

CHAPTER 6 Enrichment Activity

Design a Brochure on Computer History

Good designs should follow the four basic design principles, which can be remembered by the acronym PARC, for Proximity, Alignment, Repetition, and Contrast. Sometimes professional designers will purposely misuse one of these principles, but only in as a way to better communicate the message or the needs of the client. The message is more important than the form, though the form should help to relay the message.

Proximity refers to creating visual groups. Information that belongs together should be physically together on the page. For example, in brochures, a header should look like it belongs with the body text below it. Never put the same amount of space above a header as below one; it will look as though it does not belong with anything.

Alignment means that all things should line up on the page with something else. Things that are not aligned look like they do not belong. Some alignments can be used together (right and left, center and justify), while other combinations must be avoided.

Repetition means that a dominant design element is repeated in some form someplace else in the document. This principle can be difficult to apply because the designer must recognize or create an element to repeat that does not look out of place.

Contrast refers to an element on the page that looks starkly different from the other elements surrounding it. Contrast helps to set a focal point for the audience. Viewers' eyes will start at the point of highest contrast and then follow the visual cues they receive in the design. Contrast may seem to conflict with the principles of repetition and alignment, but while those principles adds harmony to the page, a bit of contrast adds visual interest.

CHAPTER 6 Enrichment Activity

Add Photoshop Effects

Photoshop is a powerful program capable of creating exciting, realistic-looking graphics. However, Photoshop does not do a particularly good job with text or other vector-based images that need to be printed. On screen, the images will look good, but when printed, the text will pixelate. This is primarily because the computer screen is more forgiving (only displaying 72 ppi) than a printer (which can produce 1200 dpi). Therefore, Photoshop's main strength lies in creating and editing raster graphics, not for setting text. However, there is one notable exception, title text.

Photoshop can be used to create special effects for large, title-sized text at about 18 points and larger. If the special effect is done well enough and the resolution is set high enough, the audience will ignore the fact that the text may be slightly blocky around the edges or a bit less clear than vector-based text in your layout software or illustration software.

When working with text effects in Photoshop, remember a few things:

- Photoshop rasterizes text, even when saving to a vector-based format such as an Encapsulated PostScript (EPS). Choose high resolutions such as 300 ppi to minimize this problem.
- Set the size of the workspace to the specific size you need. This will minimize distortion because you will not need to resize the title in your layout software.
- Do not try using Photoshop for delicate script text or for text smaller than 18 points in size. Delicate text becomes obviously pixelated much faster. For this kind of text, it is best to use your layout or illustration software.

In this project, you will create a brochure using Publisher, and then use Photoshop to add effects. The brochure will describe the history of computers.

CHAPTER 6 Enrichment Activity

Step-by-Step

1. In Microsoft Publisher, create a New Blank Print Publication in landscape orientation.
2. Use **Arrange>Layout Guides** to set the margins to **0.25 inches** all around. Set grids at **3 columns** with a **0.5 inch gutter** and **8 rows** with no gutter.
3. Create three text boxes, one in each column, but leave the first row blank.
4. Click **Insert>Page**, and choose the **Duplicate All Objects from Page 1** option. You should now have 2 pages with frames for the text. See Figure 6.1.
5. Select the Page 1 text box in the far left column, and choose **Insert>Text File**. Browse to the **Data File OLC 6-a**.
6. Repeat the technique in Step 5 to add the rest of the text according to the chart in Figure 6.2

