder tools</u>: learn how to build shapes with the Shaper tool and how to set the Shape Builder tool options.

For more information on various image adjustments you can make such as brightness/contrast adjustments, shadow and highlight detail adjustments, level adjustments, color balance adjustments, etc. scroll down to Learn More in the Image Adjustments section of the <a href="Photoshop User Guide">Photoshop User Guide</a>.

# **Type**

Watch the tutorial on how to work with type in Illustrator to give your students a quick overview of working with type. Then use the resources below to dive deeper into the specific type tools and text formatting options available in Illustrator.

- <u>Create text</u>: learn about creating and working with type in Adobe Illustrator.
- Create type on a path: learn about creating type on an open or closed path.
- Import and export text: learn how to import and export text in Adobe Illustrator.
- <u>Fonts</u>: learn about working with fonts in Adobe Illustrator.
- Format paragraphs: learn all about formatting paragraphs.
- <u>Character and paragraph styles</u>: learn about working with character and paragraph styles.
- <u>Format type</u>: learn about formatting text, such as how to change appearance of characters, work with OpenType fonts, and more.
- <u>Line and character spacing</u>: learn how to set the leading, shift the baseline, and adjust the kerning and tracking in Adobe Illustrator.

# **Create Special Effects**

Illustrator includes a variety of effects, which you can apply to an object, group, or layer to change its characteristics.

Illustrator CS3 and earlier included effects and *filters*, but now Illustrator includes only effects (with the exception of SVG Filters). The primary difference between a filter and an effect is that a filter permanently modifies an object or layer, but an effect and its properties can be changed or removed at any time.

Once you apply an effect to an object, the effect appears in the Appearance panel. From the Appearance panel, you can edit the effect, move it, duplicate it, delete it, or save it as part of a graphic

style. When you use an effect, you must *expand* the object before you can access the new points. *note: Previous versions of Illustrator included filters and effects.* 

The effects in the top half of the Effects menu are *vector effects*. You can apply these effects only to vector objects or to the fill or stroke of a bitmap object in the Appearance panel. The following effects and effects categories from the top section are exceptions to this rule and can be applied to both vector and bitmap objects: 3D effects, SVG Filters, Warp effects, Transform effects, Drop Shadow, Feather, Inner Glow, and Outer Glow.

The effects in the bottom half of the Effects menu are *raster effects*. You can apply them to either vector or bitmap objects. Visit the <u>work with effects</u> documentation to learn about applying, modifying and improving performance for effects in Adobe Illustrator. For additional information about effects in Adobe Illustrator refer to the resources below.

- Graphic styles: learn how to create, apply, and import graphic styles in Adobe Illustrator
- Appearance attributes: learn about working with and managing appearance attributes.
- <u>Create sketches and mosaics</u>: learn how to create sketches and mosaics in Adobe Illustrator.
- <u>Create a drop shadow</u>: learn how to apply a drop shadow effect to an object or group of objects.
- Glows and feathering: learn how to apply glows and feathering to objects.
- Summary of effects: this is a quick reference guide to the effects in Adobe Illustrator.

# **Export Your Work**

When exporting your artwork, it is important to match the export settings to the project purpose. You can export your project assets in multiple sizes and formats depending on your needs. It is very important to understand which options and formats should be used for web, print, and video. For a quick overview of the various saving options watch this <a href="https://www.neethor.com/how-to-save-a-file-for-output">how to save a file for output</a> tutorial. For a more detailed list of the different file formats and options available for exporting, see the <a href="https://www.neethor.com/how-to-save-a-file-for-output">export</a> artwork documentation.

Additionally, there is specific documentation on best practices for using Adobe Illustrator to <u>create</u> <u>web graphics</u> and <u>artwork intended for printing</u> available.

## **Practice Tutorials and Files**

Below is a list of tutorials and resources from the <u>Adobe Education Exchange</u> and the <u>Illustrator Learn & Support page</u> that you can use in your classroom to prepare your students to be successful on the Visual Design Using Adobe Photoshop CC ACA exam.

## Create your first project

Related objectives: Domain 1, Domain 2, and Domain 4

This very simple set of three tutorials explains some basic design principles such as the difference between vector and raster images, then walks you through the steps of creating a document, creating basic shapes, and adding text to projects.

## Setup a new document

Related objectives: Domain 2

This tutorial goes describes in the options for configuring a new document in Adobe Illustrator for print, web, devices, video, and more in greater detail.

