

# Introducing Microsoft Excel 2000

Microsoft Excel is a **spreadsheet** and **graphing** program. It replaces your calculator, ledger, and graphing equipment to help you record, analyze, and represent quantitative data. **Quantitative data** is information that can be measured and given a number value. Using Excel, you will easily accomplish difficult calculating and graphing tasks in a fraction of the time it would take with a pencil and paper. In addition, your projects will also have superior looks and far better accuracy than ordinary pencil and paper work.

The file you create and save in Excel is called a **workbook**. It contains a collection of worksheets that look similar to an accountant's ledger sheet, but you can perform calculations and other tasks automatically.

## Viewing the Excel 2000 Window

The screenshot shows the Microsoft Excel 2000 interface with the following components labeled:


- Title Bar:** Microsoft Excel - My First Excel Workbook LSR.xls
- Menu Bar:** File Edit View Insert Format Tools Data Window Help
- Standard Toolbar:** Contains icons for file operations, editing, and calculation.
- Formatting Toolbar:** Contains icons for text and cell formatting.
- Formula Bar:** Displays the active cell's address (B15) and formula (=SUM(B2:B13)).
- Worksheet Grid:** Contains data for 'Class Birthdays' with columns for 'Month' and 'Students'.
- Labels:** Points to the 'Month' column headers.
- Values (Data):** Points to the numerical data in the 'Students' column.
- End of Page:** Points to the right edge of the worksheet grid.
- Worksheet Tabs:** Located at the bottom, showing 'Class Birthdays' as the active tab.

Month	Students
January	5
February	2
March	2
April	2
May	2
June	0
July	3
August	6
September	5
October	2
November	1
December	0
<b>Total Students</b>	<b>30</b>

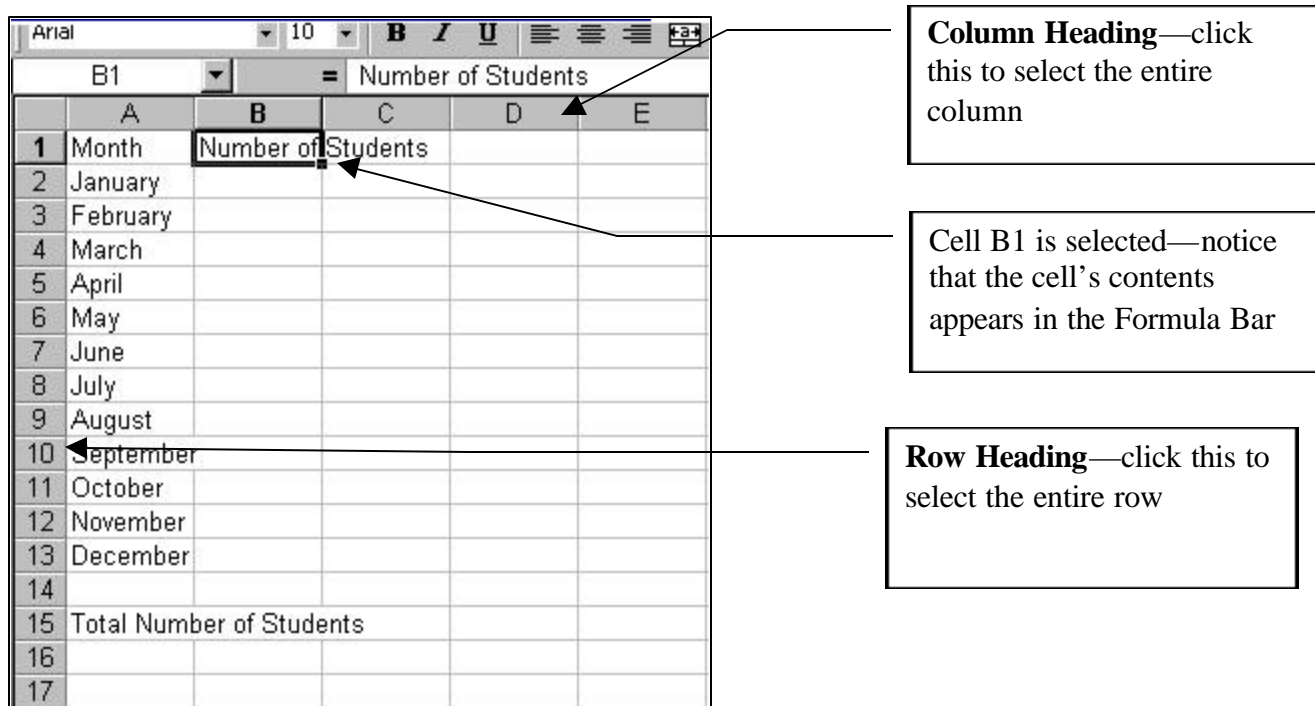
# Exercise 1



## Creating A Worksheet In A Workbook

### Starting Excel

1. Click the **Start** button  on the **Taskbar** and point to **Programs**.
2. On the **Programs Submenu**, click **Microsoft Excel**.
3. In a few seconds, the program is loaded and the Excel window appears.

**Figure 2**



4. Click the **Maximize** button  to enlarge the window.
5. Change the **Zoom** box  on the **Standard** toolbar to **100%** to see the whole spreadsheet.

Your untitled workbook opens as **Book1**. It contains three empty worksheets. Looking at the worksheet name on the tab at the bottom of the window, you can tell that you are on **Sheet1**. A **worksheet** is a huge grid of columns and rows;

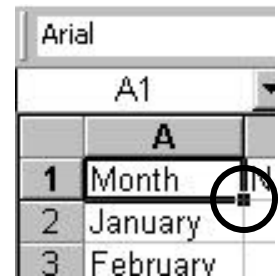


most of which cannot fit on the screen. It has 256 columns and more than 65,000 rows. Each worksheet can hold a huge amount of data.

Notice that each column has a letter. This is the **Column Heading**. Each row has a number this is the **Row Heading**. **Cells** are the rectangles formed by the intersection of a column and a row. Each cell is named by the column and row it is in (A1, B12, C134...).



Unlike a table in Microsoft Word, there is not a blinking insertion point to tell you what cell you are in. Instead, Excel has a black border around the cell you have currently selected and the name of the cell is in the **Name Box** above cell A1.

- Notice the black dot in the lower right hand corner of the border of A1. This is called the **Fill Handle**. You'll use this shortcut later.



## ***Naming a Workbook by Saving***

**Book1** has not been saved with a name.

- Press the **Save** button  on the **Standard** toolbar.
- The Save As dialog box opens.
- To the right of the **Save in** text box, click the drop-down arrow  and select **your period folder**.
- Replace this filename by typing **My First Excel Workbook**, press **Spacebar**, type **your initials**, press **Spacebar**, and type **your partner's initials**.
- Click the **Save** button or press **Enter**.

A workbook can hold up to **255** worksheets. You will learn to insert new worksheets later.

## ***Moving Around the Worksheet***

**Table 1**

<b>Shortcuts for Moving between Cells in Excel</b>	
<b>To Move To</b>	<b>Press</b>
Next cell to right	Tab or Right Arrow
Next cell to left	Shift +Tab or left arrow
Next cell down	Down arrow or <b>Enter</b>
Next cell up	Up arrow

## ***Entering Labels and Numbers in a Worksheet***

**Labels** turn a worksheet full of numbers into a meaningful report by clarifying the relationships between the numbers. You use labels to identify the data in the worksheet columns and rows. A label can be text or numbers.

**Numbers** can be whole numbers, decimals, fractions, percentages, or dates. You can enter numbers using the top row of your keyboard or the numeric keypad on the right side of the keyboard.

## Enter a Text Label

12. Click in cell **A1**.
13. Type **Month**.
14. Press **Tab** to move to cell **B1**.
15. Type **Number of Students**.
16. Notice how the words spilled into Column C. Do not worry about it now. You will adjust the column width later.
17. Click in cell **A2**.
18. Type **January**.
19. Press **Enter**.
20. Pressing **Enter** moves you to the next row down in the same column.
21. Fill in cells **A3 to A15** with the information in the **Figure 3**.
22. Press **Ctrl+S** to save your workbook.

Figure 3

	A	B	C	D
1	Month	Number of Students		
2	January			
3	February			
4	March			
5	April			
6	May			
7	June			
8	July			
9	August			
10	September			
11	October			
12	November			
13	December			
14				
15	Total Number of Students			
16				

## Entering Number Data

23. Enter the number of students born in **January** into cell **B2**.
24. Press **Enter** to move to cell **B3**.
25. Enter the number of students born in **February** into cell **B3**.
26. Press **Enter** to move to cell **B4**.
27. Continue to enter the number of students born in each month into cells **B4 to B13**.
28. Do **not** enter data into cells **B14 or B15**.
29. Press **Ctrl+S** to save your workbook.
30. Look at Figure 4.

Figure 4

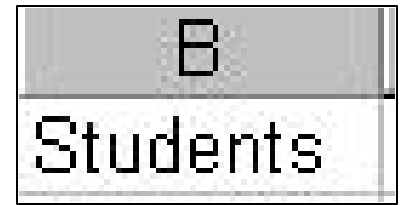
	A	B	C	D
1	Month	Number of Students		
2	January	5		
3	February	2		
4	March	2		
5	April	2		
6	May	2		
7	June	0		
8	July	3		
9	August	6		
10	September	5		
11	October	2		
12	November	1		
13	December	0		
14				
15	Total Number of Students			
16				
17				

## Editing Cell Contents

No matter how much you plan you can count on having to make changes in a worksheet. Sometimes its because you want to correct an error; other times you might want to add new information. You edit data just as easily as you enter it, using the **Formula** bar or directly editing the **active cell**.

