

Common
Occupational
Readiness
Essentials

CERTIFICATION PREP

Adobe Flash CS5

D. Michael Floor



Certification Prep Series

by D. Michael Floor



Certification Prep Series consists of individual guides that provide practice in the basic skills needed to be successful using the corresponding software. No previous software experience is required. Although the guides focus on learning skills, not test taking, users that complete the practice will be prepared to take the official software certification exam and exhibit workplace readiness. Step-by-step instructions demonstrate actual software commands and features, building from basic to advanced. Content is divided into small units for better learning and usage. There is no need to purchase additional materials as all lesson content is created using the software.

- Provides an affordable way to prepare for industry certification versus other methods.
- Integrates easily into existing classroom activities.
- Focuses on hands-on experience to develop skills.

Microsoft Office Products

- Microsoft Word 2016
- Microsoft Excel 2016
- Microsoft PowerPoint 2016
- Microsoft Outlook 2016
- Microsoft Access 2016
- Microsoft Word 2013
- Microsoft Excel 2013
- Microsoft PowerPoint 2013
- Microsoft Outlook 2013
- Microsoft Access 2013

Microsoft Office 2010 is also available.

Adobe Products

- Adobe Photoshop Creative Cloud
- Adobe Dreamweaver Creative Cloud
- Adobe Flash Creative Cloud
- Adobe Illustrator Creative Cloud
- Adobe InDesign Creative Cloud
- Adobe Photoshop CS6
- Adobe Dreamweaver CS6
- Adobe Flash CS6
- Adobe Photoshop CS5
- Adobe Dreamweaver CS5
- Adobe Flash CS5



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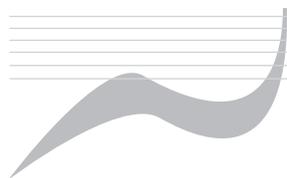
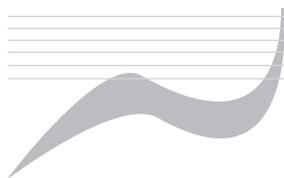


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Introduction

The Common Occupational Readiness Essentials (CORE) series of certification preparation guides focuses on mastering the essential basic skills needed as a workplace-ready user of the software. The goal of each CORE certification preparation guide is to provide practice in each essential basic skill required by employers who use the software. To prove workplace readiness, you will also be prepared to take the official certification exam for the software.

CORE Adobe Flash CS5 will help prepare you to take the Adobe Certified Associate (ACA) Adobe Flash CS5 certification exam. It provides step-by-step instruction for the features and commands covered on the certification exam. The focus of the lessons is to practice *using* the actual commands and features instead of creating a complete end product. Most lesson content is created using the software, and minimal downloading of files is required. Furthermore, each certification preparation guide is broken down into small learning units to enable better comprehension and application of the software. Where required, answers are provided at the back of the certification preparation guide.

Certification as an Adobe Certified Associate demonstrates an aptitude with Adobe software. ACA certification is offered for Adobe Dreamweaver, Adobe Flash, Adobe Photoshop, Adobe Premier, Adobe Illustrator, and Adobe InDesign. Certification exams are provided by Certiport, Inc., through various testing facilities. Visit www.certiport.com for more information on registering for certification exams.

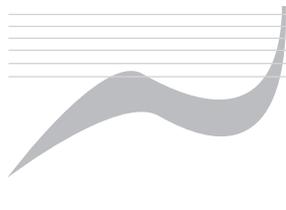
About the Author

D. Michael Ploor is the author of the CORE series of certification preparation guides. Mr. Ploor's students have achieved exceptional results with the CORE certification preparation guides. His students collectively pass more than 500 industry certification exams each year without the need for other preparation materials. Mr. Ploor has demonstrated the strength of integrating the CORE guides in a diverse mix of courses.

Mr. Ploor is also the author of three textbooks on the subject of video game design: *Introduction to Video Game Design*, *Video Game Design Foundations*, and *Video Game Design Composition*. He is a National Board Certified Teacher in Career and Technical Education and holds an MBA degree from the University of South Florida. He maintains professional teaching credentials in Business Education and Education Media Specialist.

Mr. Ploor is at the forefront of innovative teaching and curriculum. He developed STEM curriculum while serving as the lead teacher in the Career Academy of Computer Game Design at Middleton Magnet STEM High School. Mr. Ploor has applied his skills as a STEM Curriculum Integration Specialist in designing innovative curriculum and by collaborating to construct the state standards for video game design in several states. He has also been instrumental in authoring competitive events for Career and Technical Student Organizations such as the Future Business Leaders of America (FBLA) and Phi Beta Lambda (PBL).

In addition to publishing textbooks and lessons, Mr. Ploor provides professional development as a frequent presenter at regional and national conferences to promote CTE education and video game design curriculum for the high school and middle school levels.



Lesson 4

Images and Text

Objectives

Students will set the stage dimensions. Students will import an asset into the library. Students will trace a raster image to create a vector image. Students will replace color on an object. Students will obtain data from the **Info** panel. Students will create an image mask. Students will describe how to add text to a Flash document. Students will adjust color effects on an object. Students will publish a Flash document in other formats. Students will set compatibility when publishing a document.

How to Begin

1. Before beginning this lesson, download the needed files from the student companion website located at www.g-wlearning.com, and unzip them into your working folder.
2. Launch Flash.
3. Applying what you have learned, create a new ActionScript 3.0 document.
4. Click **Save As...** in the **File** pull-down menu. A standard save dialog box is displayed. Save the file as *LastName_Balloon* in your working folder.

Setting Stage Dimensions

The stage has a default size, but the size often must be changed to match the requirements of the project. The stage dimensions are changed by adjusting the document size.

5. Click **Document...** in the **Modify** pull-down menu. The **Document Settings** dialog box is displayed, as shown in **Figure 4-1**.
6. Click in the left-hand **Dimensions:** text box, and enter 600 px. This is the number of pixels in width for the document and stage. The *px* means pixels.
7. Click in the right-hand **Dimensions:** text box, and enter 600 px. This is the number of pixels in height for the document and stage.
8. Click the **OK** button to change the size of the document and stage.

Importing to the Library

Assets are the elements within an animation, such as objects, sounds, background, and characters. Assets can be added to the **Library** panel using the **Import** command. This creates a *library* for the project, which is a central storage location so assets can be quickly located and added to the animation.

9. Click **Import** and then **Import to Library...** in the **File** pull-down menu. A standard open dialog box is displayed. It may take a few seconds for Flash to prepare to import before the dialog box appears.

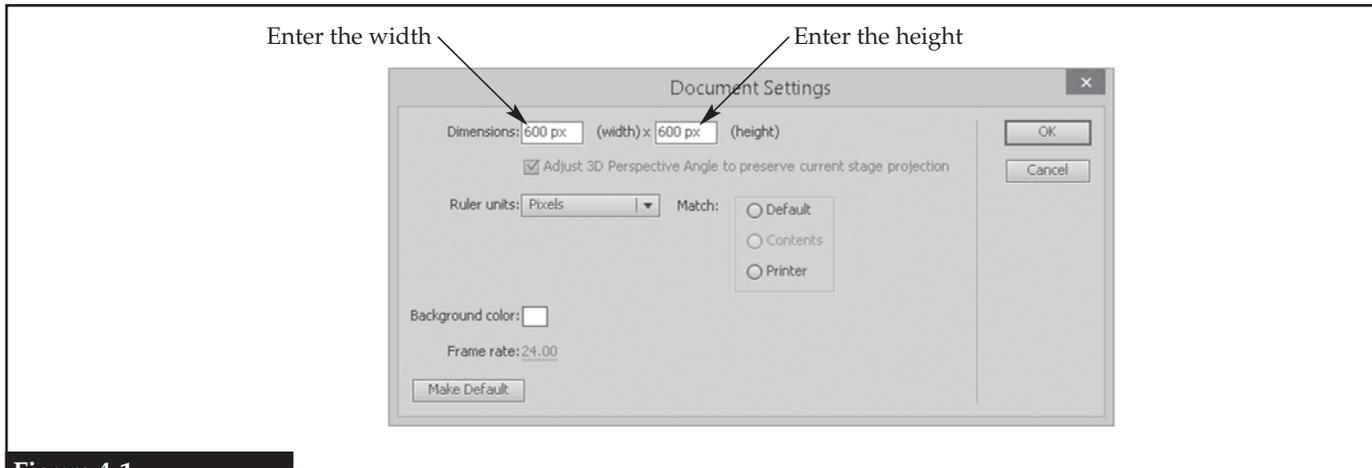


Figure 4-1.

