Excel Project
Creating a Stock Portfolio Simulation

Background Vocabulary

1. What is a stock?
   A stock is a share in the ownership of a corporation, a large business organization. A stock, also, represents a claim on the business’s profits. Stock is sold as shares in a business.

2. What is a shareholder?
   One who owns shares of stock in a corporation or mutual fund. For corporations, along with the ownership comes a right to declared dividends and the right to vote on certain company matters, including the board of directors.

3. What is a stock market?
   A stock market is a general term for the organized trading of stocks. Stocks are sold through exchanges. The most famous exchange is the New York Stock Exchange.

4. What is a stockbroker?
   A stockbroker is a person who sells or buys shares of stock for investors.

5. What is a stock certificate?
   A document reflecting legal ownership of a specific number of stock shares in a corporation.

6. What is a stock dividend?
   A share of the profits of a company paid as additional shares of stock rather than as cash.

7. What is a cash dividend?
   A share of the profits paid in the form of cash, usually by check. Dividends are usually paid out four times a year.

8. What is a mutual fund?
   A mutual fund is a collection of stocks picked by stock managers. The mutual fund can be stocks of one type (like technology) or a blend of different types of companies.

9. What is a stock split?
   When a stock price is too high, a company may declare a split in the stock. The shareholder receives more stock and the price of the stock is reduced by a certain ratio (2:1 or 4:1).

The Simulation

In this project, you and your partner will have an imaginary $20,000 to invest. Together, you will invest $20,000 by buying shares in 10 companies or mutual funds of your choice. In order to know about how the stocks are performing, you will create an easy to read spreadsheet and graph that summarizes the investments.

For each stock, the spreadsheet is to include the name, symbol, date acquired, number of shares, initial price, initial cost, current price, current value, and gain/loss. Your spreadsheet will also include the total percentage gain/loss. The pie graph will show the percentage each stock or mutual fund contributes to the
total value of the portfolio. The brokers who produce the largest percentage growth will win the simulation.

Your Calculations
You will be using Excel to perform the following calculations for each of the stocks or mutual funds.

- **Initial Cost** = Shares * Initial Price
- **Current Value** = Shares * Current Price
- **Gain/Loss** = Current Value - Initial Cost
- **Totals** for initial cost, current value, gain/loss
- **AVERAGE**, **MAX**, and **MIN** functions to determine the average, highest, and lowest values for the number of shares, initial price per share, initial stock cost, current stock price, current stock value, and gain/loss for each stock.

- **Percentage Gain/Loss** = Total Gain/Loss ÷ Total Initial Cost

Your Graph Requirements
Create a 3-D Pie chart that shows the contribution of each of the stocks and mutual funds to the total current value of the portfolio. Highlight the stock that makes the greatest contribution by exploding the slice and formatting the slice with a picture.

Your Web Requirements
Use Yahoo to get initial stock or mutual fund data. Use the Web Query feature of Excel to get real-time stock quotes for the stocks owned by your client and to update your spreadsheet and pie chart automatically.

Your PowerPoint Requirements
You and your partner will create and present two PowerPoint slideshow to the class that will summarize your investments and your portfolio.

Grading Rubric (100 possible points)
Your grade is based on the completion, correctness, and appearance of each of seven phases of the project. Check off each phase as you finish it.

<table>
<thead>
<tr>
<th>Check</th>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Research and print out of 10 stocks or mutual funds using Yahoo!</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Set-up and print the initial Investments Worksheet</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>Set-up and print the first Web Query</td>
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</tr>
<tr>
<td>4.</td>
<td>Set-up and print the revised Investments Worksheet</td>
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<tr>
<td>5.</td>
<td>Set-up and print the 3-D Pie Chart</td>
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</tr>
<tr>
<td>6.</td>
<td>Set-up and print your Investments Worksheet to show your formulas</td>
<td>10</td>
</tr>
<tr>
<td>7.</td>
<td>Create two PowerPoint presentation to summarize your investments</td>
<td>20</td>
</tr>
</tbody>
</table>
Selecting Your 10 Stocks or Mutual Funds

You will use [http://finance.yahoo.com](http://finance.yahoo.com) to research and choose your stocks and mutual funds in order to begin the simulation. The data supplied by Yahoo includes the stock names, symbols, charts, research, and the current price and splits. Your goal is to pick stocks or mutual funds that will grow the most in the next 8 months.