## Editing Cell Contents Using the Formula Bar

31. Click in cell **B1**, the cell you want to edit.
32. Click in the **Formula** bar before the **N** in **Number**.
33. Press the **Delete** key to erase the words and spaces for **Number of**.
34. Press the **Enter** key.
35. The label **B1** should read **Students**.



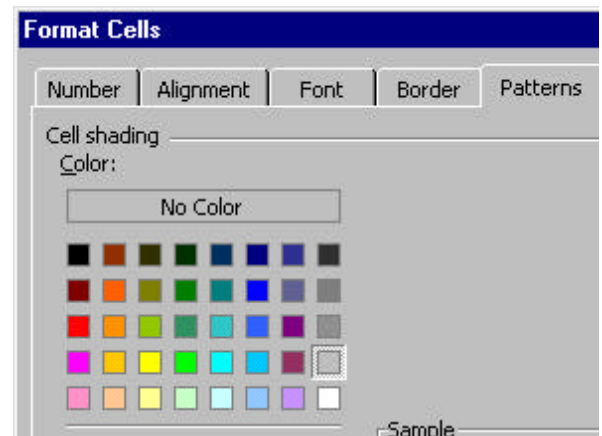
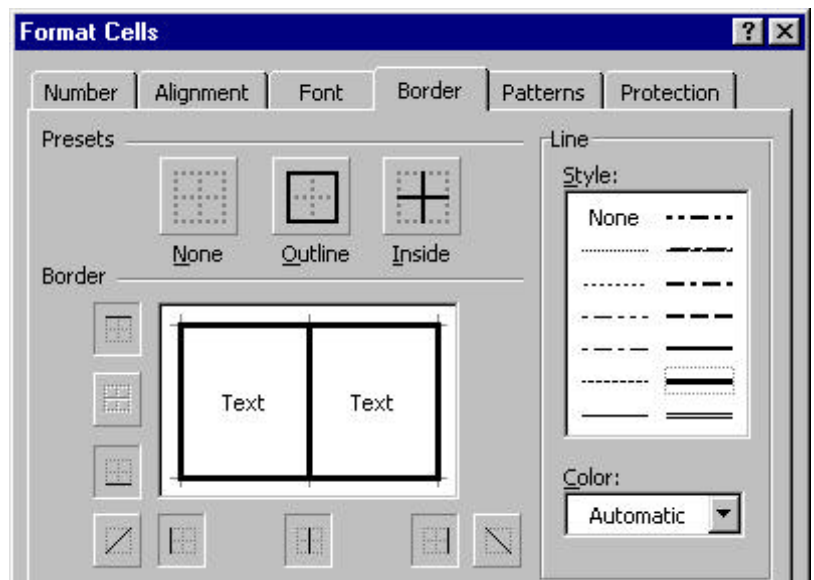
## Editing Cell Content In-Cell

36. **Double-click** in cell **A15**.
37. The blinking insertion point tells you that you can edit the contents of the cell.
38. Use the **Arrow** key to move the insertion point to the left of the **N** in **Number**.
39. Press the **Delete** key to erase the words and spaces for **Number of**.
40. Press the **Enter** key.
41. The label **A15** should read **Total Students**.



## Formatting a Cell



42. Click in cell **A1** and drag to **B1**.
43. Both cells are now selected.
44. Press **Format** on the **Menu** bar and select **Cells**.
45. The Format Cells dialog box appears.
46. Click the **Font** tab.
47. Change the **Font style** to **Bold**.
48. Click the **Border** tab.
49. Under **Line Style**, select the heaviest line.
50. Under **Presets**, click the **Outline** and **Inside** buttons.
51. Click the **Patterns** tab.
52. Under **Cell Shading**, select the lightest gray color.
53. Click **OK**.
54. Click in cell **A15**.
55. Press **Format** on the **Menu** bar and select **Cells**.
56. The Format Cells dialog box appears.



57. Click the **Font** tab.
58. Change the **Font style** to Bold.
59. Select the **Border** tab.
60. Under **Line Style**, select the heaviest line.
61. Under **Presets**, click the **Outline** button.
62. Click the **Patterns** tab.
63. Under **Cell Shading**, select the lightest gray color.
64. Click **OK**.
65. Press **Ctrl+S** to save your workbook.
66. Look at the picture to the right.

	A	B
1	<b>Month</b>	<b>Students</b>
2	January	5
3	February	2
4	March	2
5	April	2
6	May	2
7	June	0
8	July	3
9	August	6
10	September	5
11	October	2
12	November	1
13	December	0
14		
15	<b>Total Students</b>	<b>30</b>
16		

### Formatting Columns

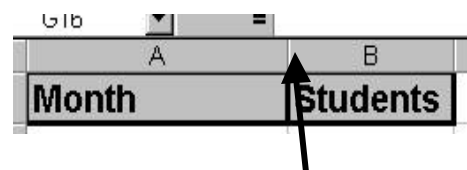
67. Click **Column Heading A** and drag to **Column Heading B**. 
68. Both columns are selected.
69. Using the **Formatting** toolbar, change the **Font Size** to 14 points.
70. Change the **Zoom** box  on the **Standard** toolbar to **75%** to see the whole spreadsheet.

### Changing the Column Width

Table 2

How to Change Column Width	
To change column width	Drag the boundary on the right side of the column heading until the column is the width you want.
To make the column width fit the contents	Double-click the boundary to the right of the column heading
To make the column width an exact size	Click Format on the Menu bar and select Column Width. Type the number of points you want the width to be.

71. Double-click the gray border to the *between* **Column Heading A** and **Column Heading B**.
72. This is called **AutoFitting**.
73. The width of the column will fit the contents perfectly.
74. Double-click the gray border to the *between* **Column Heading B** and **Column Heading C**.



## Exploring Formulas

One of the best things about Excel is that it will do mathematical calculations for you automatically. For this to happen, you must type a formula into a cell. A **formula** is a series of mathematical steps that calculates values and returns a result. There are several **formula rules** you must follow.

**Table 3: If you do not follow these rules, Excel cannot do the calculation for you.**

Excel Formula Rules	
1.	A formula always begins with an equals sign.
2.	Never use spaces in a formula.
3.	Press Enter to see the result of your formula.
4.	You may use upper or lowercase letters.

**Table 4**

How to Write Mathematical Expressions		
Symbol	Operation	Example
+	Addition	=e3+f3
-	Subtraction	=e3-f3
x	Multiplication	=e3*f3
/	Division	=e3/f3
Mixed Operations Excel follows the Order of Operations automatically when it calculates		=(e3+f3)/g2*3.14

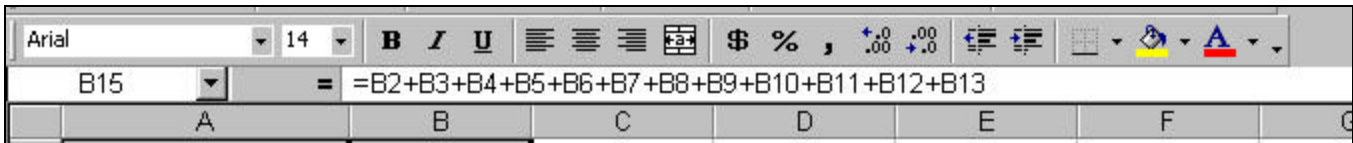
To calculate the total number of students in the class we need to tell Excel to add up the contents of each cell that contains birthday data. We want the total number of students to appear in cell B15. This tells Excel to take whatever value is in each of these cells and add them together.

75. Change the **Zoom** box  on the **Standard** toolbar to **100%**.

76. Click in cell **B15**.

77. Type the formula =b2+b3+b4+b5+b6+b7+b8+b9+b10+b11+b12+b13.
78. The formula appears in the **Formula** bar.
79. Look at Figure 5.

**Figure 5: This formula will add up all the cells between B2 and B13.**



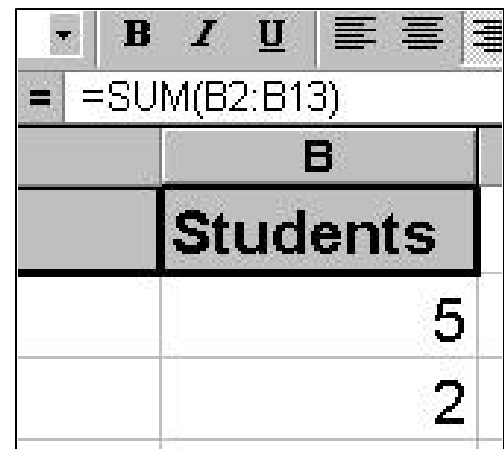
80. Press **Enter** when you are done.
81. Did the answer appear in cell **B15**?

13	December	0
14		
15	<b>Total Students</b>	<b>30</b>
16		
17		



### Performing Calculations Using Functions

**Functions** are predesigned formulas that save you the time and trouble of creating a long formula expression.

82. Click in cell **B15**.
83. Type =Sum(b2:b13).
84. Press **Enter**.
85. The answer is returned in cell **B15**.
86. Press **Ctrl+S** to save your work.