The stage size is set by changing the document dimensions.

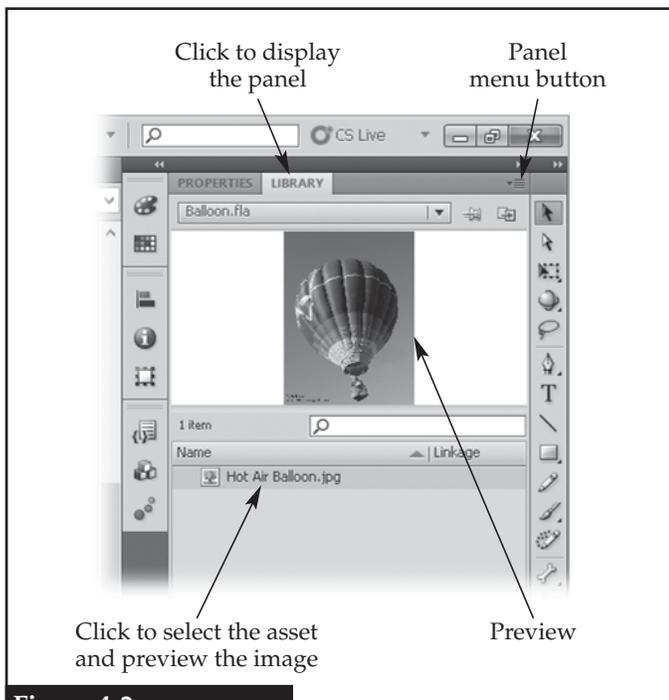


Figure 4-2.

Imported assets are displayed in the Library panel.

10. Navigate to your working folder, select the Hot Air Balloon image file, and click the **Open** button. The asset is added to the library.
11. Click the **Library** panel to display its contents, as shown in **Figure 4-2**.
12. Click the Hot Air Balloon.jpg file name in the lower part of the panel to preview the image.
13. With the Hot Air Balloon image selected in the library, click the panel menu button in the top-right corner of the panel, and click **Properties...** in the drop-down menu. The **Bitmap Properties** dialog box is displayed, as shown in **Figure 4-3**. Notice the information at the bottom of the dialog box. The current compression method has reduced the file size to 10% of the uncompressed size.
14. Click the **Compression:** drop-down arrow, and click **Lossless (PNG/GIF)** in the drop-down list. This will change the compression method to lossless compression.
15. Click the **Test** button. Notice this compression method only reduces the file size to 26% of the uncompressed size.
16. Check the **Allow smoothing** check box, and click the **OK** button to update the asset.
17. Drag the Hot Air Balloon image file from the **Library** panel, and drop it onto the stage. The asset is inserted into the current frame.
18. Click the zoom setting drop-down arrow at the upper-right of the document window, and click **Show All** in the drop-down menu. The magnification of the document is changed so everything fits within the document window.
19. With the asset selected, display the **Properties** panel.
20. Click the **X:** coordinate in the panel to make it editable, and enter 75.
21. Click the **Y:** coordinate in the panel, and enter 0.

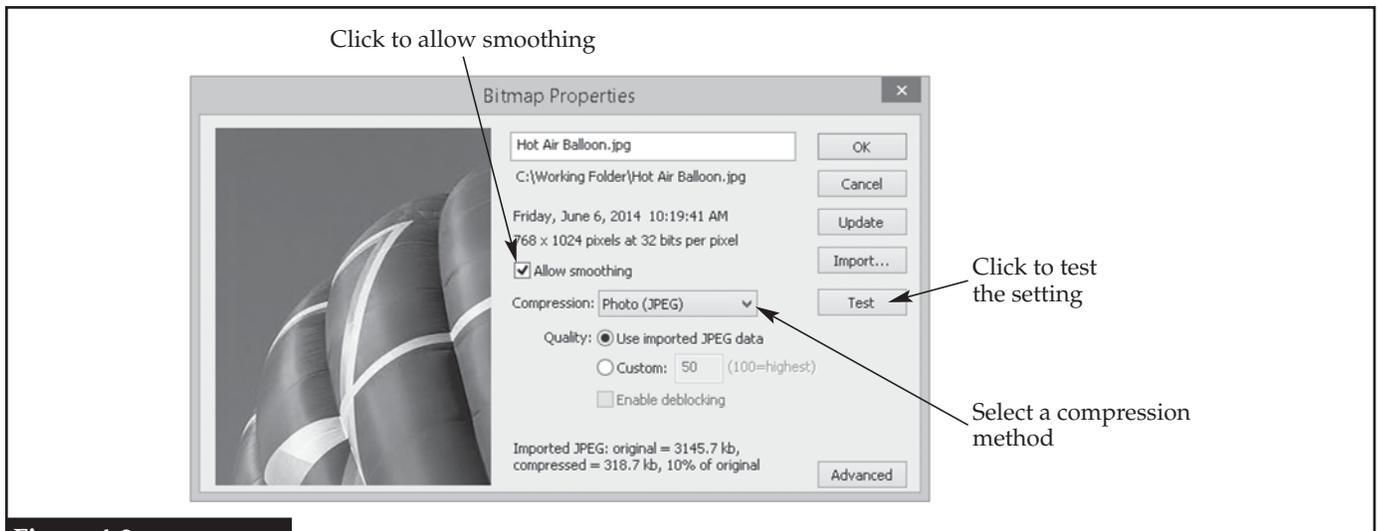


Figure 4-3.

Changing the properties of a raster image in the library.

22. Click the link icon to the left of the **W:** dimension. This locks the aspect ratio so as the width is changed, the height is proportionally changed or vice versa.
23. Click the **H:** dimension in the panel, and enter 600. This sets the height of the image to match the height of the stage. The image now fits entirely within the stage and is centered.
24. Double-click on the layer name (Layer 1) in the **Timeline** panel. The name is made editable. Change the name to Balloon. Press the [Enter] key to set the name.

Tracing a Raster Image

Vector images, not raster images, are the best to use in a Flash animation. However, the balloon image is a raster image. It needs to be converted to a vector image. Some image quality will be lost in the conversion.



New Layer

25. Click the **New Layer** button in the **Timeline** panel.
26. Applying what you have learned, rename the new layer as Vector.

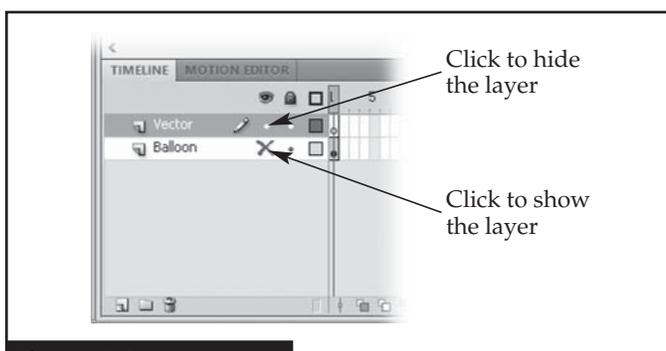


Figure 4-4.

The visibility of a layer is turned on or off in the **Timeline** panel.



Selection Tool

27. Verify that the **Vector** layer is above the **Balloon** layer in the **Timeline** panel. If not, drag and drop it at the top of the list. The order of the list from top to bottom determines the order of layers. The objects on a layer will obscure or hide all layers beneath.
28. Turn off the visibility of the **Balloon** layer by clicking the dot in the column below the eye icon, as shown in **Figure 4-4**. The layer is not deleted, just hidden from view.
29. Applying what you have learned, add the **Hot Air Balloon** image to the stage. The asset will be placed on the current layer, which should be the **Vector** layer.
30. Make sure the image is selected. If not, click the **Selection Tool** button, and click the image to select it.

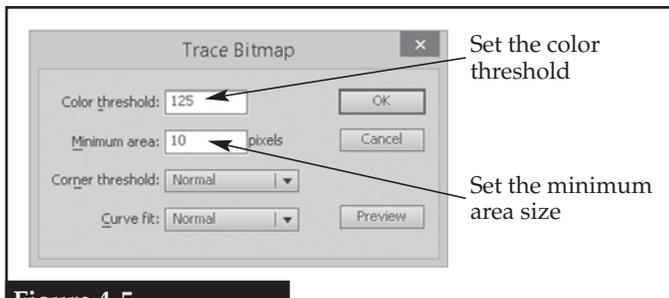


Figure 4-5.