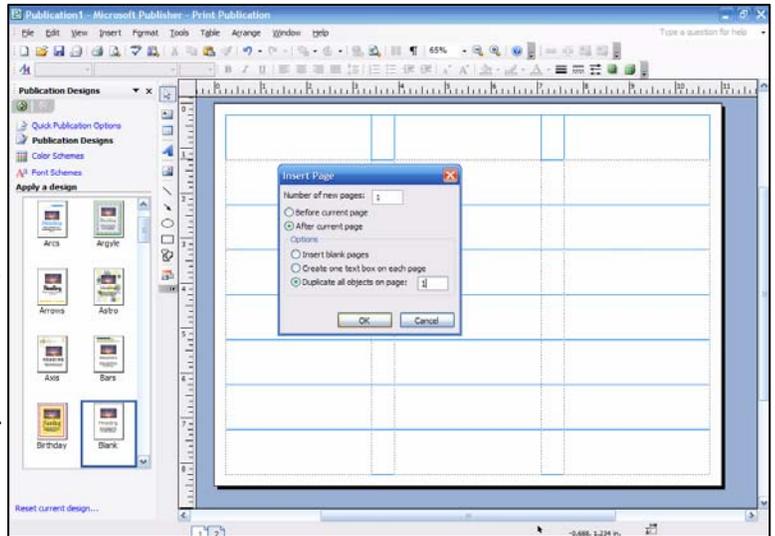


Figure 6.1 Create the layout on one page, and then insert another page so that the second page is identical to the first.

Page 1	Left column	Data File OLC 6-a: Early Computers
Page 1	Middle column	Data File OLC 6-b: Bibliography
Page 1	Right column	Text: By (Your Name)
Page 2	Left column	Data File OLC 6-c: Mechanical Computers
Page 2	Middle column	Data File OLC 6-d: Electro-Mechanical Computers
Page 2	Right column	Data File OLC 6-e: Electronic Computers

Figure 6.2 Use this chart to lay out your brochure.

CHAPTER 6 Enrichment Activity

Format Page 2

7. On Page 2, select all the text in the first column. Set the text at **Times New Roman, 10 pt.** Then use **Format>Paragraph** to change the leading to **1.25 sp Between lines, 8 pts After paragraphs**, and the **Left indent to 0.25 inches**.
8. With the paragraphs still selected, key: **Body Text** in the Styles window, then press Enter.
9. Assign the same style to all the other text frames on the second page.
10. In the first column of Page 2, find the line *Napier's Bones*. Change the font to **Gill Sans Ultra Bold, 14 pt, black**. Change the leading to **16 pt Before and 2 pt After**.
11. In the Style window, name this new style **Section Head**.
12. With the words *Napier's Bones* still selected, double-click the **Format Painter** on the Standard toolbar. Use the Format Painter to apply the new style to the following text on Page 2:
 - **Left Column:** Napier's Bones, The Analytical Engine, Boolean Expressions
 - **Middle Column:** The ABC Computer, The Mark I, The UNIVAC
 - **Right Column:** Transistors, Microprocessor, The Future

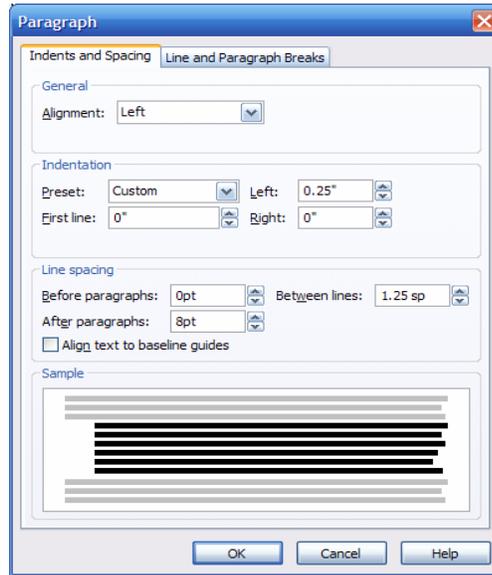


Figure 6.3 Use Format>Paragraph to set the leading for the body text.