### Inserting a WordArt Title

87. Click the **Drawing** button  on the **Standard** toolbar.
88. The **Drawing** toolbar opens.
89. On the **Drawing** toolbar, click the **Insert WordArt** button .
90. The Word Art Gallery opens.
91. Select **any style** from the WordArt Gallery.
92. Click **OK**.
93. The Edit WordArt Text dialog box opens.





94. Type **Class Birthdays**.
95. Select any **Font** that looks attractive.
96. Change the **Size** from 24 – **36** points.
97. Click **OK**.
98. Drag the WordArt somewhere between **Columns D and F**.
99. **Warning! Do not go over the dotted line. That's the end of the page.**
100. Look at Figure 6.




### ***Naming a Worksheet***

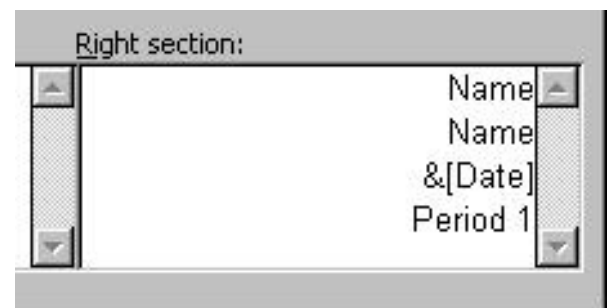
101. Double-click the tab **Sheet1**.
102. The title becomes highlighted.
103. Type the words **Class Birthdays**.




### ***Creating a Header for Your Heading***

Your worksheet needs a heading. You will create a header and footer. Remember, a header and footer appear on every page.


104. Click **View** on the **Menu** bar and select **Header and Footer**.
105. The Page Setup dialog box opens.
106. Click the **Custom Header** button .
107. The Header dialog box opens.
108. In the **Right** section type **your name**.
109. Press **Enter**.
110. Type **your partner's name**.
111. Press **Enter**.



112. Click the **Date** button .
113. Press **Enter**.
114. It should say **&[Date]**.
115. Press **Enter**.
116. Type the word **Period**, press the **Spacebar**, and type your **period number**.
117. Press **Enter**.
118. Type **Excel Exercise 1**.
119. Click **OK**.

120. Click the **Custom Footer** button .

121. The Footer dialog box opens.

122. In the **Right** section, click the **File Name** button .

123. The file name is what you called the document when you saved it.

124. It should say **&[File]**.

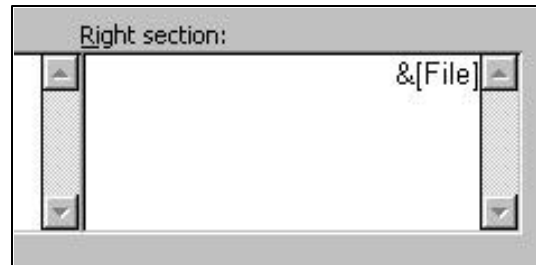
125. Click **OK**.

126. Click the **Margins** tab.

127. Change the **Top Margin** to **2 inches** so you have room for your header.

128. Click **OK**.

129. **Note: You will not see the header and footer until you use Print Preview.**



### ***Previewing a Worksheet***

130. Press **F7** to run a spell check.

131. Fix any errors.

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

133. Click on the **Print Preview** button .

134. Check the **bottom** of the Print Preview window to check that you only have **one page**.

135. You will now see your **header** and **footer**.

136. Click the **Close** button  on the Print Preview toolbar.

### ***Printing a Document***

137. Press **Ctrl+P**.

138. The Print dialog box opens.

139. The **Name** of the printer should be **Ireland**.

140. Next to **Number of copies**, type **2** in the text box.

141. Click **OK**.

142. Look at Figure 6.

Figure 6

P.C. User  
Larry Rubin  
3/20/04  
Period 1  
Excel Exercise 1

Month	Students
January	5
February	2
March	2
April	2
May	2
June	0
July	3
August	6
September	5
October	2
November	1
December	0
<b>Total Students</b>	<b>30</b>

# Class Birthdays

You only see the Header and Footer in Print Preview and after you print.

My First Excel Workbook LSR PCU

143. Press **Alt+F4** to close all open windows and to return to the **Desktop**.







## Exercise 2

### More On Excel Functions, Editing, And Formatting

**Table 5**

<b>Selecting Spreadsheet Elements</b>	
<b>To Select</b>	<b>Mouse</b>
Cell	Cell is selected when its address appears in the name box
Row	Click the row number heading
Column	Click column letter heading
Range	Drag over the cells, columns, or rows you want in your range.

### ***Opening Two Existing Files***

144. Click the **Start** button , point to **Programs**, and select **Microsoft Excel**.
145. Click **File** on the **Menu** bar and select **Open**.
146. The Open dialog box opens.
147. Click the drop-down arrow  to the right of the **Look in** box.
148. Select **your period folder**.
149. Click the file **My First Excel Workbook** to open it.
150. Click the **Open** button .
151. Click the **Maximize** button  to enlarge the window.
152. Change the **Zoom** box on the **Standard** toolbar to **100%**.
153. You should be looking at the Class Birthdays worksheet.
154. Click the **Open** button  on the **Standard** toolbar.
155. The Open dialog box opens.
156. Click the drop-down arrow  to the right of the **Look in** box and select **Network Neighborhood**.
157. Double-click **Wright-ms1 (Zeus)**.
158. Double-click **Students 200\_**.
159. Double-click the folder entitled **Excel Exercises** to open it

160. Double-click the file entitled **Student Names** to open it.



161. You now have two Excel files open and two buttons on the **Taskbar**.

162. Click the **My First Excel Workbook** button on the **Taskbar**.

### **Renaming a Sheet**

163. Click the **Sheet2** tab.

164. Sheet2 opens.

165. Double-click the words **Sheet2** on the tab.

166. Type **Class Ages** to rename the tab.



### **Copying and Pasting Data from Another File**

167. Click the **Student Names** button on the **Taskbar**.

168. Click the worksheet tab with your **class period**.



169. Click **Column Heading A** .

170. Column A is now selected.

171. Press **Ctrl+C** to copy the information.

172. A line of "dancing ants" (**marquee**) will tell you your range has been copied to the Clipboard.

173. Press **Ctrl+W** to close the **Student Names** file.

174. A message may appear stating that you have placed a lot of information into the Clipboard.

175. Click **Yes** so you can paste your information.

176. Click the **My First Excel Workbook** button on the **Taskbar**.

177. The workbook opens.

178. Click in cell **A1**.

179. Press **Ctrl+V** to paste.

180. The name information will appear in your worksheet.

181. In cell **B1** type **Age**.

182. In cell **A35** type **Mean Age**.

183. In cell **A36** type **Median Age**.

184. In cell **A37** type **Mode Age**.

185. In cell **A38** type **Number of Students**.

30	Young, Michael	
31		
32		
33		
34		
35	Mean Age	
36	Median Age	
37	Mode Age	
38	Number of Students	
39		
40		
41		
42		
43		

186. Type **the ages** of each person in your class into your **Class Ages** worksheet.

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

### ***Calculating the Average Age of Your Class***

In Exercise 1, you commanded Excel to add the amount of class birthdays to find the total amount of students in the class. In Exercise 2, you are going to perform three **average** calculations without a pencil and paper, or calculator. You are also going to have Excel count the number of students. The fastest way to perform these calculations is with functions (predesigned formulas). Before you begin you should review the three kinds of averages.

**Table 6**

<b>Three Kinds of Averages</b>	
Mean	The sum of the data divided by the number of pieces of data
Median	The middle number in a series of data.
Mode	The piece of data that is the most frequent.

**Table 7**

<b>Functions (Predesigned Formulas)</b>	
Sum	Adds a group of data
Product	Multiplies a group of data
Count	Counts number of pieces of data that are numbers
Average	Calculates the mean average
Median	Calculates the median average
Mode	Calculates the mode average
Min	Finds the least number in a group of data
Max	Finds the greatest number in a group of data

188. Look at Figure 7.

**Figure 7**

27	Umukoro, Zuberi	11
28	Umukoro, Felix	12
29	Williams, Ashley	12
30	Young, Michael	10
31		
32		
33		
34		
35	Mean Age	=AVERAGE(B2:B30)
36	Median Age	=MEDIAN(B2:B30)
37	Mode Age	=MODE(B2:B30)
38	Number of Students	=COUNT(B2:B30)
39		

Michael is the last student in this class. Therefore, the functions end with the cell that contains Michael's age.

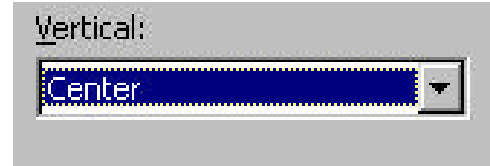
### ***Entering the Functions***

189. In cell **B35** type **=Average(b2:b?)**.
190. The question mark should be the cell of the **last age in your class**.
191. Press **Enter**.
192. In cell **B36** type **=Median(b2:b?)**.
193. The question mark should be the cell of the **last age in your class**.
194. Press **Enter**.
195. In cell **B37** type **=Mode(b2:b?)**.
196. The question mark should be the cell of the **last age in your class**.
197. Press **Enter**.
198. In cell **B38** type **=Count(b2:b?)**.
199. The question mark should be the cell of the **last age in your class**.
200. Press **Enter**.
201. You should now have calculated the mean, median, and mode average ages. You have also counted up how many ages you collected, therefore, how many students we have in the class.