Creating a vector image by tracing a raster image.

TIP
The maximum value for the **Minimum area:** setting is 1000.



Subselection Tool

TIP
You can click and drag a selection box around an area containing vector objects to select all of those objects.

31. Applying what you have learned, change the properties of the image to the same settings previously used. The image should be the same size and in the same location as the previous image.
32. Click **Bitmap** and then **Trace Bitmap...** in the **Modify** pull-down menu. The **Trace Bitmap** dialog box is displayed, as shown in Figure 4-5.
33. Click in the **Color threshold:** text box, and enter 125.
34. Click in the **Minimum area:** text box, and enter 10. Lowering the minimum area will create a vector image with more clarity, but will substantially increase the file size. Setting the minimum area larger will create fewer vector shapes. This will make the image less detailed.
35. Click the **OK** button to convert the image to a vector image.
36. Click outside the image to deselect it and see the results. Notice the color differences that occur when a raster photograph is converted to a vector image.
37. Click the **Subselection Tool** button, and click the edge of the balloon. Notice the individual shapes created when the vector image was created. Some of the larger shapes are visible with a solid fill.
38. Click **Undo action** in the **Edit** pull-down menu or press the [Ctrl][Z] key combination. Do this as many times as needed to undo the tracing of the raster image.
39. Applying what you have learned, trace the raster image again with a color threshold of 50 and a minimum area of 1000 pixels.
40. Click the **Subselection Tool** button, and click the edge of the balloon. Notice how far less detail is preserved.
41. Click the **Selection Tool** button, click outside the image to deselect it, and click any part of the dark blue sky. The upper part of the sky is now a single shape. Notice how only the dark blue is highlighted when it is selected.
42. Click and drag the dark blue sky away from the balloon. Notice how the tracing operation converted the colors of the sky into a vector object.
43. Press the [Delete] key to remove the dark blue sky.
44. Applying what you have learned, delete the remaining sky and anything else not part of the balloon.

Replacing Color

The fill color of a vector object can be easily changed. For the balloon, the fill colors will be adjusted to minimize the shadow on the right-hand side of the balloon.

45. If needed, turn off the visibility of the **Balloon** layer so only the **Vector** layer is visible.
46. Click the **Selection Tool** button, and click a dark red object on the right-hand side of the balloon. The dark red objects are in the shadow.
47. Display the **Properties** panel.
48. Click the **Fill Color** color swatch, and click the color mixer button in the color palette that is displayed, as shown in Figure 4-6. The **Color** dialog box is displayed.

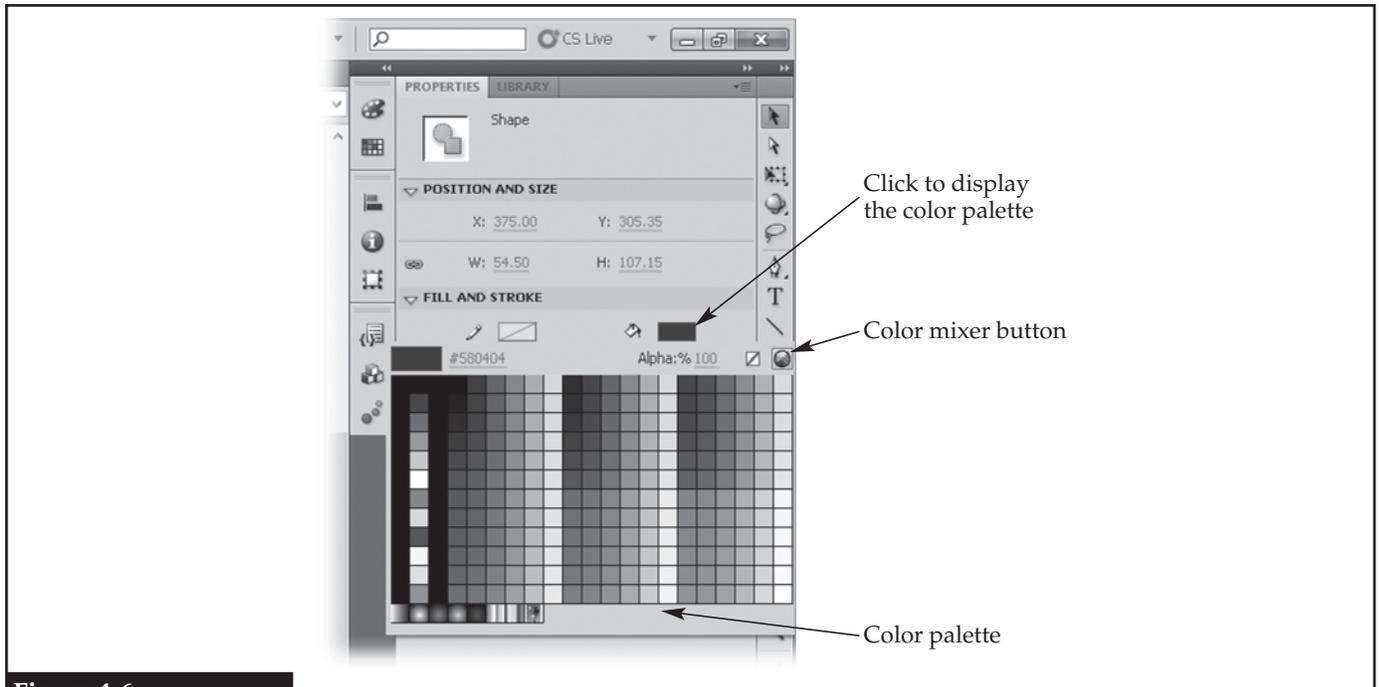


Figure 4-6.

Changing the fill color of a selected object.

49. Click in the **Red:** text box, and enter 165.
50. Click in the **Green:** text box, and enter 25.
51. Click in the **Blue:** text box, and enter 5.
52. Click the **OK** button to replace the fill color of the selected object. Notice how the object is now a lighter red, as if that area of the balloon is receiving full sun.
53. Notice that there are two shades of red in the shadow, a lighter and a darker red. With the **Selection Tool** active, hold down the [Shift] key, and click each of the darker red areas on the right-hand side of the balloon. The [Shift] key allows multiple objects to be selected.
54. Applying what you have learned, change the color of these darker red objects to R140, G25, B5.
55. Applying what you have learned, change the color of the objects in the shadow as shown in **Figure 4-7**. When finished, the right-hand side of the balloon should be much lighter and not in shadow.

Obtaining Data from the Info Panel

Knowing the exact RGBA color settings for a single pixel can be helpful when deciding on a color to select or match. This information is reported in the **Info** panel. This information also can be used to identify any areas of the balloon with a specific color that have not been changed.

56. Click **Info** in the **Window** pull-down menu or click the collapsed **Info** panel to expand the panel.
57. Move the cursor over the stripe on the balloon, and examine the RGBA values shown in the **Info** panel, as shown in **Figure 4-8**. Notice the alpha value (**A:**) is 100%, which means the color at the cursor's location is 100% opaque (not see-through). The *alpha channel* controls opacity.

Color in Shadow	Replacement Color—Light		Replacement Color—Dark	
	RGB	Hex	RGB	Hex
Red	R165, G25, B5	#A51905	R140, G25, B5	#8C1905
Orange	R235, G35, B20	#EB2314	R200, G45, B10	#C82D0A
Yellow	R200, G165, B50	#C8A532	R195, G130, B25	#C38219
Black	R100, G85, B75	#64554B	R70, G60, B50	#463C32

Goodheart-Willcox Publisher

Figure 4-7.

The color settings for changing objects on the right-hand side of the balloon.