Creating a Desktop Shortcut to Yahoo!

1. Start Internet Explorer.
2. In the **Address** bar text box type [http://finance.yahoo.com](http://finance.yahoo.com).
3. Right-click a blank area of the page and select Create Shortcut. A shortcut to the page is placed on the Desktop.

Researching Stock Data at Yahoo!

4. The active window should be [http://finance.yahoo.com](http://finance.yahoo.com). If you are not on this web page, click your shortcut on the Desktop.

In order to get information on a stock or mutual fund, you must know the symbol. Yahoo! makes it very easy to get company information by using the **Symbol Lookup** hyperlink.

5. Click the **Symbol Lookup** hyperlink.
6. Type the company name or mutual fund name and click **Lookup**.
7. Click the hyperlink for the company you are seeking.
8. A table with information will appear.
9. The table gives you the stock symbol, the date of the last trade, the price of the last trade, the amount of change, and the number of shares that were traded.
10. Click the **Chart** hyperlink to see if there is a trend.
11. Click the **Profile** hyperlink to read about the company.
12. Research at least 10 companies or mutual funds. Use the tools at Yahoo! to decide if a stock or mutual fund is worth buying.

Printing Your Yahoo! Information (Each partner must do this step separately)

13. Print the Yahoo! Web page that shows Last Sell Price or Net Asset Value Information for the 5 stocks or mutual funds you plan to buy.
14. Staple these sheets together.
15. Your partner should pick his or her own stocks or mutual funds.
16. Check that you have completed the first phase the project.

**Start Microsoft Excel.**

17. Excel Book1 will open. Book1 has three worksheets and you are on Sheet1.
18. Press Ctrl+S to save your workbook. The Save As dialog box will open.
19. The Save in text box should say your period folder.
20. In the File name text box, type Stock Portfolio Project (space), your three initials, and your partner’s three initials.
21. Click Save or press Enter.

**Setting-up the Initial Spreadsheet**

22. Double-click on the Sheet1 tab and rename it Investments Spreadsheet. Your completed worksheet looks like Figure 1. Use it as a guide.)
23. Click in any cell. Press Ctrl+A to select all.
24. Using the Formatting toolbar, change the Font Size to 14-point.
26. Click the Alignment tab.
27. Under Vertical, select Center.
28. Under Horizontal, select Center.
29. Click OK.

**Entering the Spreadsheet Title (see Figure 1)**

30. Select cells A1 to I1.
31. Using the Formatting toolbar, press the Merge and Center button.
32. Click in cell A1. Type Investments Worksheet.

**Enter the Column Titles (see Figure 1)**

33. Click in cell A2.
34. Type Stock and then press Tab.
35. In cell B2, type Symbol and then press Tab.
36. In cell C2, type Date and then press Alt+Enter.
37. Type Acquired and then press Tab.
38. In cell D2, type Shares and then press Tab.
39. In cell E2, type Initial and then press Alt+Enter.
40. Type Price and then press Tab.
41. In cell **F2**, type **Initial** and then press **Alt+Enter**.
42. Type **Cost** and then press **Tab**.
43. In cell **G2**, type **Current** and then press **Alt+Enter**.
44. Type **Price** and then press **Tab**.
45. In cell **H2**, type **Current** and then press **Alt+Enter**.
46. Type **Value** and then press **Tab**.
47. In cell **I2**, type **Gain/Loss**.
48. Press **Enter**.
49. Click cell **A3**.

**Figure 1**

Enter the Stock Data *(see Figure 1)*

50. With cell **A3** selected, type the **name of a company or mutual fund you are buying**.
51. Press **Tab**.
52. In cell **B3**, type the **stock symbol** of the company or mutual fund.
53. Press Tab.
54. In cell C3, type the date you bought the stock or mutual fund (the date on your Yahoo! print out for the company).
55. Press Tab.
56. In cell D3, type the number of shares you are buying.
57. Press Tab.
58. In cell E3, type the last trade price on your Yahoo! print out.
59. Press Enter.
60. Click cell A4.
61. Enter the data for the nine remaining stocks or mutual funds in rows 4 through 12.

