

44

Search Engines

New Skills

1. Create a pie chart.
2. Enhance charts by changing colors and font sizes.

Activity Overview

The Web is a rich source for current local, national, and international news. There are millions of Web sites on the World Wide Web, from broadcast sources to newspapers. There are several search engines available for Web searches. Users must type in keywords or phrases related to the topic to be researched. For an effective search, it is best to enter multiple search terms or phrases related to the subject of interest. The more precise you are with the keywords or phrases, the better the results.

The following spreadsheet and chart illustrates how spreadsheets can be used to log data to track the percentage of market share each search engine incurred in August of 2010.

Instructions

1. Create a NEW spreadsheet.
- * Unless otherwise stated, the font should be 10 point Arial.
2. Type the data as shown.
3. Change the font size of cell A1 to 16 point.
4. Format the width of column A to 26.0 and left align.
5. Format the width of column B to 22.0 and center align.
6. Bold rows 1 and 3.
7. Create a pie chart as follows:
 - a. Select cells A1 – B8.
 - b. Using the Chart Wizard, select Pie for the Chart type. The Chart sub-type should be Pie.
 - c. Set the chart to Series in Columns.
 - d. Enter the chart title as "SEARCH ENGINES % OF MARKET SHARE."
 - e. Display the legend to the right of the pie chart.
 - f. Show no data labels.
 - g. Save the chart as a new sheet. Name the new sheet SEARCH ENGINES CHART.
8. Format the Chart Area with a background color of peach.
9. Format the colors of each piece of the pie chart as follows:
 - a. Google → purple
 - b. Yahoo → green
 - c. Bing → yellow
 - d. Ask → turquoise
 - e. AOL Search → pink

NEW SKILL

NEW SKILL

NEW SKILL



NEW SKILL

- 10. Format the chart's legend background color to light blue and change the font size to 16 point.
- 11. Format the chart's title to blue and change the font size to 24 point bold.
- 12. When formatted, your chart should look similar to the one provided in Figure 44-1.
- 13. Insert a header for both the spreadsheet and the chart that shows:
 - a. Left Section Activity 44-Student Name
 - b. Center Section SEARCH ENGINES
 - c. Right Section Current Date
- 14. Insert a footer that shows:
 - a. Center Section PAGE number
- 15. Carefully proofread your work for accuracy.
- 16. Save the spreadsheet as SEARCH ENGINES.
- 17. Analyze the changes made to the data in the spreadsheet.
- 18. Print Preview and adjust the Page Setup so that the spreadsheet and the chart each fit on one page. Set the Page Orientation to Landscape for the chart.