### ***Formatting the Worksheet***

202. Press **Ctrl+A** to select all the cells.
203. Press **Ctrl+1**.

204. The Format Cells dialog box opens.
205. Click the **Alignment** tab.
206. Click the drop down arrow under **Vertical** and change it to **Center**.
207. This will center the information in the cells vertically.
208. Click the **Font** tab.
209. Change the **Size** to 12 points.
210. Click **OK**.



### ***Formatting the Column Labels***

211. Click in cell **A1** and drag to cell **B1**.
212. Both column labels are selected.
213. Press **Ctrl+1**.
214. The Format Cells dialog box opens.
215. Click the **Alignment** tab.
216. Click the drop down arrow under **Horizontal** and change it to **Center**.
217. This will center the labels in the cells horizontally.
218. The bottom check boxes should be **unchecked**.
219. Click the **Font** tab.
220. Change the **Font style** to Bold.
221. Click the **Border** tab.
222. Under **Line Style**, select the heaviest solid line in the group.
223. Under **Presets**, click the **Outline** button and the **Inside** button.
224. Click the **Patterns** tab.
225. Under **Cell Shading**, select the lightest gray color.
226. Click **OK**.

	A	B
1	<b>Student Name</b>	<b>Age</b>
2	Adams, Brittany	10
3	Anderson, Angelina	11

### ***Formatting the Function Labels***

227. Click in cell **A35** and drag down to cell **A38**.
228. The cells are selected.
229. Press **Ctrl+1**.
230. The Format Cells dialog box opens.
231. Click the **Alignment** tab.
232. Click the drop down arrow under **Horizontal** and change it to **Right**.
233. This will right align the labels in the cells horizontally.
234. The bottom check boxes should be unchecked.



235. Click the **Font** tab.
236. Change the **Font style** to Bold.
237. Click the **Border** tab.
238. Under **Line Style**, select the heaviest solid line in the group.
239. Under **Presets**, click the **Outline** button and the **Inside** button.
240. Click the **Patterns** tab.
241. Under **Cell Shading**, select the lightest gray color.
242. Click **OK**.

34		
35	<b>Mean Age</b>	<b>11.</b>
36	<b>Median Age</b>	
37	<b>Mode Age</b>	
38	<b>Number of Students</b>	
39		

### **Formatting the Averages and the Number of Students**

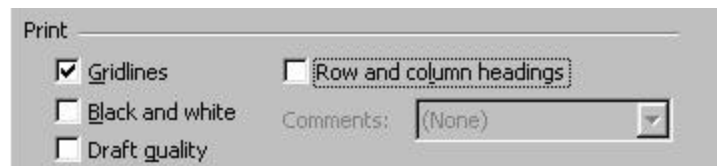
243. Click in cell **B35** and drag down to cell **B38**.
244. The cells are selected.
245. Press **Ctrl+B** to make the numbers bold.

### **Adjusting the Column Width**

246. Click the **Column Heading A** and drag to the **Column Heading B**.
247. Both columns are selected.

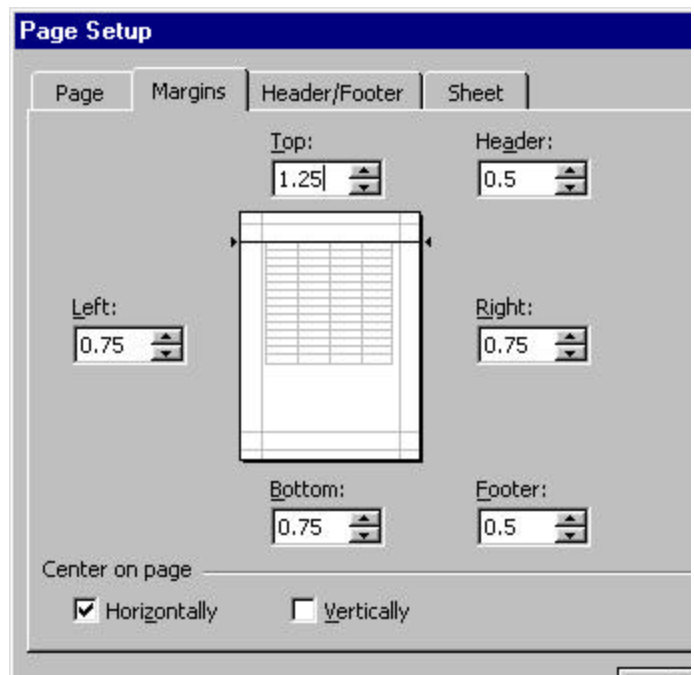


248. Click **Format** on the menu bar; point to **Column**, and select **AutoFit Selection**.
249. Autofitting makes the columns or rows fit the data and labels perfectly.








### **Changing the Page Setup**


250. Click **File** on the **Menu** bar and select **Page Setup**.
251. The Page Setup dialog box opens.
252. Click on the **Sheet** tab.
253. Under **Print**, check **Gridlines**.
254. This will put gridlines around your cells when you print. Generally, you should print gridlines if you have a lot of data. It makes the numbers more readable.
255. Click the **Margins** tab.
256. Make the **Top Margin** 1.25 inches.
257. Make the **Bottom Margin** 0.75 inch.
258. This will push the spreadsheet down




and away from your header.

259. Check the box that says **Center on page Horizontally**.
260. Click the **Header/Footer** tab.
261. Click the **Custom Header** button .
262. The Header dialog box opens.
263. In the **Right** section type **your name**.
264. Press **Enter**.
265. Type **your partner's name**.
266. Press **Enter**.
267. Click the **Date** button .
268. Press **Enter**.
269. It should say **&[Date]**.
270. Type the word **Period**, press the **Spacebar**, and type your **period number**.
271. Press **Enter**.
272. Type **Excel Exercise 2**.
273. In the left section, type **Class Ages**.
274. Click and drag to select the words **Class Ages**.
275. Click the **Font** button .
276. The Format Font dialog box opens.
277. Change the **Font** to Arial Black.
278. Change the **Size** to 20 points.
279. Click **OK twice**.
280. Click the **Custom Footer** button .
281. The Footer dialog box opens.
282. In the **Right** section click the **File Name** button .
283. Click **OK twice**.

### ***Previewing a Worksheet***

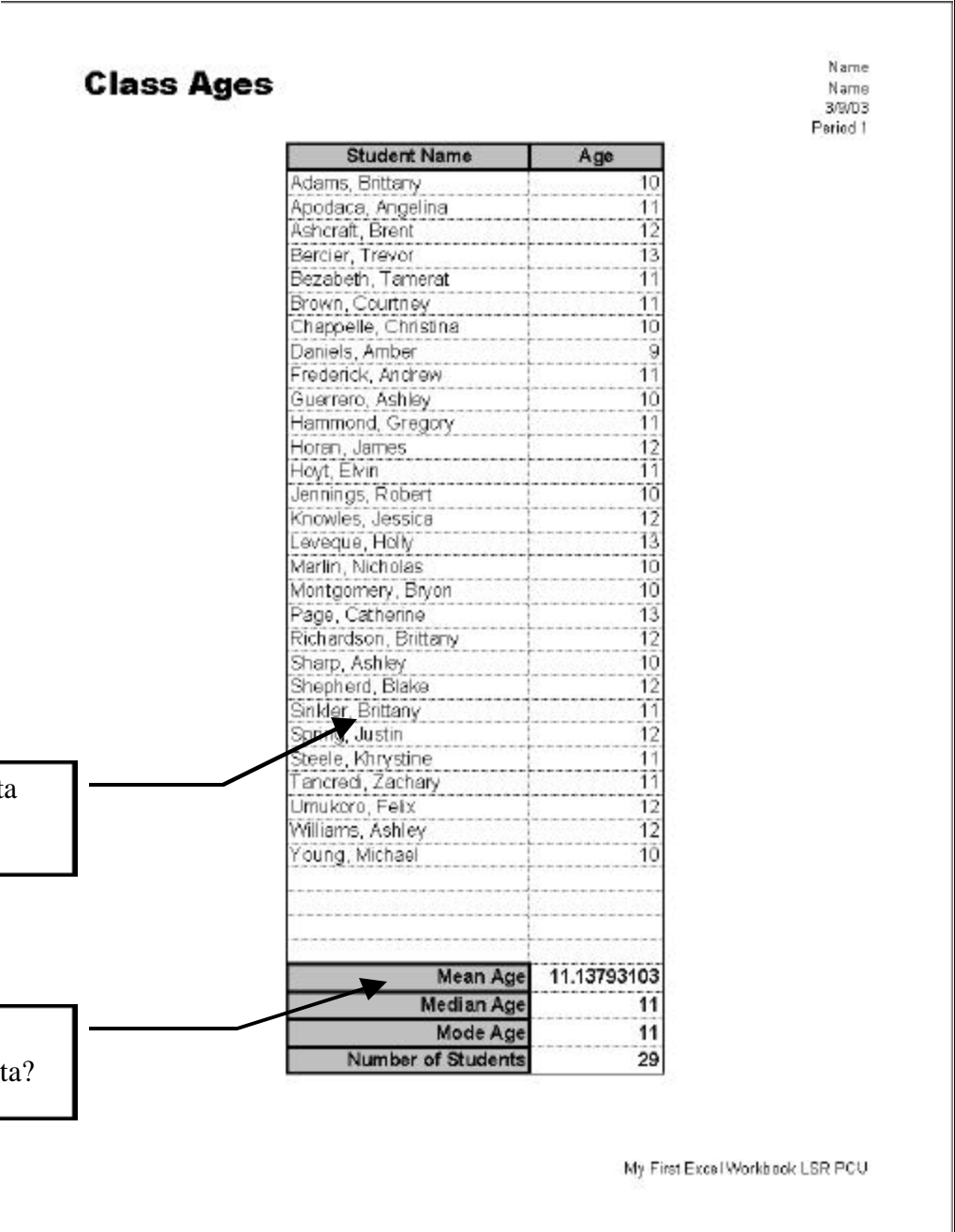
284. Press **F7** to run a spell check.
285. Fix any errors.
286. Press **Ctrl+S** to save your work.
287. Click on the **Print Preview** button .
288. Check the **bottom** of the Print Preview window to check that you only have **one page**.