**Enter the Total Row Titles (see Figure 1)**
62. Click cell A13.
63. Type Total and then press Enter.
64. In cell A14 type Average and then press Enter.
65. In cell A15, type Highest and then press Enter.
66. In cell A16 type Lowest and then press Enter.
67. Select cells A17 to C17.
68. Using the Formatting toolbar, press the Merge and Center button.
69. In cell A17, type Percentage Gain/Loss ===> (four equal signs and then press the Shift+Period keys).
70. Press Enter.

**Enter a Formula to Calculate Initial Cost Using the Keyboard**
To find the starting cost of your stocks follow this formula: Initial Cost = Shares * Initial Price.
71. Click in cell F3,
72. Type =d3*e3 in the cell.
73. Press Tab twice to select cell H3.

**Enter a Formula to Calculate the Current Value Using Point Mode**
To find the updated value of your stocks use this formula: Current Value = Shares * Current Price.
74. With cell H3 selected, type =.
75. Click cell D3.
76. Type *.
77. Click cell G3.
78. Press Enter.
**Enter a Formula to Calculate Your Gain or Loss Using the Keyboard**

To find amount of money that you have gained or lost follow this formula: Gain/Loss = Current Value-Initial Cost.

79. Click in cell I3.
80. Type \(=h3-f3\).
81. Press Enter.

**Copying the Initial Cost Formula Using the Fill Handle**

82. Click cell F3.
83. Move the mouse over the fill handle in the lower right corner of cell F3. The mouse changes to a plus sign.
84. Click the mouse and drag the fill handle through cell F12. You have now calculated the initial cost of all of your stocks or mutual funds.

**Copying Two Formulas at Once Using the Fill Handle**

85. Click in cell H3 and drag to I3. The two cells are selected.
86. Move the mouse over the fill handle in the lower right corner of cell I3. The mouse changes to a plus sign.
87. Click the mouse and drag the fill handle through cells H12:I12.

You have now copied the formula for the current value of each stock and the formula for the gain/loss of each stock. You will not have any answers in Column H because you do not have the current price yet in Column G.

**Determining the Totals Using the AutoSum Button**

The next step is to determine the totals in row 13 for the following three columns:
- Initial cost in column F
- Current value in column H
- Gain/loss in column I.

88. Click in cell F13.
89. Hold the Control key down.
90. Click in cell H13 and drag to cell I13.
91. Release the Control key.
92. Click the AutoSum button \(\sum\) on the Standard toolbar.
93. The three totals display in Row 13.

<p>| | | |</p>
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<th></th>
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</thead>
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<td>$3,681.00</td>
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<tr>
<td>48</td>
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<td>51</td>
<td>$42.63</td>
<td>$2,173.88</td>
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<tr>
<td></td>
<td></td>
<td>$19,996.44</td>
</tr>
</tbody>
</table>

**Getting the Initial Cost to Equal $20,000**

As you can see from Figure 1, the amount of shares of each company’s stock is not equal. Since your teacher could not exceed the budget of $20,000, he had to experiment with different combinations of shares.
until it almost equaled $20,000. Excel is fantastic when you want to experiment with different numbers and get quick, accurate, recalculation.

94. Experiment with different amounts of shares to make the total initial cost in cell F13 come close to **not exceed** $20,000.

**Determining the Average of a Range of Numbers with the Keyboard**

95. Click in cell D14.
96. Type =average(d3:d12).
97. Press Enter.

**Determining the Highest Number in a Range of Numbers with the Point Mode**

98. Click in cell D15.
99. Type =Max(.
100. Click in cell D3.
101. Drag through cell D12.
102. Press Enter.

**Determining the Lowest Number in a Range of Numbers with the Point Mode**

103. Click in cell D16.
104. Type =Min(.
105. Click in cell D3.
106. Drag through cell D12.
107. Press Enter.

**Copying Three Formulas at Once Using the Fill Handle**

108. Click in cell D14 and drag to cell D16. The three cells are selected.

109. Move the mouse over the fill handle in the lower right corner of cell D16. The mouse changes to a plus sign.

110. Click the mouse and drag the fill handle through cells I14:I16.

You have now copied the Average, Min, and Max formulas to all of these cells. Some will be blank, because information is still missing.