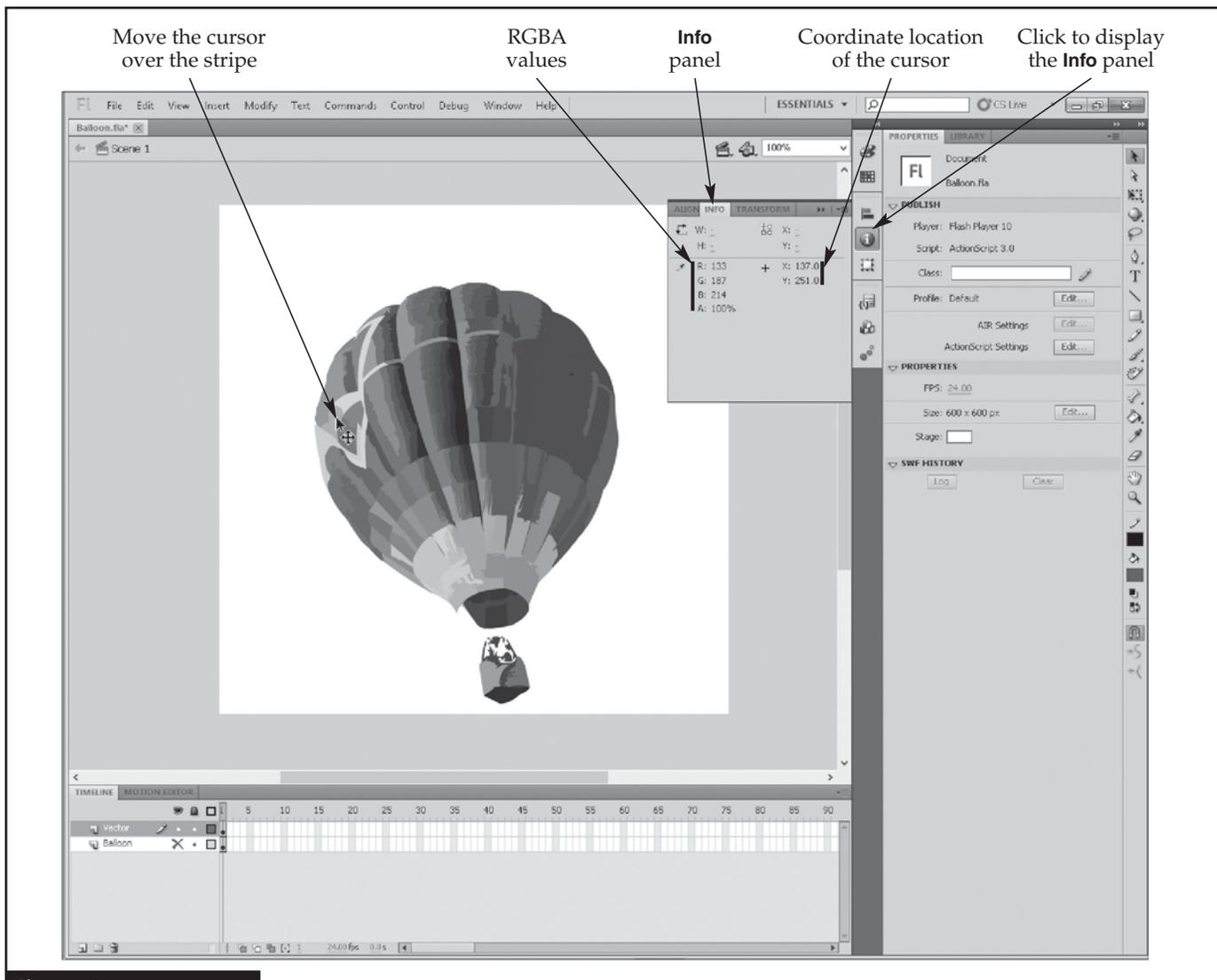


Figure 4-8.

The Info panel displays color and coordinate data about the cursor's location.

58. Determine which blue in the stripe you like best, and note the RGBA value of that color.
59. Applying what you have learned, change all objects in the stripe so the fill matches the blue you chose.

60. Click outside the image to deselect it, and then click any object in the stripe. Notice how Flash has automatically joined all of the objects into a single object when all of the colors were changed to match.
61. Applying what you have learned, display the color palette in the **Properties** panel for the stripe object, and click the **Alpha: %** setting, as shown in **Figure 4-9**.
62. Change the setting to 50, and press the [Enter] key. The stripe is now 50% opaque. In this case, since the background is white, it looks like the color is lightened, but if another object were behind the stripe, it would be partially visible through the stripe.

Masking an Image

An *image mask* can be used to exclude parts of an existing image. The mask will reveal only the parts of the image that are covered by the mask.

63. Applying what you have learned, turn off the visibility of the Vector layer and turn on the visibility of the Balloon layer.
64. Applying what you have learned, create a new layer, and name it Mask.
65. Applying what you have learned, position the Mask layer below the Vector layer, but above the Balloon layer.
66. Click the **Oval Tool** button in the **Tools** panel.
67. Applying what you have learned, change the fill color to yellow with an alpha setting of 50%. By making the color semitransparent, you will be able to see through it to make the mask exactly where you want it.
68. Click the **Stroke Color** color swatch in the **Properties** panel, and click the no stroke swatch, as shown in **Figure 4-10**. This means the object will be drawn using only the fill color.
69. Click and drag on the stage to draw an oval that covers most of the balloon. You will adjust the object later, so its size does not need to be exact at this point.



Oval Tool

TIP

If the oval does not appear, the image may be set to be on top. Select the image, and click **Arrange>Send to Back** in the **Modify** pull-down menu.

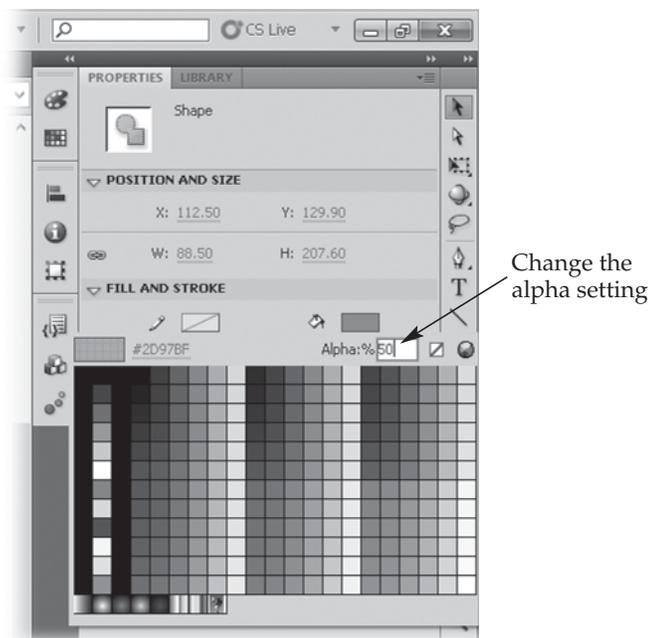


Figure 4-9.

Changing the alpha channel setting in the **Properties** panel.

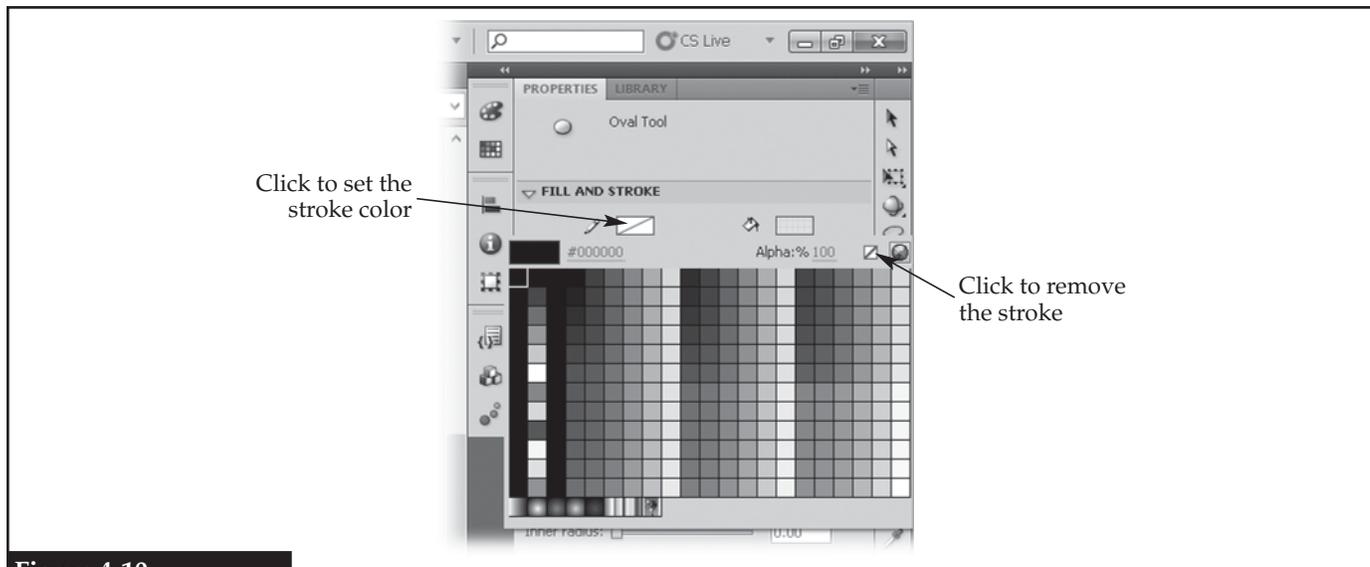


Figure 4-10.