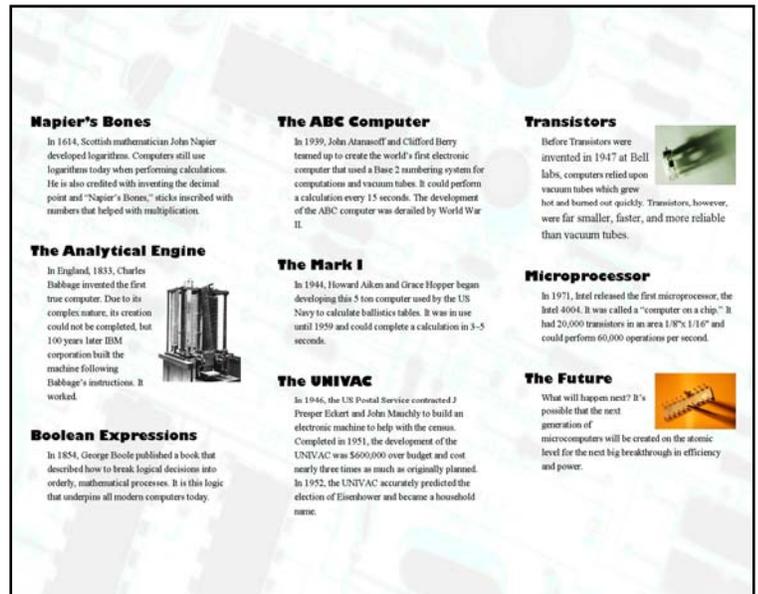


Figure 6.4 Apply the same style to every header on Page 2.

CHAPTER 6 Enrichment Activity

Format Page 1

- On Page 1, change the text in the first column to **15 pt**.
- Select all the text in the middle column. Set the leading to **1.25 sp Between lines** and **16 pt After paragraph**. Change the Indentation Preset to **Hanging Indent** (Figure 6.5).

Insert Graphics

- Search for pictures or use the Clip Art Gallery to add pictures to both pages of the brochure. (See Figures 6.4 and 6.6).
- On Page 1, make sure the image in the right panel is sent to the back so that text is visible. Change the font to a suitable contrasting color and size (Figure 6.6).
- Open **Data File OLC 6-f** and resize the image to fill the page. Then choose **Format>Picture** and click on the **Picture** tab. Change the **Brightness** to **95%** and the **Contrast** to **11%** so that the image is barely visible.
- Use **Arrange>Send to Master Page** so that the picture will be seen as a watermark in both pages (Figure 6.6).

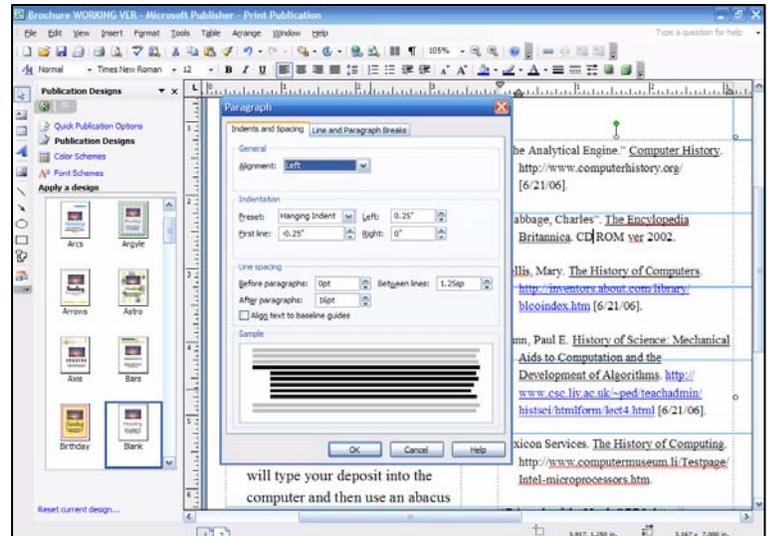


Figure 6.5 Create a hanging indent for the bibliography section.