**Entering the Percentage Gain/Loss Formula with the Keyboard**

The formula determines the percentage gain/loss by dividing the total gain/loss in cell I8 by the total initial cost in cell F8.

111. Click cell D17.
112. Type =I13/F13.
113. Press Enter.

114. Click the Save button. 

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Excel calculates the percentage gain or loss that you have. This is blank because some information is still missing. The stockbroker with the greatest percentage increase in D17 wins the simulation.

**Format the Spreadsheet Title** (see Figure 1)

115. Click in A1.
117. Click on the Font tab.
118. Change the Font to Britannic Bold.
119. Change the Size to 28 points.
120. Change the Color to white.
121. Click the Alignment tab.
122. The Vertical and Horizontal text alignments are Center.
123. Check the Merge check box.
124. Click the Border tab.
125. Select the thickest Line Style.
126. Select the Top and Bottom border buttons.
127. Click the Patterns tab.
128. Select the green cell shading.
129. Click OK.

**Format the Column Labels** (see Figure 1)

130. Select cells A2 to I2.
132. Click on the Font tab.
133. Change the Font style to Bold.
134. Click the Alignment tab.
135. Wrap text should be checked.
136. Click the Border tab.
137. Select the thickest Line Style.
138. The Top border is already selected.
139. Select the Bottom border button also.
140. Click OK.

**Format the Column A Labels** *(see Figure 1)*

141. Select cells in A3 to A16.

142. Click the **Align Left** button on the **Formatting** toolbar.

**Format the Date Acquired and Shares**

143. Click in cell C3 and drag diagonally to cell D16.
144. Press **Ctrl+1**. The Format Cells dialog box opens.
145. Click the **Alignment** tab.
146. The **Horizontal** text alignment is **Right**
147. Click **OK**.

**Add Two Bottom Borders at the Same Time**

148. Click in cell A7 and drag to cell I7.
149. Hold the **Control** key down.
150. Select cells A12 to I12.
151. Release the **Control** key.
152. Press **Ctrl+1**. The Format Cells dialog box opens.
153. Click the **Border** tab.
154. Select the thickest **Line Style**.
155. Select the **Bottom** border button.
156. Click **OK**.

**Formatting Money Data**

157. Click in cell E3 and drag diagonally to cell I16.
158. Press **Ctrl+1**. The Format Cells dialog box opens.
159. Click the **Number** tab.
160. Under **Category** select **Currency**.
161. Under **Decimal places** select 2.
162. Under **Symbol** select $.
163. Under **Negative numbers**, select the top style.
164. Click the **Alignment** tab.
165. The **Horizontal** text alignment is **Right**
166. Click OK.

**Formatting the Percentage Gain/Loss Label and Data**

167. Click in cell A17.
169. Click the Font tab.
170. Change the Font style to Bold.
171. Click the Alignment tab.
172. The Vertical and Horizontal text alignments are Center.
173. Check the Merge check box.
174. Press OK.
175. Click in D17.
177. Click the Font tab.
178. Change the Font style to Bold.
179. Click the Number tab.
180. Under Category and select Percentage.
181. Under Decimal places select 2.
182. Click OK.

**Changing the Widths of Columns and Heights of Rows**

183. Change the Zoom Box to 100%.
184. Select rows 1 to 17.
185. Click on Format from the Menu bar, point to Column, and select AutoFit Selection.
186. Click on Format from the Menu bar, point to Row, and select AutoFit.

**Changing the Page Setup**

187. Click File on the Menu bar and select Page Setup.
188. Click the Page tab.
189. Change the Orientation to Landscape.
190. Under Scaling, copy the settings to the right.
191. Click the Margins tab.
192. Change the Top margin to 1.50 inches.
193. Change the Left, Right and Bottom margins to 0.5 inch.
194. Under Center on page, select Horizontally.
195. Click the Sheet tab.
196. Check the box next to **Gridlines**.
197. Click the **Header/Footer** tab.
198. Click the **Custom Header** button. The **Header** dialog box opens.
199. Click in the right pane of the **Header** window.
200. Type your name and press **Enter**.
201. Type your partner’s name and press **Enter**.
202. Click the **Date** button.
203. Press **Enter**.
204. Type the word **Period**, press the **Spacebar**, and type your period number. Press **Enter**.
205. Click the **Filename** button.
206. Click **OK**.
207. Press **Ctrl+S** to save your work.