44

Input Data: ↴

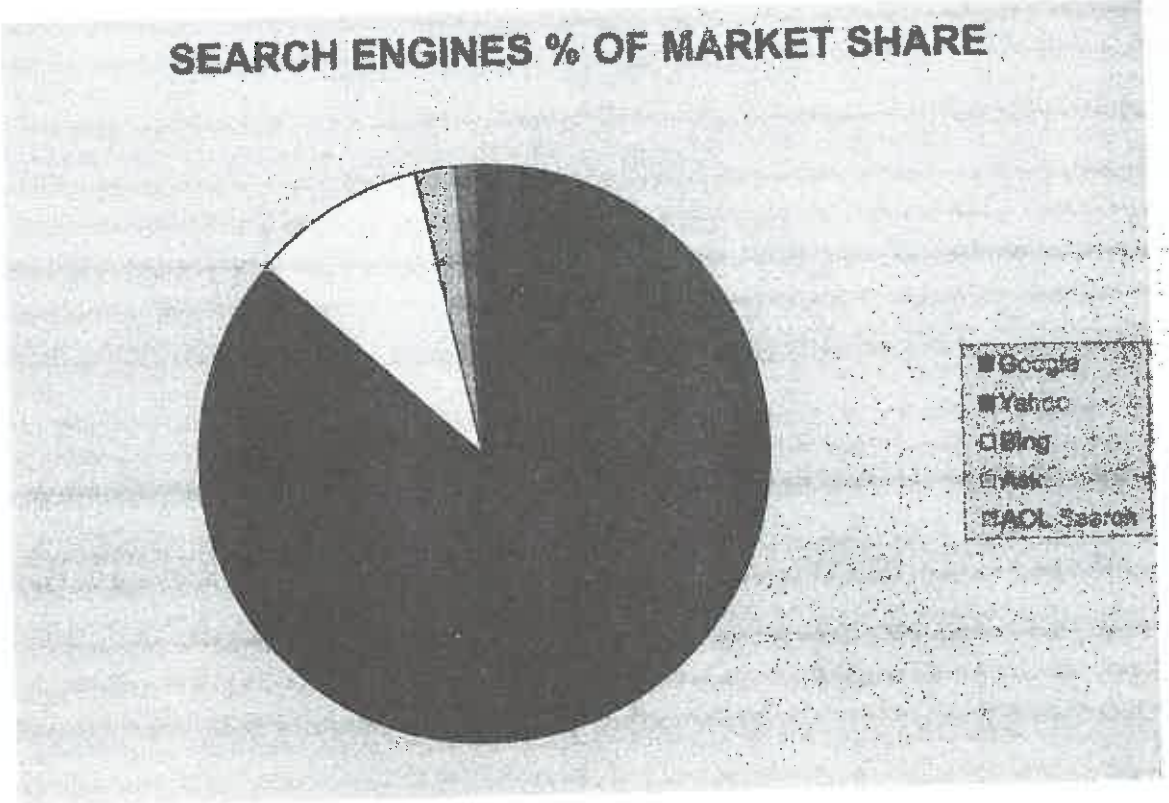
	A	B	C	D
1	SEARCH ENGINES			
2				
3	NAME	% of MARKET SHARE		
4	Google	71.59%		
5	Yahoo	14.28%		
6	Bing	9.87%		
7	Ask	2.28%		
8	AOL Search	1.21%		

44

Search Engines

Finished work example ↴

FIGURE 44-1



iPhone® Games

New Skills

1. Create a column chart.

Activity Overview

The iPhone® is a line of Internet and multimedia-enabled smartphones designed and marketed by Apple Inc. The first iPhone was introduced on January 9, 2007. An iPhone functions as a camera phone, including text messaging and visual voicemail, a portable media player, and an Internet client, with e-mail, web browsing, and Wi-Fi connectivity. Third-party applications are available from the App Store, which launched in mid-2008 and now has well over 300,000 “apps” approved by Apple. These apps have diverse functionalities, including games, reference, GPS navigation, social networking, and advertising for television shows, films, and celebrities.

The following activity illustrates how spreadsheets can be used to create a bar graph to analyze the most popular iPhone® paid games downloaded.

Instructions

1. Create a NEW spreadsheet.
- * *Unless otherwise stated, the font should be 10 point Arial.*
2. Type the data as shown.
3. Change the font size of cell A1 to 16 point bold.
4. Format the width of column A to 30.0 and left align.
5. Format the width of column B to 14.0 and center align.
6. Bold row 3.
7. Create a column chart as follows.
 - a. Select cells A3 – B13.
 - b. Using the Chart Wizard, select Column for the Chart type and Clustered Column for the Chart sub-type.
 - c. Set the chart to Series in Columns.
 - d. Enter the chart title as “MOST POPULAR IPHONE GAMES DOWNLOADED,” the title for Category (X) axis as “GAME,” and the title for the value (Y) axis as “FREQUENCY.”
 - e. Display the legend to the right of the chart.
 - f. Show no data labels.
 - g. Save the chart as a new sheet. Name the new sheet IPHONE CHART.
8. Format the style and colors of the chart as follows:
 - a. Change the background color of the Chart Area to turquoise.
 - b. Change the background color of the Plot Area to yellow.