Removing the stroke color from an object.



Subselection Tool

TIP
To have a layer not affected by the mask, drag the layer to the bottom of the indented stack, and then drag to the left until the black line is all the way to the left, and drop the layer. To make a layer affected by the mask, drag it into the indented stack.



Text Tool

70. Click the **Subselection Tool** button in the **Tools** panel, and click the edge of the oval. Handles are displayed on the oval, as shown in **Figure 4-11**.
71. Drag the handles to distort the oval so it completely covers the balloon.
72. Right-click on the Mask layer in the **Timeline** panel, and click **Mask** in the shortcut menu. All areas of the layers below the Mask layer that are not covered by the mask are blocked from view, as indicated by the layer names being indented under the Mask layer.

Adding Text

Text can be added to the stage to provide decoration or information. The **Properties** panel is used to modify the text.

73. Display the Vector layer, hide all other layers, and make the Vector layer current.
74. Click the **Text Tool** button in the **Tools** panel, and click anywhere above the balloon. A text box is placed on the stage and active.
75. Enter the text Balloons are Fun. Notice the text is in the current fill color and alpha setting.
76. Click the **Selection Tool** button in the **Tools** panel, and then click the text box so it is selected.
77. Click the **Text Engine** drop-down arrow (first) in the **Properties** panel, and click **Classic Text** in the drop-down list.
78. Click the **Text Type** drop-down arrow (second) in the **Properties** panel, and click **Static Text** in the drop-down list.
79. Set the position to X=150 and Y=5.
80. Set the width to 330.
81. Click the **Family:** drop-down arrow in the **Character** area of the **Properties** panel, and click **Broadway** in the drop-down list. If this font is not available, choose any serif typeface.

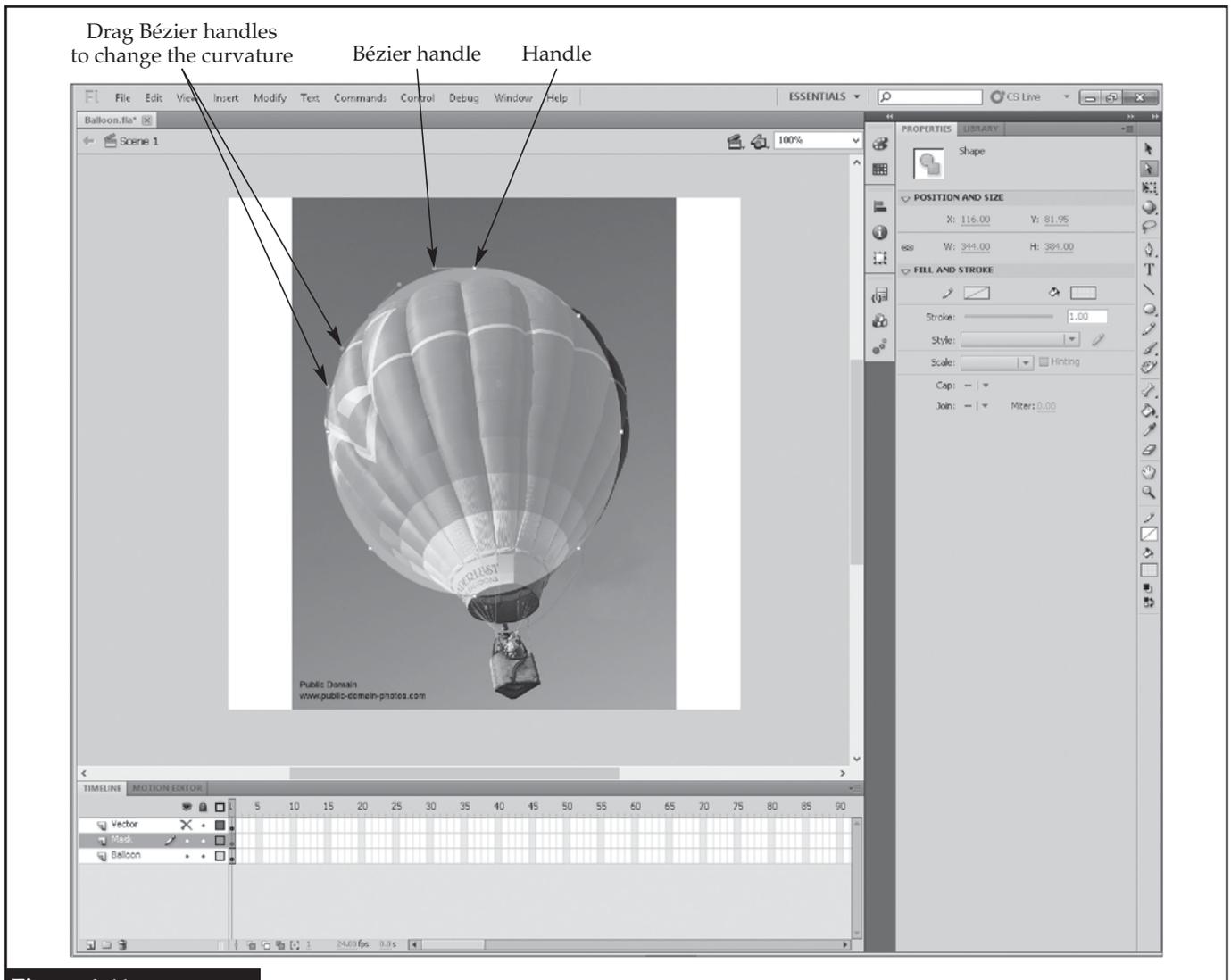


Figure 4-11.

Adjusting the shape of an oval object to match the balloon shape by dragging the handles.

82. Click the **Size:** setting, and enter 36. This sets the size of the type in points, as shown in **Figure 4-12**.
83. Click the **Color:** swatch, and change the color to #0000FF (blue) with an alpha setting of 100%.
84. Click the **Anti-alias:** drop-down arrow, and click **Anti-alias for readability** in the drop-down list. This applies a form of antialiasing that is best for reading, as opposed to animated text.
85. Expand the **Options** area of the **Properties** panel, click in the **Link:** text box, and enter <http://www.balloons.com> as the URL. This makes the text a hyperlink.
86. Click in the **Target:** text box, and enter `_blank`. An entry of `_blank` will open the link in a new browser tab or window.

Adjusting Color Effects

To this point, you have worked with basic color properties. Other color settings such as tint and brightness can be changed as well.



Figure 4-12.

Adding text and changing its properties.

TIP

When a layer is current, a pencil icon appears next to its name in the **Timeline** panel. If the layer is locked, the pencil icon will have a slash through it.

87. Applying what you have learned, create a new layer named Colors, and place it on top of the layer stack.
88. Applying what you have learned, add an instance of the Balloon image file to the Colors layer, and make it the same size and in the same location as the previous instances. Note that since this layer is not below the Mask layer, the mask will not affect it.
89. Make sure the lock icon for the Colors layer in the **Timeline** panel is not displayed so the layer is unlocked.
90. Hide all layers other than the Colors layer.
91. Select the balloon image on the Colors layer.
92. Click **Convert to Symbol...** in the **Modify** pull-down menu. The **Convert to Symbol** dialog box is displayed, as shown in **Figure 4-13**.
93. Click in the **Name:** text box, and enter movie_balloon.

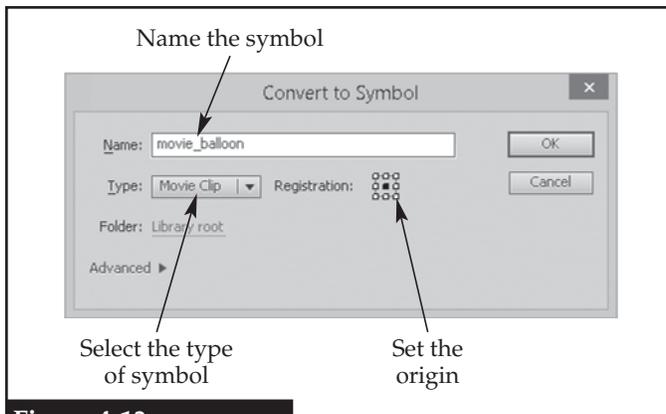


Figure 4-13.