## **Illustrator basics for new users**

Related objectives: Domain 3 and Domain 4

This tutorial introduces students to the basic Illustrator tools and panels needed to create shapes, draw lines and curves, add and adjust type, manage colors, and organize assets using layers.

## Quickly manipulate shapes and effects

Related objectives: Domain 3 and Domain 4

Effects are a quick and easy way to manipulate shapes. Since effects are "live," you can return an altered shape to its original appearance afterwards. Learn how to create effects and experiment with variations in this tutorial.

## Draw and edit curves

Related objectives: Domain 4

In Exercise 5, the path has already been created. Use the Selection tool to select the path, and then switch to the Curvature tool. Drag the middle points to adjust their curves as shown.

## Create and apply patterns

Related objectives: Domain 2 and Domain 4

Learn how to create and apply patterns to many shapes in this tutorial, while experimenting with colors and shapes in patterns.

## Add painterly effects with brushes

Related objectives: Domain 4

Experiment with applying brush strokes to objects, adding texture, interest, and details to your illustration.

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## Draw with shapes, lines, and color

Related objectives: Domain 1, Domains 2, Domain 4, and Domain 5

Learn how to use the vector shape tools in Illustrator to create a striking illustration for any medium.

# Design a logo

Related objectives: Domain 1, Domain 2, Domain 3, Domain 4, Domain 5

Use vector shapes to create a logo that looks good on screen and in print. Vector art scales to any size—from business cards to billboards—without losing quality.

#### Create a web icon

Related objectives: Domain 1, Domain 2, Domain 3, Domain 4, and Domain 5

Learn how to modify simple shapes to create standout icons for your blog, forms, digital documents, interactive projects, and more.

# Design a monogram

Related objectives: Domain 1, Domain 2, Domain 3, Domain 4, Domain 5

Use a simple shape, a professional typeface, and color to create a striking monogram.

Check out additional projects, lesson plans, and teacher resources related to the ACA Photoshop exam on the <u>Education Exchange</u>.

# Sample Questions for the ACA Study Guides

## **Illustrator CC 2015**

All sample questions have been provided by GMetrix. For information about full practice exams and additional exam preparation materials, visit <u>GMetrix.com</u>.

# **Selected Response Questions**

- 1. What is the purpose for using hierarchy in design?
  - a. It leads the viewer through the elements from graphics to text.
  - It leads the viewer through the elements from brightest to darkest.
  - c. It leads the viewer through the elements from side to side.
  - d. It leads the viewer through the elements from most important to least important.
- 2. If an image is divided into nine equal sections and you move the focal point to one of the intersecting areas, which rule of composition are you demonstrating?
  - a. The rule of ninths
  - b. The rule of thirds
  - c. The 30-60-90 placement rule
  - d. The non-symmetrical rule
- 3. What is the definition of a vanishing point?
  - a. The point at which colors no longer appear on a design
  - b. The point at which two circles intersect
  - c. The point at which receding parallel lines viewed in perspective appear to converge
  - d. The point at which a linear gradient is transparent

- 4. Which two tools are vector drawing tools?
  - a. Pen tool
  - b. Lasso tool
  - c. Smooth tool
  - d. Slice tool
- 5. Which of the following would be a reason to add a bleed to your document?
  - a. To add needed margins or padding to your document
  - To compensate for printing in both the RGB and CMYK color spaces
  - To allow for accurate color printing on various printer types
  - To ensure that your artwork is still printed to the edge of the page after the page is trimmed
- 6. Which of the following methods can you use to import an EPS file into your document?
  - a. Open Command
  - b. Place Command
  - c. Paste Command
  - d. Drag-and-Drop Feature
  - e. All of the above
- 7. Which two of the following describes the characteristics of typing on a path?

- a. The text flows along the edge of a closed path only
- The text flows along the edge of an open or closed path
- c. The text flows in the direction in which points were added to the path

- d. Text cannot be edited once it's been added to a path
- b. The text flows along the edge 8. Which tool is a vector drawing tool?
  - a. Paintbrush
  - b. Slice
  - c. Width
  - d. Gradient

# **Simulation Questions**

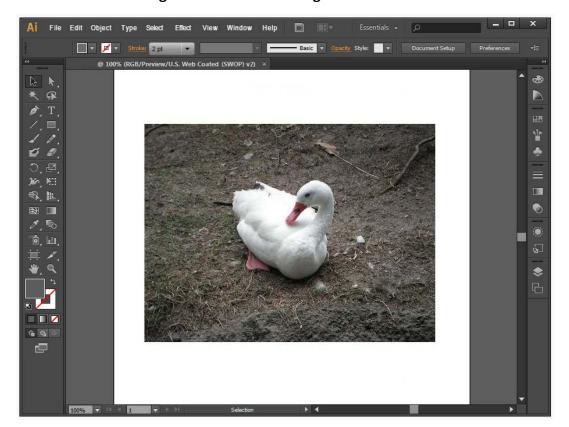
When taking the actual exam, you will complete each of the tasks with your mouse in a simulated manner, but for this study guide we recommend that you practice by writing out the steps. In the space provided.