NEW SKILL



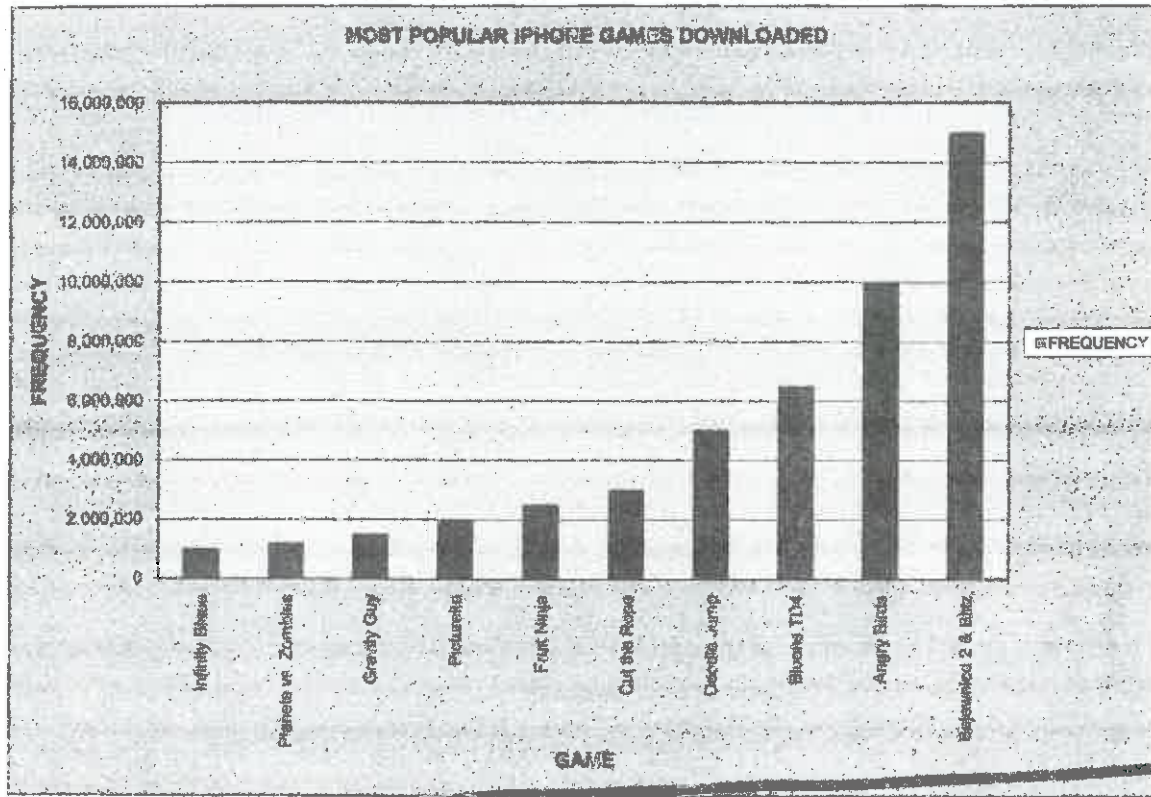
iPhone® Games

45

FIGURE 45-1

Example of finished work →

Input Data. ↓



A	B	C	D
1	MOST POPULAR IPHONE GAMES DOWNLOADED		
2			
3	GAME	FREQUENCY	
4	Infinity Blade	1,000,000	
5	Planets vs. Zombies	1,200,000	
6	Gravity Guy	1,500,000	
7	Pictureka	2,000,000	
8	Fruit Ninja	2,500,000	
9	Cut the Rope	3,000,000	
10	Doodle Jump	5,000,000	
11	Bloons TD4	6,500,000	
12	Angry Birds	10,000,000	
13	Bejeweled 2 & Blitz	15,000,000	