289. You will now see your header and footer.
290. Click the **Close** button  on the Print Preview toolbar.

### Printing a Document

291. Press **Ctrl+P**.
292. The Print dialog box opens.
293. The **Name** of the printer should be **Ireland**.
294. Next to **Number of copies**, type **2** in the text box.
295. Click **OK** or press **Enter**.
296. Press **Alt+F4** to close all open windows and to return to the **Desktop**.
297. Look at Figure 8.

**Figure 8: Excel will calculate all three kinds of averages—mean, median, and mode.**



**Class Ages**

Student Name	Age
Adams, Brittany	10
Apodaca, Angelina	11
Ashcraft, Brent	12
Bercier, Trevor	13
Bezabeth, Tamerat	11
Brown, Courtney	11
Chappelle, Christina	10
Daniels, Amber	9
Frederick, Andrew	11
Guerrero, Ashley	10
Hammond, Gregory	11
Horan, James	12
Hoyt, Evin	11
Jennings, Robert	10
Knowles, Jessica	12
Laveque, Holly	13
Marlin, Nicholas	10
Montgomery, Bryon	10
Page, Catherine	13
Richardson, Brittany	12
Sharp, Ashley	10
Shepherd, Blake	12
Sinkler, Brittany	11
Spry, Justin	12
Steele, Khrystine	11
Tancred, Zachary	11
Umukoro, Felix	12
Williams, Ashley	12
Young, Michael	10

Mean Age	11.13793103
Median Age	11
Mode Age	11
Number of Students	29

Name  
Name  
3/8/03  
Period 1

My First Excel Workbook LSR PCU

Gridlines make the data easier to read.

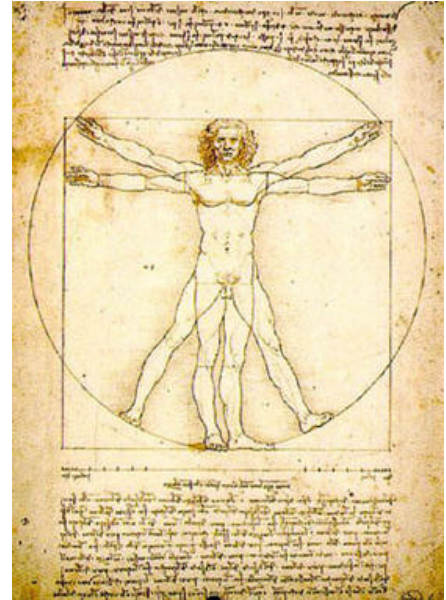
Did you format the function labels and data?

## Exercise 3





### Was Leonardo Correct About Body Proportions?

During the Internet Scavenger Hunt, you looked for a picture of the Mona Lisa, by Leonardo Da Vinci. For centuries, artists, such as Da Vinci, have known that there are average proportions for certain parts of the human body that are useful in drawing human subjects accurately. In addition, this information is important to clothing designers. Da Vinci claimed that arm span length is equal to height, forearm length is  $1/10^{\text{th}}$  of height, and hand length is three times the width of one's wrist. To see his other claims see <http://www2.evansville.edu/drawubgkab/body.html>.

In this activity, you will test out one of Da Vinci's claims by calculating the average ratio of height to arm span length.



#### ***Copying and Pasting Data from Another Worksheet***



298. Click the **Start** button , point to **Programs**, and select **Microsoft Excel**.
299. Click **File** on the **Menu** bar and select **Open**.
300. The Open dialog box opens.
301. Click the drop-down arrow  to the right of the **Look in** box.
302. Select **your period folder**.
303. Click the file **My First Excel Workbook** to open it.
304. Click the **Open** button .
305. Click the **Maximize** button  to enlarge the window.
306. Change the **Zoom** box on the **Standard** toolbar to **100%** to see the whole spreadsheet.

#### ***Renaming a Sheet***

307. Click the **Sheet3** tab.
308. Sheet3 opens.
309. Double-click the words **Sheet3** on the tab.
310. Type **Body Measurements** to rename the tab.



#### ***Copying and Pasting Data from Another File***

311. Click the **Open** button  on the **Standard** toolbar.
312. The Open dialog box opens.
313. Click the drop-down arrow  to the right of the **Look in** box and select **Network Neighborhood**.
314. Double-click **Wright-ms1 (Zeus)**.

315. Double-click **Students 200\_**.
316. Double-click the folder entitled **Excel Exercises** to open it
317. Double-click the file entitled **Student Names** to open it.



318. You now have two Excel files open and two buttons on the **Taskbar**.
319. Click the **Student Names** button on the **Taskbar**.
320. In the **Student Names** workbook, click the worksheet tab with your **class period**.



321. In **Columns B and C**, you will see the heights and spans of each student in your class.
322. Click in cell **A2** and drag diagonally to cell **C?**.
323. The question mark should be the cell of the **last span in your class**.
324. The **name, height, and span data** are now selected.
325. Press **Ctrl+C** to copy the height and span information.
326. A line of "dancing ants" (**marquee**) will tell you your range has been copied to the Clipboard.
327. Press **Ctrl+W** to close the **Student Names** file.
328. A message may appear stating that you have placed a lot of information into the Clipboard.
329. Click **Yes** so you can paste your information.
330. Click the **My First Excel Workbook** button on the **Taskbar**. The workbook opens.
331. Click the **Body Measurement** tab. The worksheet opens.
332. Click in cell **A2**.
333. Press **Ctrl+V** to paste.
334. The name, height, and span data will appear in your worksheet.

### ***Entering the Column Labels***

335. In cell **A1** type **Student**.
336. Press **Alt+Enter**.
337. **Alt+Enter** causes a line break in a cell.
338. The column will be thinner and take up less room.
339. Type **Name**.
340. Press **Tab**.
341. In cell **B1** type **Height**.
342. Press **Alt+Enter**.

	A	B	C	D
1	Student Name	Height (cm)	Span (cm)	Height Divided by Span

343. Type **(cm)**.
344. Press **Tab**.
345. In cell **C1** type **Span**.
346. Press **Alt+Enter**.
347. Type **(cm)**.
348. Press **Tab**
349. In cell **D1** type **Height Divided**.
350. Press **Alt+Enter**.
351. Type **by Span**.
352. Press **Tab**.

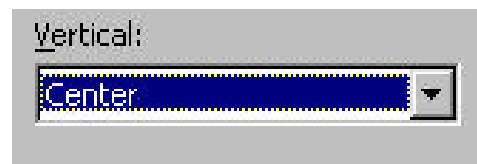
### ***Entering the Function Labels***

353. In cell **A35** type **Mean**.
354. Press **Enter**.
355. In cell **A36** type **Maximum**.
356. Press **Enter**.
357. In cell **A37** type **Minimum**.
358. Press **Enter**.
359. In cell **A38** type **Range**.
360. Press **Enter**.

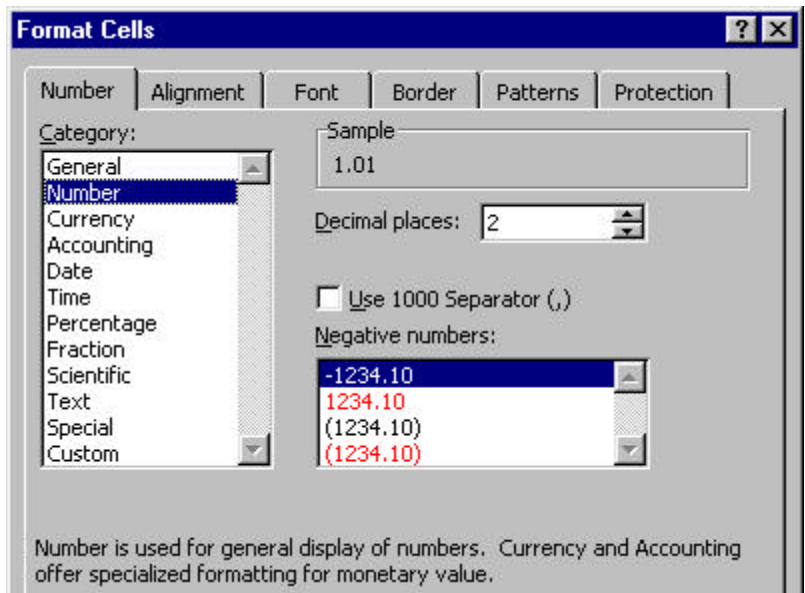
33		
34		
35	Mean	
36	Maximum	
37	Minimum	
38	Range	
39		
40		

### ***Formatting the Worksheet***

361. Press **Ctrl+A** to select all the cells.
362. Press **Ctrl+1**.
363. The Format Cells dialog box opens.
364. Click the **Alignment** tab.
365. Click the drop down arrow under **Vertical** and change it to **Center**.
366. This will center the information in the cells vertically.
367. Click the **Font** tab.
368. Change the **Size** to 12 points.
369. Click the **Number** tab.
370. Excel contains many number formats.
371. Under **Category**, select **Number**.