### Printing a Section of a Worksheet

Your teacher will check that you have bought 10 stocks or mutual funds, that you have the correct share price, that you have the correct date, and that the total doesn’t exceed $20,000.

208. Select cells A2 to F13.
209. Press **Ctrl+P**. The **Print** dialog box opens.
210. Click **Selection** in the **Print what** area. Excel will print only the selected range.
211. Print 2 copies to **Ireland**.
212. Check that you have completed the **second** phase of the project.

### Getting External Data from a Web Source Using a Web Query

One of the major features of Excel is its capability to obtain external data from sites on the World Wide Web. To obtain external data from, a World Wide Web site, you must have access to the Internet. You can then run a **Web Query** to retrieve data stored on the World Wide Web. When you run a Web query, Excel returns the external data in the form of a spreadsheet.

The data returned by the stock market web query is in real-time, because it is no more than 20 minutes old during the business day. You will set up a web query to return the most recent data on the ten stocks or mutual funds you are tracking.
213. Double-click the Sheet2 tab.
214. Type Web Query.
216. Click Data on the Menu bar, point to Get External Data, and select Run Saved Query.
217. The Run Query dialog box opens.
218. Click the drop-down arrow to the right of the Look in box and select Network Neighborhood.
220. Double-click Students _____.
221. Double-click the Advanced Computers folder.
222. Double-click Multiple Stock Quotes by PC Quote, Inc.
223. The Returning External Data to Microsoft Excel dialog box opens.
224. Select Existing worksheet.
225. Click OK.
226. The Enter Parameter Value dialog box opens.
227. Click the Investments Spreadsheet tab.
228. Select cells B3 to B12. A Marquee will surround the cells. The cells will be entered into the dialog box.
229. Check the box next to Use this value/reference for future refreshes.
230. Click OK. After a few moments, Excel will display a new worksheet with the desired data. (See Figure 2)
231. Press Ctrl+S to save your work.
Check that you have completed the third phase of the project.

**Revising Your Investments Worksheet**

The next step is to update your Investments Worksheet with the new stock prices you downloaded through the web query. You will create a special formula to make Excel look “outside” the Investments Worksheet and get data from the Web Query worksheet. Excel will automatically use the data from the Web Query worksheet in the functions you set up and calculate your percentage gain or loss. Your pie chart will use the data from the Web Query because it will represent the current value of your investments.

233. Click the **Investments Spreadsheet** tab to make it active.

234. In cell **G3** type = (the equals sign).

235. Click the **Web Query** tab to make that worksheet active.

236. Click in cell **B5** of the Web Query worksheet.

237. The formula bar should read '=Web Query!B5'.

238. Press **Enter**.

239. When you press **Enter** you are automatically back in the Investments Worksheet in cell **G4**.

240. Click in cell **G3**.

241. Press **Ctrl+C** to copy the cell.

242. Select cells **G4** to **G12**.

243. Click **Edit** on the **Menu** bar and select **Paste Special**. The Paste Special dialog box opens.

244. Under **Paste**, select **Formulas**.

245. Click **OK**.

246. Press **Ctrl+S** to save your work.

**Reviewing the Formulas**

247. Press **Ctrl+~**. You are now in Formula View.
248. Check over your formulas to see if they make sense.

249. Your formulas must be correct in order to collect prize money. It also affects your grade.

250. Look at Figure 3 on the next page.

Figure 3

<table>
<thead>
<tr>
<th>Stock</th>
<th>Symbol</th>
<th>Date Acquired</th>
<th>Shares</th>
<th>Initial Price</th>
<th>Initial Cost</th>
<th>Current Price</th>
<th>Current Value</th>
<th>Gain/Loss</th>
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<td>100%</td>
<td>100%</td>
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</tbody>
</table>

251. Click Ctrl+~ to turn off Formula View.

252. Check that you have completed the fourth phase of the project.

Adding a 3-D Pie Chart to the Workbook

The next step in the project is to draw the 3-D Pie chart on a separate sheet. The 3D Pie chart in Figure 3 shows the contribution of each stock to the total value of the stock portfolio.

This project also calls for emphasizing the stock with the greatest contribution to the total value by offsetting its slice from the main portion.