- c. Change the colors of the bars to purple.
 - d. Format the chart title and axis titles to font size 12 point bold.
 - e. Change the text alignment of the game titles to 90 degrees.
 - f. Change the major unit of the frequency numbers to 2000000, the minor unit to 400000, and the maximum unit to 16000000.
9. When formatted, your chart should look similar to the one provided in Figure 45-1.
 10. Insert a header that shows:
 - a. Left Section Activity 45-Student Name
 - b. Center Section IPHONE GAMES
 - c. Right Section Current date
 11. Insert a footer that shows:
 - a. Center Section PAGE number
 12. Carefully proofread your work for accuracy.
 13. Save the spreadsheet as IPHONE GAMES.
 14. Analyze the changes made to the data in the spreadsheet.
 15. Print Preview and adjust the Page Setup so that the spreadsheet and the chart each fit on one page. Set the Page Orientation to Landscape for the chart.

Summer Olympic Games

46

New Skills

1. Create a line chart.
2. Select cells using multiple ranges.
3. Use the Fill Effects feature in a chart.

Activity Overview

The Summer Olympic Games are an international multi-sport event occurring every four years, organized by the International Olympic Committee. Medals are awarded in each event, with gold medals for first place, silver for second, and bronze for third—a tradition that started in 1904.

The games have expanded from a 42-event competition with fewer than 250 male athletes to a 300-event sporting tradition with over 10,000 competitors from 205 nations. The United States has hosted four Summer Olympic Games—more than any other nation.

The following activity illustrates how spreadsheets can be used to graph the number of competitors in the Summer Olympic Games over the years.

Instructions

1. Create a NEW spreadsheet.
- ★ *Unless otherwise stated, the font should be 10 point Arial.*
2. Type the data as shown.
3. Change the font size of cell A1 to 16 point.
4. Bold and underline row 3.
5. Format column widths and alignments as follows:
 - a. Column A to 10.0 and left align.
 - b. Column B to 22.0 and left align.
 - c. Column C to 25.0 and left align.
 - d. Column D to 20.0 and center align.
6. Create a line chart as follows:
 - a. Select cells A3 – A11 and D3 – D11 simultaneously. To do this, select cells A3 – A11, then hold down <CTRL> and select cells D3 – D11. Both cell ranges should be selected.
 - b. Using the Chart Wizard, select Line for the Chart type and “Line with markers displayed at each data value” for the Chart sub-type.
 - c. Click on the Series tab.
 - d. Click on Year and click on Remove tab.
 - e. Define the Category (X) axis labels by selecting cells A4 – A11.
 - f. Enter the chart title as “SUMMER OLYMPICS,” the title for Category (X) axis as “YEAR,” and the title for value (Y) axis as “# OF COMPETITORS.”
 - g. Display the legend to the right of the chart.

NEW SKILL

NEW SKILL



46

Summer Olympic Games

NEW SKILL

A		B		C		D
Summer Olympics Competitors		Summer Olympics Competitors				
1	2	3	4	5	6	7
Year	Number	Host				# of Competitors
1980	5179	Moscow, Soviet Union				5179
1984	6829	Los Angeles, United States				6829
1988	8391	Seoul, South Korea				8391
1992	9356	Barcelona, Spain				9356
1996	10318	Atlanta, United States				10318
2000	10651	Sydney, Australia				10651
2004	10625	Athens, Greece				10625
2008	10942	Beijing, China				10942

h. Show no data labels.

i. Save the chart as a new sheet. Name the new sheet SUMMER OLYMPICS CHART.

7. Format the style and colors in the chart as follows:

a. Change the background color of the Chart Area using the Fill Effects feature. Choose a Gradient effect with two colors. Set Color 1 to blue and color 2 to light pink with horizontal shading style.

b. Change the background color of the Plot Area to peach.

c. Change the font size of the title in the chart to 20 point.

d. Change the font size of the X and Y axis titles to 14 point.