Converting a raster image into a movie clip symbol.

94. Click the **Type:** drop-down arrow, and click **Movie Clip** in the drop-down list.
95. Click the center box in the **Registration:** area to set the origin of the object.
96. Click the **OK** button to convert the image to a movie clip.
97. Expand the **Color Effect** section in the **Properties** panel.
98. Click the **Styles:** drop-down list, and examine the different color effects available.
99. Click **Alpha** in the drop-down list, click in the **Alpha:** text box that is displayed, and enter 50.
100. Applying what you have learned, change the tint setting to 20% with a red value of 0, green value of 200, and blue value of 0.

101. Turn on the visibility of the Balloon layer.
102. Toggle the visibility of the Colors layer to see the changes from the original image on the Balloon layer and the adjusted image on the Colors layer. Notice the effect of the color effect adjustments. The image on the Colors layer looks like an aged photograph.
103. Save your work.

Publishing in Other Formats

Flash files are generally saved in one of two formats: SWF and FLA. The file saved in the previous section is a Flash document in FLA format. This is the native file format for Flash. SWF, which is generally pronounced *swif*, is a vector-graphic animation format. Other software can create an FLV file, which is a Flash video format.

104. Turn on the visibility of all layers, and arrange them in this order from top to bottom: Mask with Balloon indented below it, Vector, and Colors. The Vector and Colors layers should not be indented under the Mask layer so they will not be affected by the mask. This produces an image with the masked balloon image on top, the text visible, and the tinted sky visible, as shown in **Figure 4-14**.
105. Toggle the visibility of each layer to see how the image is assembled.
106. Click **Publish** in the **File** pull-down menu. Two files are saved in the same folder where the FLA file is stored: SWF and HTML. The HTML file is created so the SWF can be viewed in a web browser.
107. Using the system file explorer, navigate to your working folder. Notice there are three *LastName_Balloon* files in the folder.
108. Hover the cursor over each of the *LastName_Balloon* files to display the help text. If the system is set up to display file extensions, you will not need to display the help text for a file to determine its type.
109. Double-click on the *LastName_Balloon.html* file to open it in the default web browser. If a message is displayed warning of ActiveX content, allow the content to be displayed.

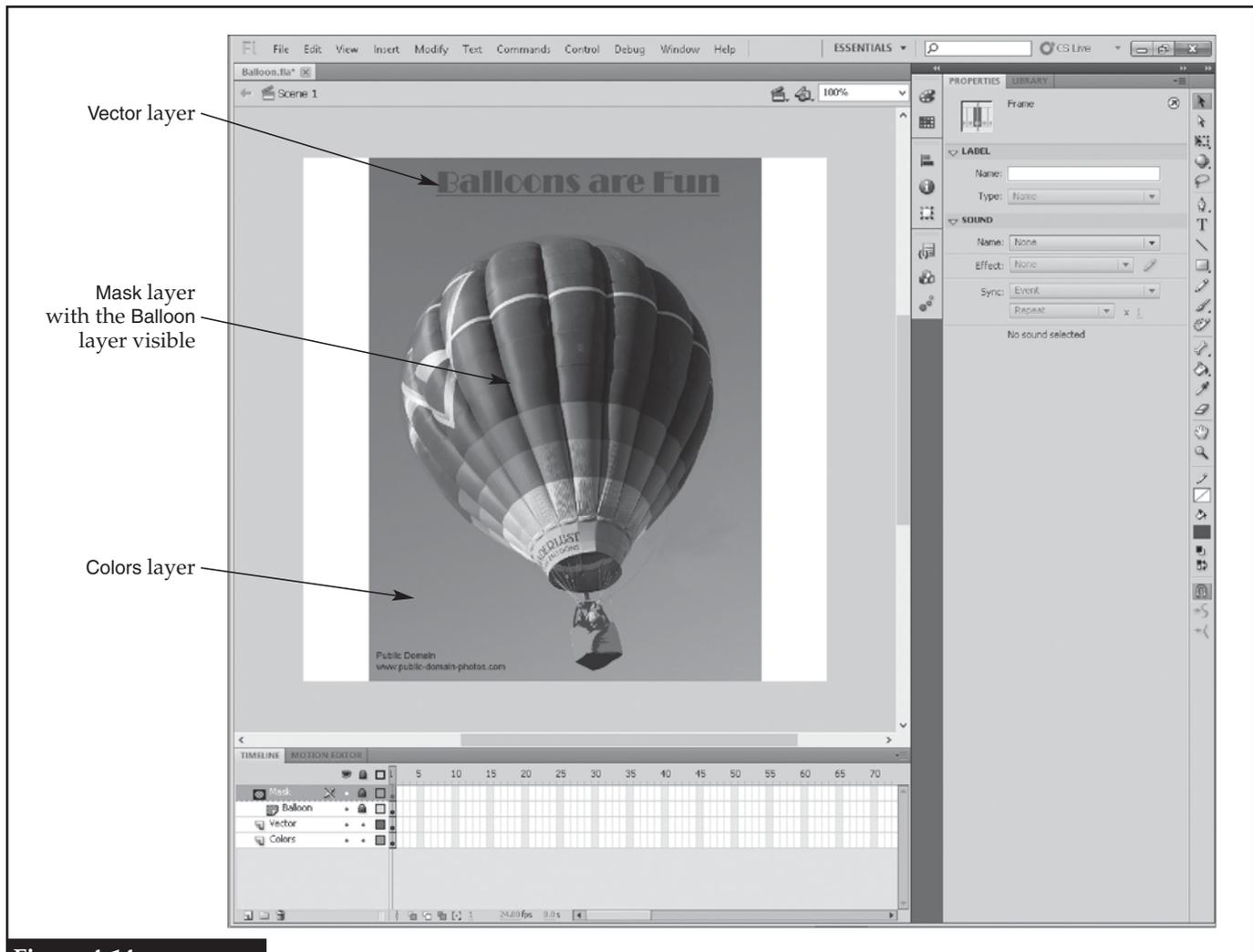


Figure 4-14.

The layers are all visible, and their order has been adjusted to show and hide various features.

TIP
By default, Flash blocks Internet links when the file is stored on a local drive instead of at an Internet address. If a warning appears when clicking the hyperlink, cancel the warning, right-click on the image in the browser, and click the **Global Settings...** in the shortcut menu. Then, take the steps necessary to add your local machine as a trusted location.

110. Click the hyperlink Balloons are Fun. A new browser tab or window is opened and the www.balloons.com website is displayed.
111. Close both tabs or browser windows.
112. Double-click on the SWF file to open it in the Adobe Flash Player installed on your computer.
113. Click the hyperlink Balloons are Fun. A browser window is opened outside of Adobe Flash Player, and the www.balloons.com website is displayed.
114. Close Adobe Flash Player and the web browser. Leave the Flash open.

Publishing for Compatibility

There are many different versions of Adobe Flash Player. If the SWF document is created for a newer version of Adobe Flash Player than the user has installed, he or she will have to download a new version to view the document. Saving as an earlier version of Flash, Flash Lite, or AIR format can add a level of compatibility for the SWF across devices.

TIP

More recent features of Flash may not be supported by older versions of Adobe Flash Player, which will make those features unavailable or the document unusable. Since the balloon animation is a very basic document, saving in an older format will not cause a problem.

115. Click **Publish Settings...** in the **File** pull-down menu. The **Publish Settings** dialog box is displayed, as shown in **Figure 4-15**.
116. Click the **Flash** tab in the dialog box, and click the **Player:** drop-down arrow. Examine the list of options for compatibility. Click **Flash Player 8** in the drop-down list. This will allow devices with Adobe Flash Player 8 or later to view the document.
117. Click the **Script:** drop-down arrow. Notice that ActionScript 3.0 is not an option with Flash Player 8. If this document contained any scripting written in ActionScript 3.0, it could not be saved to Flash Player 8 compatibility. Click **ActionScript 2.0** in the drop-down list.
118. Click in the **JPEG Quality:** text box, and enter 100. This will increase the resolution quality of the JPEG-compressed images.
119. Click the **Formats** tab, and make sure the **Flash (.swf)** check box is checked.
120. Check the **Macintosh Projector** check box. Notice the .app file extension is included in corresponding **File:** text box. The **Macintosh Projector** option creates a standalone Mac application that the user can run or download as an app if it is submitted to the iTunes store.