- 372. Next to **Decimal places**, type **2**.
- 373. Click **OK**.
- 374. Press **Ctrl+S** to save your work.
- 375. Look at Figure 9.

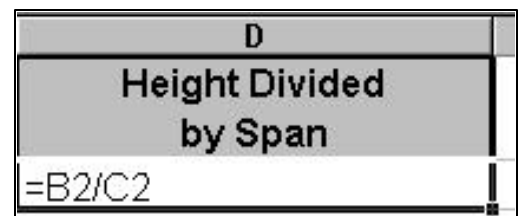


**Figure 9:** Notice that the heights are rounded to the nearest hundredth.

	A	B	C	D
	Student Name	Height (cm)	Span (cm)	Height Divided by Span
1				
2	Aguilar, Yvette	153.50	150.50	
3	Amadi, Chidi	158.00	158.00	
4	Arnold, Leo	122.00	153.00	
5	Baker, Brooke	156.00	155.50	
6	Brock, Keira	168.00	168.00	
7	Brown, Sean	117.00	160.00	
8	Clements, Joel	146.00	144.00	
9	Cruz Garcia, Jonathan	148.50	150.00	
10	Dingman, Scott	149.00	149.00	
11	Emmanuel, Christina	157.00	164.00	
12	Guijarro, Sofia	151.00	155.00	
13	Hasegawa, Micah	160.00	156.00	
14	Jackson, Andre	154.00	151.00	
15	Johnson, Lawrence	155.00	162.00	
16	Johnson, Quinella	160.00	158.00	
17	Kittling, Mia	161.00	162.00	

### **Calculating with Excel**

- 376. Click in cell **D2**.
- 377. Type the formula **=b2/c2**.
- 378. This is the **height** divided by the **width** of the first person in your class.
- 379. Press **Enter**.



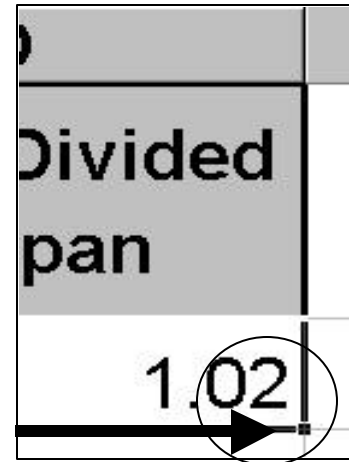
## Using the Fill Handle to Copy into Adjacent Cells

You could type a new formula for each person in column E, however that would be too slow. You could copy and paste the formula from one cell to another, however that would be too slow. The quickest method is to copy the formula and fill adjacent cells with the same formula using the **Fill Handle**.

380. Click in cell **D2**.
381. In the lower right-hand corner, you will see a handle.
382. Move the mouse over the handle and the mouse changes into a small + sign.
383. Press the left mouse button and drag the **Fill Handle** down **Column D** to the cell for the **last person** in your class.

You have copied and pasted the formula for each person's height divided by width. What is fantastic is that Excel automatically has changed the row information in the formula. You have completed more than twenty difficult division problems in one second. Try that with a calculator or pencil and paper!

384. Click in **D3** and read the formula.
385. Notice that it says **=B3/C3**.
386. Excel automatically changes the formula for each person.
387. Press **Enter** a few times and watch the **Formula** bar to see the formula change automatically.



## Entering the Functions

388. In cell **B35** type **=Average(b2:b?)**.
389. The question mark should be the cell of the **last height in your class**.
390. Press **Enter**.
391. In cell **B36** type **=Max(b2:b?)**.
392. The question should be the cell of the **last height in your class**.
393. Press **Enter**.
394. In cell **B37** type **=Min(b2:b?)**.
395. The question mark should be the cell of the **last height in your class**.
396. Press **Enter**.
397. In cell **B38** type **=b36-b37**.
398. Press **Enter**.
399. The range is equal to the **maximum** height minus the **minimum** height.

Height Divided by Span
=B2/C2
=B3/C3
=B4/C4
=B5/C5
=B6/C6
=B7/C7
=B8/C8
=B9/C9
=B10/C10



33			
34			
35	Mean	=AVERAGE(B2:B30)	
36	Maximum	=MAX(B2:B30)	
37	Minimum	=MIN(B2:B30)	
38	Range	=B36-B37	
39			

### ***More Using the Fill Handle to Copy into Adjacent Cells***

400. Click in cell **B35**.
401. Move the mouse over the **Fill Handle** so that the mouse changes into a small + sign.
402. Press the left mouse button and drag the fill handle to cell **D35**.
403. You have copied the function to **C35** and **D35**.
404. Click in cell **B36**.
405. Move the mouse over the **Fill Handle** so that the mouse changes into a small + sign.
406. Press the left mouse button and drag the fill handle to cell **D36**.
407. You have copied the function to **C36** and **D36**.
408. Click in cell **B37**.
409. Move the mouse over the **Fill Handle** so that the mouse changes into a small + sign.
410. Press the left mouse button and drag the fill handle to cell **D37**.
411. You have copied the function to **C37** and **D37**.
412. Click in cell **B38**.
413. Move the mouse over the **Fill Handle** so that the mouse changes into a small + sign.
414. Press the left mouse button and drag the fill handle to cell **D38**.
415. You have copied the formula to **C38** and **D38**.

### ***Formatting the Column Labels***

416. Click in cell **A1** and drag to cell **D1**.
417. The cells are selected.
418. Press **Ctrl+1**.
419. The Format Cells dialog box opens.
420. Click the **Alignment** tab.
421. Click the drop down arrow under **Horizontal** and change it to **Center**.
422. This will center the labels in the cells horizontally.
423. The bottom check boxes should be unchecked **except for Wrap text**.
424. Click the **Font** tab.

425. Change the **Font** to Arial.
426. Change the **Font style** to Bold.
427. Click the **Border** tab.
428. Under **Line Style**, select the heaviest solid line in the group.
429. Under **Presets**, click the **Outline** button and the **Inside** button.
430. Click the **Patterns** tab.
431. Under **Cell Shading**, select the lightest gray color.
432. Click **OK**.

### ***Formatting the Function Labels***

433. Click in cell **A35** and drag to cell **A38**.
434. The cells are selected.
435. Press **Ctrl+1**.
436. The Format Cells dialog box opens.
437. Click the **Alignment** tab.
438. Click the drop down arrow under **Horizontal** and change it to **Right**.
439. This will right align the labels in the cells horizontally.
440. The bottom check boxes should be unchecked.
441. Click the **Font** tab.
442. Change the **Font** to Arial.
443. Change the **Font style** to Bold.
444. Click the **Border** tab.
445. Under **Line Style**, select the heaviest solid line in the group.
446. Under **Presets**, click the **Outline** button and the **Inside** button.
447. Click the **Patterns** tab.
448. Under **Cell Shading**, select the lightest gray color.
449. Click **OK**.

34		
35	Mean	
36	Maximum	
37	Minimum	
38	Range	

### ***Formatting the Important Data***

450. Click in cell **B35**.
451. Drag diagonally to cell **D38**.
452. You have selected 12 cells.
453. Press **Ctrl+B** to make the data Bold.

### ***AutoFitting the Columns***

454. Click **Column Heading A** and drag across to **Column Heading D**.

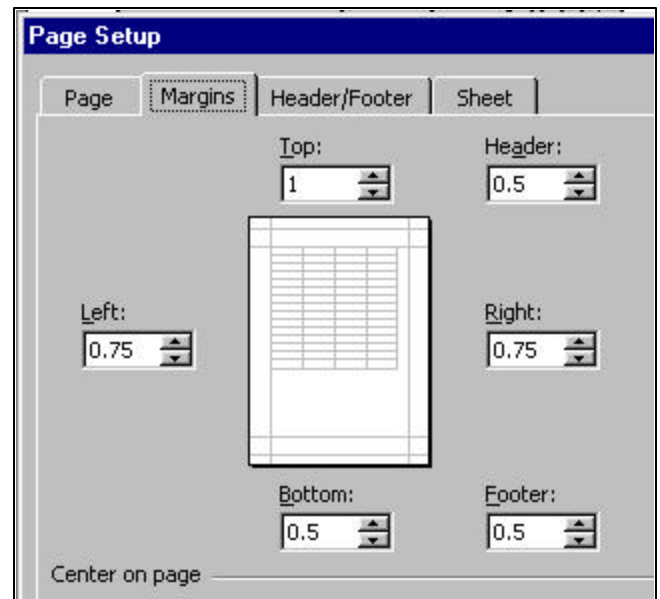
- 455. The columns are selected.
- 456. Click **Format** on the **Menu** bar, point to **Column**, and select **AutoFit Selection**.

### ***Autofitting the Title Row***


- 457. Click the **Row Heading 1**.
- 458. The row is selected.
- 459. Click **Format** on the **Menu** bar, point to **Row**, and select **AutoFit**.




### ***Changing the Page Setup***

- 460. Click **File** on the **Menu** bar and select **Page Setup**.
- 461. The Page Setup dialog box opens.
- 462. Click on the **Sheet** tab.
- 463. Under **Print**, check **Gridlines**.
- 464. This will put gridlines around your cells when you print.
- 465. Generally, you should print gridlines if you have a lot of data. It makes the numbers more readable.