A pie chart with one or more slices offset is called an exploded pie chart.

As shown in Figure 3, the default 3-D Pie chart also has been enhanced by rotating and tilting the pie forward, changing the colors of the slices, and modifying the chart title and labels that identify the slices.

Creating the 3-D Pie Chart

253. Select cells A3 to A12.

254. Hold down the Control key.

255. Select cells H3 to H12.

256. Release the Control key.

257. Click the Chart Wizard button on the Standard tool bar.
258. In Step 1, select Pie under Chart type.
259. Under Chart sub type, select 3-D Pie Chart.
260. Click Next.
261. In Step 2 of the Chart Wizard, click the Next button.
262. In Step 3 of the Chart Wizard, click the Titles tab.
263. Under Chart title type Portfolio Breakdown.
264. Click the Legend tab and then uncheck the Show legend check box.
265. Click the Data Labels tab.
266. Check the box that says Show label and percent. This will show the name of the stock and its percent of the whole portfolio.
267. Check the box that says Show leader lines. Click the Next button.
268. Step 4 of the Chart Wizard, the Chart Location dialog box displays.
269. Click the As new sheet option button, and entitle the sheet Portfolio Breakdown.
270. Click the Finish button.
271. Click the Save button on the Standard toolbar.

**Format the Chart Title**

272. Double-click the chart title Portfolio Breakdown. The Format Chart Title dialog box opens.
273. Click the Font tab.
274. Change the Font to Arial.
275. Change the Font style to Bold.
276. Change the Size to 36-point.
277. Change the Color to red.
278. Change the Underline to Single.
279. Click OK.
**Format the Data Labels**

280. Double-click the name of any of your stocks. The **Format Data Labels** dialog box opens.

281. Click the **Font** tab.

282. Change the **Font** to Arial.

283. Change the **Size** to 14-point.

284. Change the **Color** to red.

285. Click the **Number** tab.

286. Under **Category**, select **Percentage**.

287. Set the number of **Decimal places** to 2.

288. Click **OK**.

**Moving the Data Labels Away from the Chart** (see Figure 4)

289. Click a **Data Label**.

290. Then click it again. Only one data label should be selected.

291. Place the mouse pointer over the rectangular border around the data label and drag the data label away from the slice it represents.

292. Do this to each of the data labels.

The data labels are moved away from each slice. Excel draws thin leader lines that connect each data label to its corresponding slice.

**Changing the Colors of the Slices**

The next step is to change the colors of the slices of the pie. Excel uses default colors when you first create a pie chart. You are required that the colors be changed.

293. Click a slice twice, once to select all the slices and once to select the individual slice. (Do not double-click.)

294. Using the **Formatting** toolbar, click the **Fill Color** button arrow and select any color you want.

295. One at a time, click the remaining slices and then use the **Fill Color** palette to change each slice to any colors you desire.

**Adding a Picture to the Largest Slice**

23. Find a picture from the World Wide Web or from an Internet Clip gallery that represents a product made by the company with the largest slice.

296. Save the picture to your **period folder**.

297. Select the **largest slice** of your pie chart only.

298. Right-click the slice and select **Format Data Point**.
299. Click the Patterns tab.
300. Click the Fill Effects button. The Fill Effects dialog box opens.
301. Click the Picture tab.
302. Click the Select Picture button.
303. Look in your period folder, and select your picture.
304. Click the Insert button. The Fill Effects dialog box opens.
305. Click OK.
306. You should see a picture in your slice.

Exploding the 3-D Pie Chart  (See Figure 4)
The next step is to emphasize a slice representing by offsetting, or exploding, it from the rest of the slices.
308. Click the largest slice twice, once to select all the slices and once to select the individual slice. (Do not double-click.)
309. Excel displays resizing handles around the slice.
310. Drag the slice out and away from the pie and then release the left mouse button.
311. Excel redraws the 3-D Pie chart with the exploded slice offset from the rest of the slices.