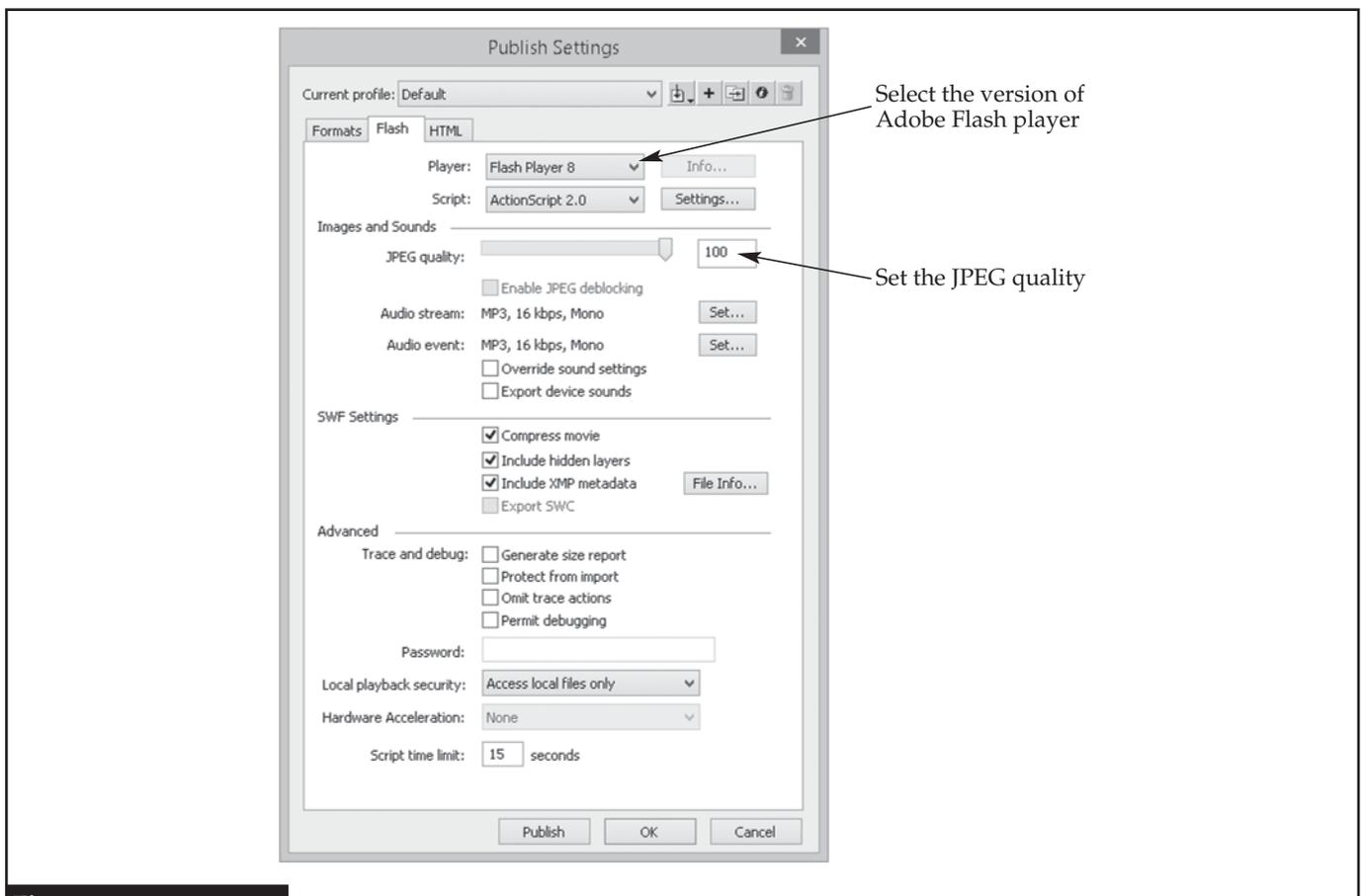


Figure 4-15.

Compatibility can be added by publishing a document for an older version of Adobe Flash Player and by creating a standalone application that can be played on a PC or a Mac.

TIP

The **Enable JPEG deblocking** check box will apply a deblocking filter to remove some of the blurry-block areas, called *artifacts*, caused by JPEG compression.

121. Uncheck the **Macintosh Projector** check box, and check the **Windows Projector** check box. Notice the **File:** text box displays the .exe file extension on the file name. The **Windows Projector** option creates a standalone Windows application that the user can run.
122. Click the **Publish** button.
123. Using the system file explorer, navigate to your working folder. Compare the file size of the EXE and SWF files by displaying the help text for each. Notice how much larger the EXE file is.
124. Run the EXE by double-clicking the file, and test the hyperlink.
125. Save your work, and close Flash and all other windows.

Lesson Review

Vocabulary

In a word processing document or on a sheet of paper, list all of the *key terms* in this lesson. Place each term on a separate line. Then, write a definition for each term using your own words. You will continue to build this terminology dictionary throughout this certification guide.

Review Questions

Answer the following questions. These questions are aligned to questions in the certification exam. Answering these questions will help prepare you to take the exam.

1. How is the stage size changed?

2. Which tool or panel of the interface is used to change the X or Y coordinate of an object?

3. Briefly describe how to trace a raster image to create a vector image.

4. How is the fill color of a selected object changed?

5. What does the alpha channel setting control?

6. Which panel displays the RGBA values and the coordinates at the cursor's location?

7. What happens to the parts of an image that are outside of the mask shape when the mask is applied?

8. How is a layer turned into a mask?

9. In which area of the **Properties** panel is a hyperlink added to text?

10. How is a hyperlink configured to open in a new browser tab or window?

11. Briefly describe how to add a yellow tint to a movie clip symbol (object).

12. What are the three file types in which a Flash file is generally saved?

13. What is the native format for Flash?

14. What setting when publishing a Flash file is used to remove artifacts in JPEG images?

15. How can a Flash document be published so it is compatible with Adobe Flash Player 6 and Mac computers?



Answers

Lesson 1

1. Shape, form, line, color, value, space, and texture.
2. Regular shapes and objects that are used to assemble more complex shapes or objects.
3. The primary colors of red, blue, and yellow.
4. A complementary color is located opposite of the selected color on the color wheel, while an analogous color is located next to the selected color.
5. Positive space is the area or volume occupied by the primary objects, while negative space is the area or volume around or between the primary objects.
6. The point or points in a perspective drawing where receding parallel lines appear to meet.
7. Movement, emphasis, harmony, variety, balance, contrast, proportion, pattern, and unity.
8. Movement.
9. Emphasis.
10. Balance.
11. An image is divided into three sections horizontally and three sections vertically to create nine areas, and where the lines cross are the focal points for a scene.
12. Contrast.
13. Unity.
14. To achieve site-wide consistency.
15. Shorter development time, easier maintenance, and improved usability.

Lesson 2

1. RGB
2. CMYK
3. It is the total spectrum a given color model can produce.
4. Bit depth of 8.
5. The alpha channel allows for a masking color, which is a single shade of a color that determines areas of transparency in the image.
6. Vector.
7. The process of converting a vector image into a raster image.
8. Raster images are composed of colored dots at specified locations, while vector images are composed of elements recorded by their mathematical definitions.
9. Applying the most appropriate resolution and file compression.
10. Download it from a digital camera.
11. The image is dithered, and the software creates a color through interpolation.
12. 576
13. Bicubic for enlargement.
14. A serif font has decorations called serifs at the ends of letters, while a sans serif font lacks these decorations.
15. Sans serif.