8. Change the text alignment of the YEARS to 90 degrees.

9. When formatted, your chart should look similar to the one provided in Figure 46-1.

10. Insert a header for both the spreadsheet and the chart that shows:

a. Left Section Activity 46-Student Name

b. Center Section SUMMER OLYMPICS

c. Right Section Current Date

11. Insert a footer that shows:

a. Center Section PAGE number

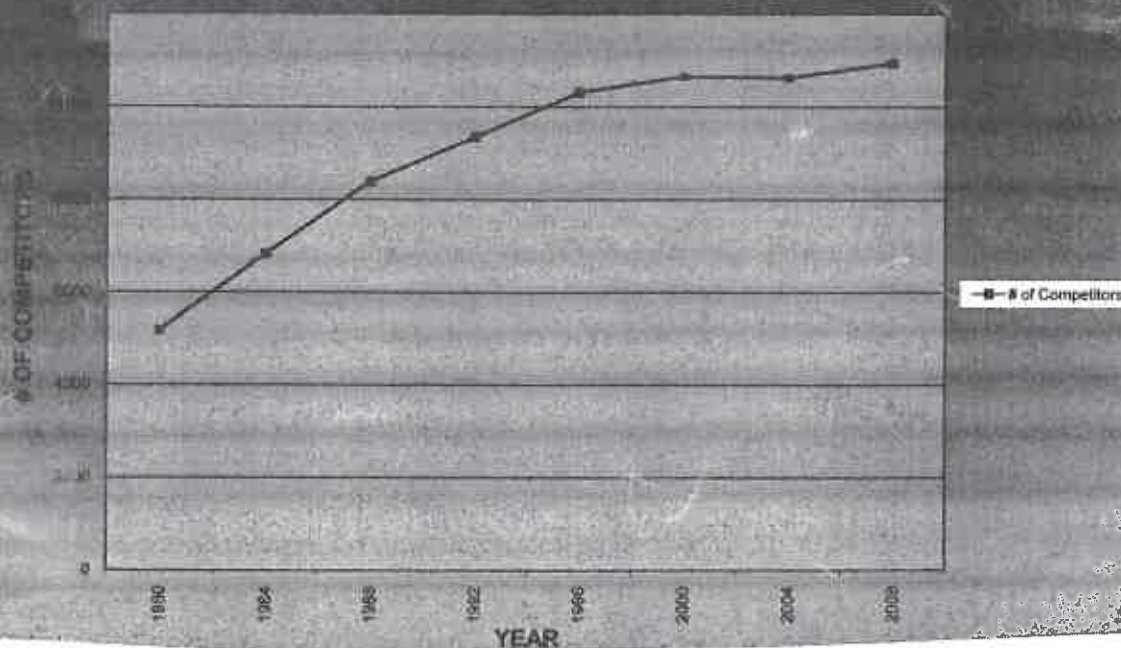
12. Carefully proofread your work for accuracy.

13. Save the spreadsheet as SUMMER OLYMPICS GAMES.

14. Analyze the changes made to the data in the spreadsheet.

15. Print Preview and adjust the Page Setup so that the spreadsheet and the chart each fit on one page. Set the Page Orientation to Landscape for the chart.

FIGURE 46-1



New Skills

1. Create a bar chart.
2. Align text in a chart.

NEW SKILL ►

1. Create a NEW spreadsheet.
- * Unless otherwise stated, the font should be 10 point Arial.
2. Type the data as shown.
3. Change the font size of cell A1 to 16 point.
4. Bold and underline rows 1, 2, and 4.
5. Left align cells A4 – D24.
6. Format the width of columns A and B to 22.0.
7. Format the width of column C to 10.0.
8. Format the width of column D to 14.0.
9. Create a bar chart as follows:
 - a. Select cells B4 – B24 and D4 – D24 simultaneously. To do this, select cells B4 – B24 then, hold down <CTRL> and select cells D4 – D24. Both cell ranges should be selected.
 - b. Using the Chart Wizard, select Bar for the Chart type and Clustered Bar for the Chart sub-type.
 - c. Set the Data Range of the Series in Columns.
 - d. Enter the chart title as "WEEKS IN TOP 20," the title for Category (X) axis as "RINGTONE," and the title for value (Y) axis as "# OF WEEKS."
 - e. Display the legend to the right of the chart.
 - f. Show no data labels.
 - g. Save the chart as a new sheet. Name the new sheet as RINGTONES CHART.