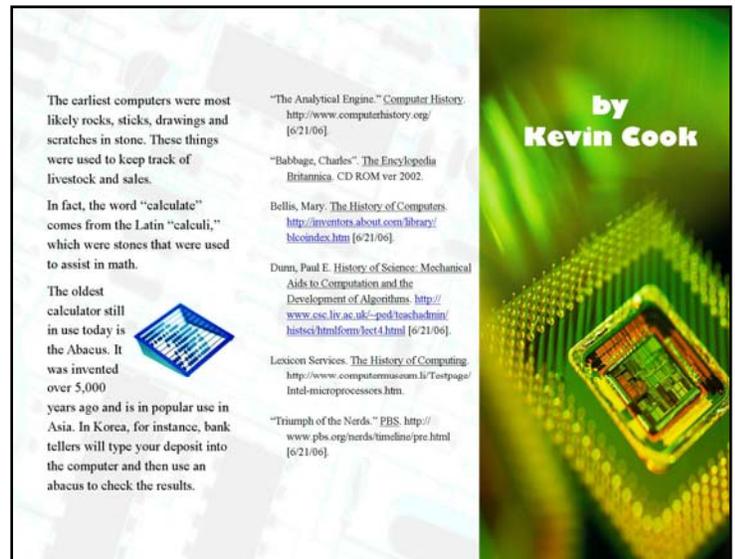


Figure 6.6 Add a watermark to both pages by using a Master Page.

CHAPTER 6 Enrichment Activity

Add Photoshop Effects

20. In Adobe Photoshop, create a new document that is **3.25 inches wide, 1 inch tall, and 300 ppi**.
21. Create a new text layer. Use Gill Sans Ultra Bold and key: **Computer History**.
22. Use the **Options bar** to **center** the text. Resize the text to the largest that it can be and still fit in the workspace.
23. Select the Text layer. At the bottom of the **Layers** palette, click on the **Layer Styles** button, and choose **Gradient Overlay**.
24. In the **Layer Styles** dialog box, check the checkboxes, and adjust the settings as indicated in the table below:



Figure 6.7 Select each Layer Style and adjust the settings to make the text more effective.

Drop Shadow	Blending Mode: Multiply	Opacity: 75%	Distance: 11	Spread: 22	Size: 27
Outer Glow	Element: Softer	Spread: 9	Size: 27		
Gradient Overlay	Blending Mode: Normal	Opacity: 100%	Style: Linear	Angle: 90°	Scale: 150
Stroke	Fill Type: Color	Color: 000000			

25. In the **Layers** palette, double click the Background layer to unlock the layer.
26. With the Background layer still selected, press the Delete key and remove the layer, leaving only the text layer.

CHAPTER 6 Enrichment Activity

27. Click **File>Save As**, and change the file type to **PNG**. Save the file as *Computer History*.
28. In the document, use the **Type tool** to select the text. Change the text to: **Early Computers**. Again, save as a PNG file, but this time name the file *Early Computers*.
29. Repeat Step 28, but this time change the text to **Bibliography**, and use the file name *Bibliography*. Continue to do this so that you also create individual files for:
 - Mechanical Computers
 - Electro-Mechanical
 - Electronic

Insert the Photoshop Image

30. In Publisher again, open the brochure you created about the history of computers.
31. Click **Insert>Picture>Picture from File**, and browse to the Photoshop text files you just created.
32. Insert the titles according to the chart in Figure 6.8 and Figures 6.9 (on the next page).
33. Following your teacher's instructions for saving and printing your brochure.

Page 1	Left Column	Early Computers
Page 1	Middle Column	Bibliography
Page 1	Right Column	Computer History
Page 2	Left Column	Mechanical
Page 2	Middle Column	Electro-Mechanical
Page 2	Right Column	Electronic

Figure 6.8 Use this chart and the figures on the next page to place your Photoshop text.

CHAPTER 6 Enrichment Activity

34. Use the examples in Figure 6.9 as guides and check that:

- Titles have drop shadows, outer glows, a thick stroke, and a gradient fill.
- All titles appear to be a consistent size, and the resolution is set high enough to avoid pixilation.
- The text size, leading, and typeface are consistent.
- The headers appear nearest the text which they are heading.
- The text is complete, accurate, and easy to read.
- The space between paragraphs is consistent.
- The top lines of all columns align horizontally.
- The gutters are wide enough to fold the brochure without disrupting the text.
- The computer chip picture has been watermarked and sent to the background.
- The bibliography has a hanging indent.
- Font typefaces use only one font from each font family, with no more than three font typefaces altogether.

Figure 6.9 This finished exterior and interior of the brochure, with Photoshop text.