1. Create a new web document named Aria Bakery that uses two artboards with the size 1024x768.

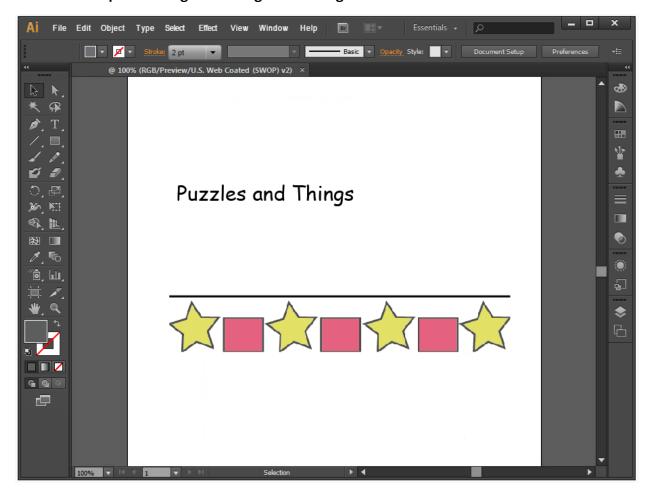
2. In the Pathfinder panel, remove the red arrow shape by combining the selected shapes using the Minus Front method.

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3.	Relink to the missing terapexLogo.png file, located in the Logo Images folder.	
4.	Make the grid visible.	

# 5. Create a sketched art image trace of the Duck image.



6. Rotate the pink rectangle to an angle of 255 degrees.



# 7. Left-align the text goat.



# **Scenario-Based Questions**

**Scenario:** A hobby store has hired you to create a banner that includes the company name and logo. They would like the flexibility to create banners in a variety of sizes.

9.	Which type of graphic should you use for the company name and logo to allow the company to print banners in a variety of sizes?		
	a.	Raster	
	b.	Vector	
	c.	Bitmap	

10. Set the tracking on the company's name to be -50 (list steps).

11. Open the Artistic\_Ink brushes library.

# **Answer Key**

# **Selected-Response Questions**

- 1. d
- 2. b
- 3. c
- 4. a and c
- 5. d
- 6. e
- 7. b
- 8. a

# Answer Key for Simulation Questions (answers below outline the steps to complete each simulation)

#### Simulation 1

- 1. Select the File menu
- 2. Select New...
- 3. Name it Aria Bakery
- 4. In the Profile drop down menu, select Web
- 5. For Number of Artboards, select or type 2
- 6. In the Width textbox enter 1024
- 7. In the Height textbox enter 768
- 8. Click OK

#### Simulation 2

- 1. Select the Window menu
- 2. Select Pathfinder
- 3. In the Pathfinder panel, under the Shape Modes section, click the Minus Front button

## Simulation 3

- 1. Select the terapexLogo.png image
- 2. Select the Window menu
- 3. Select Links
- 4. In the Links dialog box, click the Relink icon
- 5. Open the Logo Images folder
- 6. Select the terapexLogo.png image
- 7. Click Place

#### Simulation 4

- 1. Select the View menu
- 2. Select Show Grid

## Simulation 5

- 1. Select the Duck image
- 2. Select the Sketched Art from the Image Trace drop down menu.

#### Simulation 6

- 1. Select the pink rectangle
- 2. Open the Transform panel
- 3. Change the rotation to 255 degrees

#### OR

- 1. Select the pink rectangle
- 2. Select the Transform from the Object drop down menu
- 3. Select Transform
- 4. Change the rotation to 255 degrees
- 5. Click OK

#### Simulation 7

- 1. Select the text goat
- 2. In the Navigation bar, select Paragraph
- 3. In the Paragraph drop down, select the Leftalign button

## **Scenario-Based Questions**

- 1. b
- 2. Answer:
  - 1. Select the company name
  - 2. In the Type bar, select Character
  - 3. Change the Tracking value to -50
- 3. Answer:
  - 1. Select the Window menu
  - 2. Select Brushes
  - 3. Select Brush Libraries drop down menu
  - 4. Hover over Artistic and select Artistic Ink