Rotate and Tilt the 3-D Pie Chart
With a three-dimensional chart, you can change the view to display the section of the chart you are trying to emphasize. Excel allows you to control the orientation angle, elevation, perspective, height, and angle of the axes by using the 3-D View command on the Chart menu.
312. With the exploded slice selected, click Chart on the Menu bar and select to 3-D View.
313. Click the Up Arrow button in the 3-D View dialog box until 25 displays in the Elevation box.
314. The result of increasing the elevation of the 3-D Pie chart is to tilt it forward.
315. Click the Apply button.
316. Rotate the pie chart by clicking the Right Rotation button until the exploded slice is towards the front of the pie. You may have to experiment a few times. Excel
displays the 3-D Pie chart tilted forward and exploded slice rotated to the front. Click OK.

317. Click the Save button.

Changing the Page Setup for the Web Query and Chart

318. Click the Web Query tab.
319. Click File on the Menu bar and select Page Setup.
320. Click the Page tab.
321. Change the Orientation to Landscape.

The spreadsheet is slightly too large for one page. One column will end up on page 2.

322. Under Scaling, select Fit to 1 page wide by 1 page tall. This will force the spreadsheet to fit to one page.

323. Click the Margins tab.
324. Change the Top margin to 2 inches.
325. Change the Left, Right and Bottom margins to 0.5 inch.
326. Under Center on page, select Horizontally.
327. Click the Sheet tab.
328. Check the box next to Gridlines.
329. Click the Header/Footer tab.
330. Click the Custom Header button. The Header dialog box opens.
331. Click in the right pane of the Header window.
332. Type your name and press Enter.
333. Type your partner’s name and press Enter.
334. Click the Date button.
335. Press Enter.
336. Type the word Period, press the Spacebar, and type your period number.
337. Press Enter.
338. Click the Filename button.
339. Click OK.
340. Click the Pie Chart tab.
341. Click File on the Menu bar and select Page Setup.
342. Click the Page tab.
343. Change the Orientation to Landscape.
344. Click the Margins tab.
345. Change the Top margin to 1.5 inches.
346. Change the Left, Right and Bottom margins to 0.5 inch.
347. Under Center on page, select Horizontally.
348. Click the Header/Footer tab.
349. Click the Custom Header button. The Header dialog box opens.
350. Click in the right pane of the Header window.
351. Type your name and press Enter.
352. Type your partner’s name and press Enter.
353. Click the Date button.
354. Press Enter.
355. Type the word Period, press the Spacebar, and type your period number.
356. Press Enter.
357. Click the Filename button.
358. Click OK.
359. Press Ctrl+S to save your work.
360. Check that you have completed the fifth phase the project.

Figure 4

Portfolio Breakdown
**Updating Your Portfolio to See How Your Portfolio Changes**

Now that you’ve bought your stocks, organized them in a spreadsheet, downloaded data in through a Web Query, and represented your investments in a pie chart, it’s time to update them to report on any value changes.

361. Click the **Web Query** tab.
362. Right-click on the spreadsheet and select **Refresh Data**.
363. The **Web Query** will start and download new data from the Internet.
364. Compare it to the last query you did. Did the value of your stocks go up or down?
365. Check the current total value of your investments in cell **H13**.
366. Check how much money you’ve gained or lost in cell **I13**.
367. Finally, check the percentage gain or lost you’ve achieved through your *wise* investment decisions.  
   The students with the greatest **percentage growth** win the competition!

**Printing the Entire Workbook At Once**

You are going to print and turn in the final three parts of the project: the Investments Spreadsheet, the Web Query spreadsheet, and the 3-D Pie Chart. You are going to print them all at once to save time.

368. Press **Ctrl+P**. The **Print** dialog box opens.
369. Select **Wales** as the printer.
370. For **Number of copies**, select **2**.
371. Under **Print what**, select **Entire workbook**.
372. Click the **Preview** button for one last look.
373. Click **Next** to move through all the sheets.
374. Click **Print**.

**Printing the Formulas in the Worksheet**

375. Click the **Investments Worksheet** tab in your Stock Portfolio Project workbook.
376. Press **Ctrl+~**. Formula View opens.
377. Click on **File** on the **Menu** bar and select **Page Setup**. The **Page Setup** dialog box opens.
378. Click the **Page** tab.
379. The **Orientation** should be set to **Landscape**.
380. The **Scaling** should be set to **Fit to 1 page wide by 1 page tall**.
381. Print 2 copies to **Ireland**.
382. Staple your pages together and turn them in.
383. Check that you have completed the **sixth** phase the project.