- 466. Click the **Margins** tab.
- 467. Change the **Top Margin** to 1 inch.
- 468. Change the **Bottom Margin** to 0.5 inch.
- 469. Click the **Header/Footer** tab.
- 470. Click the **Custom Header** button

- 471. The Header dialog box opens.
- 472. In the **Right** section type **your** name.
- 473. Press **Enter**.
- 474. Type **your partner's name**.
- 475. Press **Enter**.
- 476. Click the **Date** button .
- 477. Press **Enter**.
- 478. It should say **&[Date]**.
- 479. Type the word **Period**, press the **Spacebar**, and type your **period number**.
- 480. Press **Enter**.
- 481. Type **Excel Exercise 3**.
- 482. In the left section, type **Body Measurements**.

483. Select the text you just typed.
484. Click the **Font** button .
485. The Format Font dialog box opens.
486. Change the **Font** to Impact.
487. Change the **Size** to 20 points.
488. Click **OK twice**.
489. Click the **Custom Footer** button .
490. The Footer dialog box opens.
491. In the **Right** section click the **File Name** button .
492. The file name is what you called the document when you saved it.
493. Click **OK twice**.

### ***Previewing a Worksheet***

494. Press **F7** to run a spell check.
495. Fix any errors.
496. Press **Ctrl+S** to save your work.
497. Click on the **Print Preview** button .
498. Check the **bottom** of the Print Preview window to check that you only have **one page**.
499. You will now see your header and footer.
500. Click the **Close** button  on the Print Preview toolbar.

### ***Printing a Document***

501. Press **Ctrl+P**.
502. The Print dialog box opens.
503. The **Name** of the printer should be **Ireland**.
504. Next to **Number of copies**, type **2** in the text box.
505. Click **OK** or press **Enter**.
506. Press **Alt+F4** to close all open windows and to return to the **Desktop**.
507. Look at Figure 10.



513. Click the file **My First Excel Workbook** to open it.

514. Click the **Open** button .

### ***Renaming a Sheet***

An Excel workbook contains 3 worksheets at the beginning. You can have up to 255 sheets in a single workbook.

515. Click on **Insert** on the **Menu** bar and select **Worksheet**.

516. A new Sheet1 will be inserted into your workbook.

517. Click the **Sheet1** tab.

518. Sheet1 opens.

519. Double-click the words **Sheet1** on the tab.

520. Type **M&Ms** to rename the tab.

521. Click the **Maximize** button  to enlarge the window.

522. Change the **Zoom** box  on the **Standard** toolbar to **100%**.

### ***Formatting the Worksheet***

523. Click in any cell.

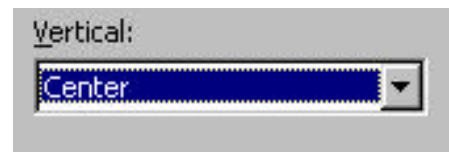
524. Press **Ctrl+A** to select all.

525. Press **Ctrl+1**.

526. The Format Cells dialog box opens.

527. Click the **Alignment** tab.

528. Click the drop down arrow under **Vertical** and change it to **Center**.



529. This will center the information in the cells vertically.

530. Click the **Font** tab.

531. Change the **Size** to 14 points

532. Change the **Font style** to Bold.

533. Click **OK**.

### ***Entering the Spreadsheet Title***


534. In cell **A1** type **M&Ms Math Investigation**.

535. Press **Tab**.

### ***Formatting the Spreadsheet Title***

In Exercise 1, you used WordArt to make the spreadsheet title. In Exercises 2 and 3 you placed your title in the Header. In Exercise 4, you will make the title directly in the spreadsheet.

536. Click in cell **A1** and drag to cell **E1**.

537. The cells are selected.
538. Using the **Formatting** toolbar, click the **Merge and Center** button .
539. Press **Ctrl+1**.
540. The Format Cells dialog box opens.
541. Click the **Patterns** tab.
542. Under **Cell Shading**, select a chocolate brown color.
543. Click the **Font** tab.
544. Change the **Font** to Stencil.
545. Change the **Size** to 44 points.
546. Change the **Font style** to Regular.
547. Change the **Font Color** to White.
548. Click the **Borders** tab.
549. Under **Line Style**, select the heaviest line in the group.
550. Under **Presets**, click the **Outline** button.
551. Click **OK**.
552. Click **Format** on the **Menu** bar point to **Row** and select **Height**.
553. The Row Height dialog box opens.
554. Change the **Row Height** to 60 points.
555. Click **OK**.
556. This will give your title extra space and separate it from the data.

### ***Making the Columns Have the Same Width***

557. Click **Column Heading A** and drag across to **Column Heading E**.
558. The columns are selected.
559. Click **Format** on the **Menu** bar, point to **Column**, and select **Width**.
560. The Column Width dialog box opens.
561. Type **23** in the text box.
562. Click **OK**.
563. The columns will be the same width.
564. Look at Figure 11.



**Figure 11**



## ***Entering the Column Labels***

565. In cell **A2** type **Color**.
566. Press **Tab**.
567. In cell **B2** type **Amount**.
568. Press **Tab**.
569. In cell **C2** type **Fraction of**.
570. Press **Alt+Enter**.
571. Type **Whole Bag**.
572. Press **Tab**.
573. In cell **D2** type **Decimal Amount of**.
574. Press **Alt+Enter**.
575. Type **Whole Bag**.
576. Press **Tab**.
577. In cell **E2** type **Percent of**.
578. Press **Alt+Enter**.
579. Type **Whole Bag**.

## ***Formatting the Column Labels***

580. Click in **A1** and drag across to **E2**.
581. The area is selected.
582. Press **Ctrl+1**.
583. The Format Cells dialog box opens.
584. Click the **Alignment** tab.
585. Click the drop down arrow under **Horizontal** and change it to **Center**.
586. Click the **Border** tab.
587. Under **Line Style**, select the heaviest solid line in the group.
588. Under **Presets**, click the **Outline** button and the **Inside** button.
589. Click **OK**.

**Figure 12**



The screenshot shows an Excel spreadsheet with a title row (row 1) and five data columns (columns A through E). The title row is highlighted in a dark red color and contains the text "M&MS MATH INVESTIGATION" in white, bold, uppercase letters. The data columns are highlighted in a light gray color and contain the following text in bold, uppercase letters: "Color", "Amount", "Fraction of Whole Bag", "Decimal Amount of Whole Bag", and "Percent of Whole Bag". The spreadsheet is displayed in a window with a blue title bar.

	A	B	C	D	E
1	<b>M&amp;MS MATH INVESTIGATION</b>				
2	<b>Color</b>	<b>Amount</b>	<b>Fraction of Whole Bag</b>	<b>Decimal Amount of Whole Bag</b>	<b>Percent of Whole Bag</b>



## Entering the Row Labels

590. In cells **A3 to A9**, type in the **colors** of M&Ms that you found in your bag.
591. Leave cells blank if you don't have enough colors.
592. In cell **A10** type **Total in Bag**.
593. Press **Ctrl+S** to save your work.

## Entering Data

594. In cells **B3 to B9**, type in the **amount** of M&Ms of each color that you found in your bag.

## Calculating the Total Amount of M&Ms

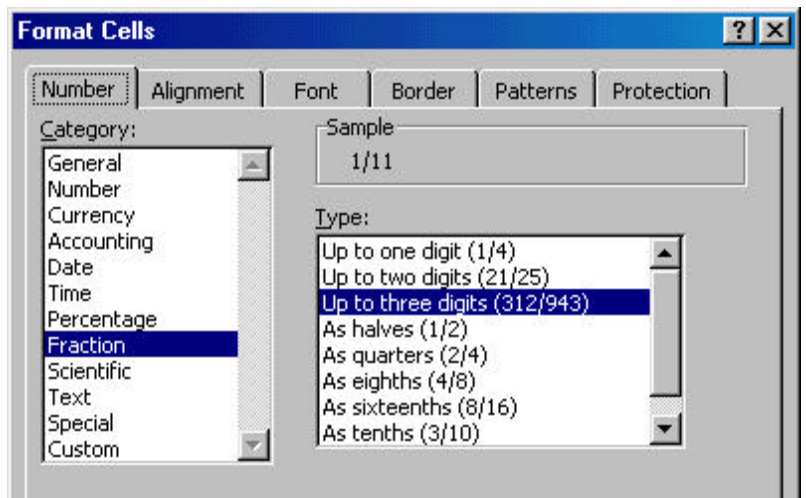
595. Click in cell **B10**.
596. Type the formula `=Sum(b3:b9)`.
597. This will give you the total amount of M&Ms found in your bag.
598. Press **Enter**.

M&MS MATH	
Color	Amount
Red	9
Yellow	8
Blue	5
Orange	4
Brown	6
Green	7
Purple	10
<b>Total in Bag</b>	<b>49</b>

## Formatting Cells into Fractions

Excel can use many different number formats. In Column C you are going to use fractions. Therefore you must change the number format from normal whole numbers.

599. Click in cell **C3** and drag down to cell **C10**.
600. The cells are selected.
601. Press **Ctrl+1**.
602. The Format Cells dialog box opens.
603. Click the **Number** tab.
604. Under **Category**, select **Fraction**.
605. Under **Type**, select **Up to three digits**.
606. Click **OK**.