Lesson 3

Figure 3-2

- | | | |
|------------------------------------|--------------------------------------|------------------------------------|
| 1. Selection Tool | 13. Pen Tool | 25. Brush Tool |
| 2. Subselection Tool | 14. Text Tool | 26. Deco Tool |
| 3. Free Transform Tool | 15. Line Tool | 27. Bone Tool |
| 4. 3D Rotation Tool | 16. Rectangle Tool | 28. Paint Bucket Tool |
| 5. Lasso Tool | 17. Pencil Tool | 29. Eyedropper Tool |
| 6. Eraser Tool | 18. Hand Tool | 30. Zoom Tool |
| 7. Stroke Color | 19. Fill Color | 31. Black and White |
| 8. Swap Colors | 20. Add Anchor Point Tool | 32. Gradient Transform Tool |
| 9. Delete Anchor Point Tool | 21. Convert Anchor Point Tool | 33. Bind Tool |
| 10. Oval Tool | 22. Rectangle Primitive Tool | 34. Oval Primitive Tool |
| 11. PolyStar Tool | 23. Ink Bottle Tool | |
| 12. Spray Brush Tool | 24. 3D Translation Tool | |

Figure 3-3

- | | |
|---------------------------|-------------------------------|
| 1. Snap to Objects | 4. Object Drawing |
| 2. Polygon Mode | 5. Magic Wand Settings |
| 3. Magic Wand | 6. Faucet |

Review Questions

- The layout of the toolbars, panels, and document on the screen.
- A small window that holds commands or options.
- The **Timeline** panel.
- The stage is the area where the on-screen action is displayed, while anything on the pasteboard will not appear in the final output.
- The scene bar above the pasteboard.
- By clicking the document tab of the document to display.
- By clicking **Reset** ‘workspace name’ in the drop-down menu displayed by clicking the workspace switcher button.
- Click the **Subselection Tool** button in the **Tools** panel.
- At the bottom of the **Tools** panel.
- A flyout is a toolbar that contains additional tools and is indicated by a black triangle at the bottom-right corner of a tool.

Lesson 4

1. By changing the document size in the **Document Settings** dialog box.
2. The **Properties** panel.
3. Select the image, click **Modify>Bitmap>Trace Bitmap...**, and set the color threshold and minimum area.
4. Click the **Fill Color** color swatch in the **Properties** panel, and select a color in the palette that is displayed or click the color mixer button to define a color in the **Color** dialog box.
5. The opacity of the object to which the color is applied.
6. The **Info** panel.
7. Anything outside of the masked area is hidden.
8. Right-click on the layer in the **Timeline** panel, and click **Mask** in the shortcut menu. Any layers in the stack below that layer will be masked.
9. The **Link:** text box is located in the **Options** area of the **Properties** panel.
10. Enter `_blank` in the **Target:** text box in the **Options** area of the **Properties** panel.
11. In the **Color Effect** area of the **Properties** panel, click **Tint** in the **Style:** drop-down list, and adjust the **Red:**, **Green:**, **Blue:**, and **Tint:** sliders to the color and level desired.
12. FLA, SWF, and FLV
13. FLA is the native format for Flash.
14. The **Enable JPEG deblocking** check box should be checked.
15. In the **Publish Settings** dialog box, set the **Target:** drop-down list to **Flash Player 6**, and check the **Mac Projector** check box in the **OTHER FORMATS** area.

Lesson 5

1. To enhance the content of a website and create animated, rich content.
2. Easing.
3. The onion skin.
4. Action is defined on keyframes, and Flash creates the tweens to fill in the action between the keyframes.
5. Shape tweening, because the object is gradually changed from one basic shape on the first keyframe to another shape on the next keyframe.
6. Motion tweening.
7. Motion tweening.
8. Symbols are the building blocks of animations because they are reusable objects such as graphics, buttons, and movie clips.
9. Individual bones are rigged to create the skeleton, each bone is assigned a range of motion and a pivot point, and the bones are attached to the objects that compose the character.
10. The movement of the parent object controls the movement of the child object and vice versa.
11. By copying the code for the animation as a snippet and then pasting the snippet where needed.
12. It contains objects that are not animated, such as the background, and requires only one frame.
13. Blue.
14. Light green.
15. The playhead indicates the current frame in the animation; it moves across the timeline during animation playback and can be dragged to manually preview the animation.
16. Two seconds.
17. One-half second.
18. Rich media that contains both video and audio.
19. The animation may take longer to play or frames may be dropped out.
20. Web browser in use, operating system of the device, and screen resolution of the device.

Lesson 6

1. The thickness of a line.
2. Click the **Lock corner radius controls to one control** (chain link) button in the **Rectangle Options** area of the **Properties** panel so the button is on, and then enter the radius in the one active text box.
3. The X value increases to the right of the stage, while the Y value increases to the bottom of the stage.
4. The **Subselection Tool**.
5. A black dot means the frame is a keyframe, blue means motion tweening, and green means shape tweening.
6. Straight ahead (frame-by-frame) animation.
7. The animation must be previewed in Flash, because only the stage is included in the compiled animation output to a SWF file.
8. Click **Play** in the **Control** pull-down menu or drag the playhead.
9. On the first frame of the motion, right-click on the object, select **Create Motion Tween** in the shortcut menu, move to the last frame of the motion, and drag the object to the new location. The motion path is automatically created, with one node on each tween.
10. The motion of the object is changed.
11. In the **Motion Editor** panel, change the setting in the **Ease** column to **Simple (Slow)**, and adjust the value in the **Eases** area of the panel if needed.
12. Drag and drop the layers into the folder.
13. Shape tweening.
14. Drag the guideline and drop it on the ruler.
15. The text must be broken apart twice.

Lesson 7

1. Identify the target audience and set the client goals.
2. Sketches, a statement of deadlines and milestones, definition of the project scope, and detailed project specifications.
3. Compatibility with Flash, format and size, and amount of rich media.
4. SWF, AVI, GIF, and MOV.
5. <object>, <embed>, or <video>
6. A storyboard is a graphical representation of an intended visual process that is used to visualize graphic sequences and the user interface.
7. Determine if it helps meet the business requirements of the project.
8. It is a tool that helps store and organize assets used between Adobe products.
9. It is important to meeting the deadline, helps improve usability of the output, and makes maintenance easier.
10. It results in an aesthetically pleasing design and helps streamline the process.
11. Reusing assets leads to consistency, which in turn reduces the total size of the project because there are fewer assets.
12. With antialiasing using the **Anti-Alias for Readability** setting.
13. It allows the screen reader to state a description of the image.
14. Ensure enough white space is provided, overlapping content is avoided, a readable font is used, and the text is set in an appropriate size.
15. Provide high contrast by using a light color for the text.
16. [Alt] and [Tab]
17. Permission must be obtained from the owner of the copyright to reuse the song.
18. The material has no restrictions on use.
19. The fair use doctrine.
20. It is the letter C contained within a circle.
21. An idea cannot be copyrighted; the material must be in tangible form.
22. To stream video content.
23. Movie_Apples_mc
24. Observe, survey, or interview members of the target audience.
25. Links, scripts, buttons, and rich content.

Lesson 8

1. Click the panel menu button in the **Color** panel, and click **Add Swatch** in the menu.
2. Exported by clicking the panel button menu in the **Swatches** panel and clicking **Save Colors...** in the menu.
3. The **Motion Presets** panel.
4. Remove the head and tail and compress the audio.
5. Create a new layer for the sound, add a keyframe for the frame on which the sound will begin, and drag the sound asset from the **Library** panel to the stage.
6. Select the first frame of the waveform in the **Timeline** panel, and in the **Properties** panel click the **Effect:** drop-down arrow and select the effect.
7. An event sound must be fully downloaded before it begins playing, while a streaming sound will begin to play as it is downloaded.
8. Click **File Info...** in the **File** pull-down menu, and then add the metadata in the dialog box that is displayed.
9. Click **Test Movie** and then **In Flash** (or **In Flash Professional**) from the **Control** pull-down menu.
10. Exporting (**File>Export>Export Movie...**)

Lesson 9

Lesson

15. `import flash.display.Sprite;`

Review Questions

1. `flash.events`
2. `TimerEvent`
3. `myTimer`
4. `event:TimerEvent`
5. `var`
6. A variable.
7. Uploads the variable data to a server.
8. It closes the function and returns no value so Flash stops looking for a value.
9. `timerFunction`
10. `addEventListener`

Lesson 10

1. In the User Interface folder on the **Components** panel.
2. Parameters, which are input variable settings used in a computer programming argument.
3. It identifies the object as a button that, when clicked, begins some action, such as starting a game or playback.
4. The **enable** and **visible** check boxes in the **Component Parameters** area of the **Properties** panel must be checked.
5. Apply the alpha color effect to the button fill color, and change the alpha value to less than 100%, such as 50%.
6. Over (changes from up to over).
7. The method and parameter `gotoAndStop(1)` will return the movie to Frame 1 and stop playback. The user then must click the Play button, which must be properly programmed, to resume playback.
8. A Flash package.
9. Custom
10. Place the cursor at the point in the code where the snippet is to be inserted, display the **Code Snippets** panel, select the snippet, and click the **Add to Current Frame** button. Finally, modify the code as needed.