## Making Fractions

Each color of M&M represents a fractional amount of the whole bag. The amount of each color is the **numerator** and the total amount of M&Ms is the **denominator**. To type fractions in Excel type the numerator, then the / key, then the denominator. For example:  $1/2 = \frac{1}{2}$

607. In cell **C3**, type the number in cell **B3**.
608. Press the / **key** (division) on the numeric keypad.
609. Type the number in **B10** (the total).
610. In cells **C4 to C9**, repeat the prior steps for each color of M&Ms so that all of your fractions are complete.
611. Notice that Excel automatically simplifies and reduces each fraction to simplest form. This is a great way to learn how to reduce fractions.
612. Look at Figure 13.

Figure 13

	A	B	C
1	<b>M&amp;MS MATH INVE</b>		
2	<b>Color</b>	<b>Amount</b>	<b>Fraction of Whole Bag</b>
3	Red	9	9/49
4	Yellow	8	8/49
5	Blue	5	5/49
6	Orange	4	4/49
7	Brown	6	6/49
8	Green	7	1/7
9	Purple	10	10/49
10	<b>Total in Bag</b>	<b>49</b>	<b>1</b>

Nine out of forty-nine M&Ms were red.

## Using the Fill Handle to Copy into Adjacent Cells the Fast Way

By the time you complete middle school, you should be able to convert a number to a fraction, decimal, or percent. Excel will do this for you.

613. Click in cell **C3** drag down to cell **C10**.
614. The cells are selected.
615. In the lower right-hand corner of cell **C10** you will see a handle.
616. Move the mouse over the handle and the mouse changes into a small + sign.

617. Press the left mouse button and drag the fill handle across to cell **E10**.
618. You have now copied the fractions to Columns D and E.
619. Look at Figure 14.

**Figure 14: You have three columns of fractions. Notice the totals equal 1 whole bag.**

M&MS MATH INVESTIGATION				
Color	Amount	Fraction of Whole Bag	Decimal Amount of Whole Bag	Percent of Whole Bag
Red	20	1/3	1/3	1/3
Yellow	8	2/15	2/15	2/15
Blue	5	1/12	1/12	1/12
Orange	4	1/15	1/15	1/15
Brown	6	1/10	1/10	1/10
Green	7	7/60	7/60	7/60
Purple	10	1/6	1/6	1/6
<b>Total in Bag</b>	<b>60</b>	<b>1</b>	<b>1</b>	<b>1</b>

### ***Using the Fill Handle to Copy into Adjacent Cells***

620. Click in cell **B10**.
621. In the lower right-hand corner of B10 you will see a handle.
622. Move the mouse over the handle and the mouse changes into a small + sign.
623. Press the left mouse button and drag the fill handle across to cell **E10**.
624. You have now copied the Sum function to columns C through E.
625. Notice that the sum of all the fractional parts is equal to 1 whole bag.

### ***Converting Fractions to Decimals***


626. Click in cell **D3** drag down to cell **D10**.
627. The cells are now selected.
628. Press **Ctrl+1**.
629. The Format Cells dialog box opens.
630. Click the **Number** tab.
631. Under **Category**, select **Number**.
632. Next to **Decimal Places**, type **2**.
633. This will round off any long decimals to hundredths.
634. Click **OK**.

### ***Converting Fractions to Percents***

635. Click in cell **E3** drag down to cell **E10**.

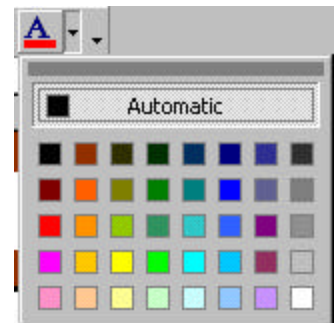
- 636. The cells are now selected.
- 637. Press **Ctrl+1**.
- 638. The Format Cells dialog box opens.
- 639. Click the **Number** tab.
- 640. Under **Category**, select **Percentage**.
- 641. Next to **Decimal Places**, type **2**.
- 642. This will round off any long decimals to hundredths.
- 643. Click **OK**.

### **Formatting the Row Labels**

- 644. Click in cell **A3**.
- 645. Using the **Formatting** toolbar, click the drop down arrow next to the **Font Color** button  and change the Font Color to the **color of the M&M**.
- 646. Repeat the prior steps so that each color label in Column A has a *different* font color.
- 647. Look at Figure 14 or 15.

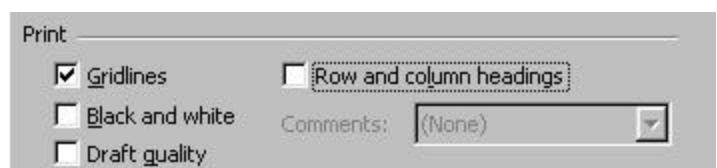
### **Formatting the Totals Row**

- 648. Click in cell **A10** and drag across to cell **E10**.
- 649. The cells are now selected.
- 650. Press **Ctrl+1**.
- 651. The Format Cells dialog box opens.
- 652. Click the **Borders** tab.
- 653. Under **Line Style**, select the heaviest line in the group.
- 654. Under **Presets**, click the **Outline** button.
- 655. Click the **Font** tab.
- 656. Change the **Font Color** to White.
- 657. Click the **Patterns** tab.
- 658. Change the **Cell Shading Color** to chocolate brown.
- 659. Click **OK**.



### **Changing the Page Setup**

- 660. Click **File** on the **Menu** bar and select **Page Setup**.
- 661. The Page Setup dialog box opens.
- 662. Click on the **Sheet** tab.
- 663. Under **Print**, check **Gridlines**.



664. This will put gridlines around your cells when you print. Generally, you should print gridlines if you have a lot of data. It makes the numbers more readable.

665. Click the **Margins** tab.

666. Set the **Top Margin** to 2 inches.

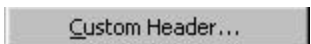
667. Under **Center on page**, check **Horizontally**.

668. Click the **Page** tab.

669. Change the **Orientation** to **Landscape**.

670. Click the **Header/Footer** tab.

671. Click the **Custom Header** button



672. The Header dialog box opens.

673. In the **Right** section type **your name**.

674. Press **Enter**.

675. Type **your partner's name**.

676. Press **Enter**.

677. Click the **Date** button .

678. Press **Enter**.

679. It should say **&[Date]**.

680. Type the word **Period**, press the **Spacebar**, and type your **period number**.

681. Press **Enter**.

682. Type **Excel Exercise 4**.

683. Click **OK**.

684. Click the **Custom Footer** button .

685. The Footer dialog box opens.

686. In the **Right** section click the **File Name** button .

687. Click **OK twice**.

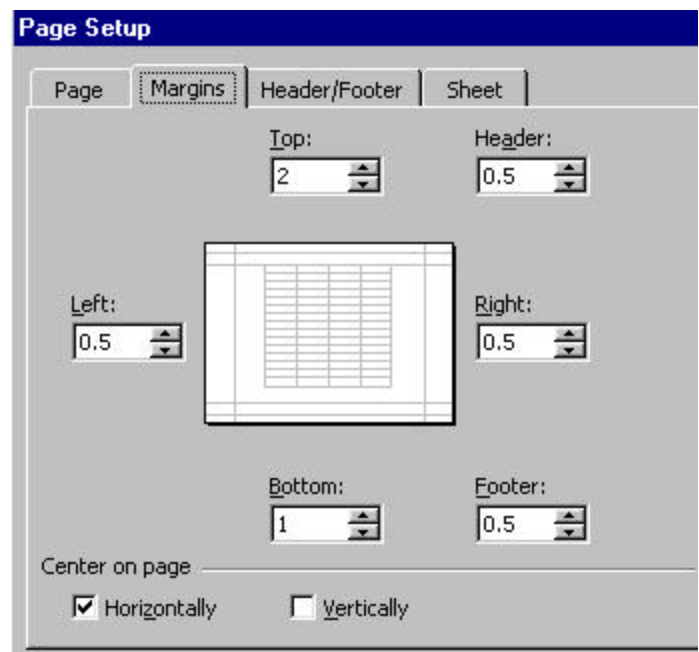
### **Previewing a Worksheet**


688. Press **F7** to run a spell check.

689. Fix any errors.

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

691. Click on the **Print Preview** button .



692. Check the **bottom** of the Print Preview window to check that you only have **one page**.
693. You will now see your header and footer.
694. Click the **Close** button  on the Print Preview toolbar.

### **Printing a Document**

695. Press **Ctrl+P**.
696. The Print dialog box opens.
697. The **Name** of the printer should be **Wales**.
698. Next to **Number of copies**, type **2** in the text box.
699. Click **OK** or press **Enter**.
700. Press **Alt+F4** to close all open windows and to return to the **Desktop**.

**Figure 15: You have changed the fractions to equivalent decimals and percents.**

Larry Rubin  
 P.C. User  
 12/29/02  
 Period 1  
 Excel Exercise 4

<b>M&amp;MS MATH INVESTIGATION</b>				
<b>Color</b>	<b>Amount</b>	<b>Fraction of Whole Bag</b>	<b>Decimal Amount of Whole Bag</b>	<b>Percent of Whole Bag</b>
<b>Red</b>	9	9/49	0.18	18.37%
<b>Yellow</b>	8	8/49	0.16	16.33%
<b>Blue</b>	5	5/49	0.10	10.20%
<b>Orange</b>	4	4/49	0.08	8.16%
<b>Brown</b>	6	6/49	0.12	12.24%
<b>Green</b>	7	1/7	0.14	14.29%
<b>Purple</b>	10	10/49	0.20	20.41%
<b>Total in Bag</b>	<b>49</b>	<b>1</b>	<b>1.00</b>	<b>100.00%</b>