NEW SKILL ►

10. Format the style of the chart as follows:
 - a. Change the font size of the ringtone titles to 7 point.
 - b. Change the font size of the title to 16 point bold.
 - c. Change the text alignment of the ringtones to 25 degrees.
11. When formatted, your chart should look similar to the one provided in Figure 47-1.
12. Insert a header for both the spreadsheet and the chart that shows:
 - a. Left Section Activity 47-Student Name
 - b. Center Section RINGTONES
 - c. Right Section Current Date
13. Insert a footer that shows:
 - a. Center Section PAGE number
14. Carefully proofread your work for accuracy.
15. Save the spreadsheet as RINGTONES.
16. Analyze the changes made to the data in the spreadsheet.
17. Print Preview and adjust the Page Setup so that the spreadsheet and the chart each fit on one page. Set the Page Orientation to Landscape for the chart.

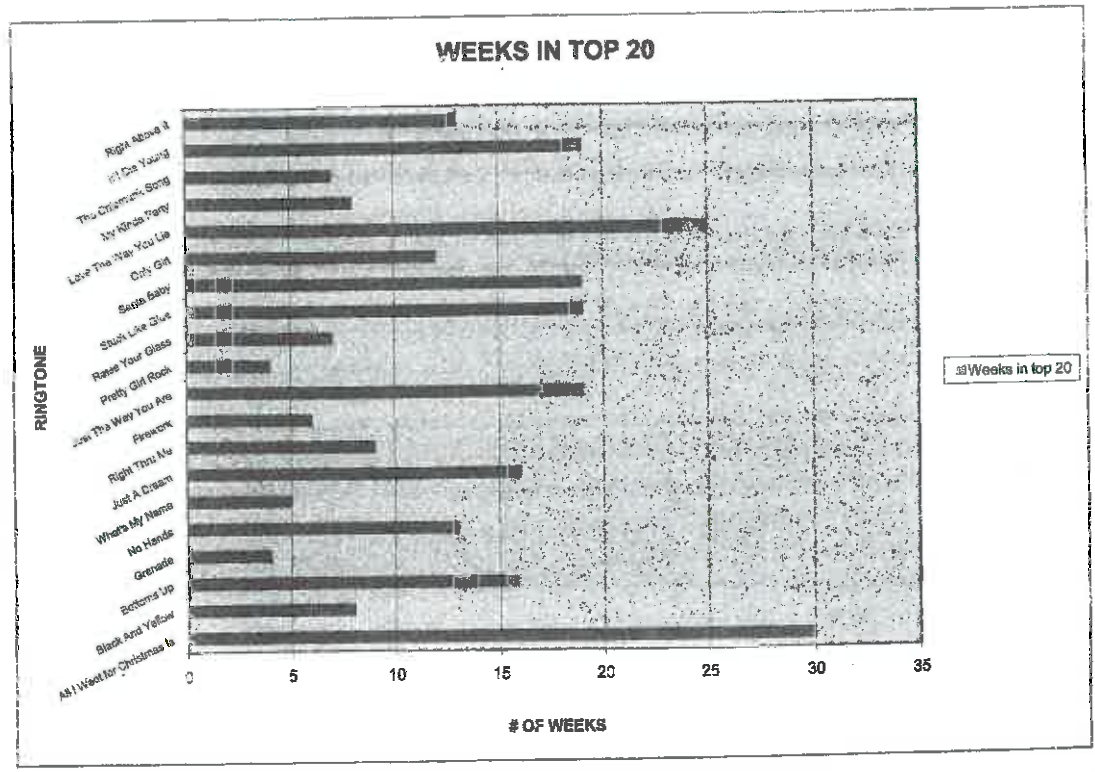
47

Ringtones

INPUT DATA

	A	B	C	D
1	TOP 20 RINGTONES			
2	December 2010			
3				
4	Artist	Ringtone	Cost	Weeks in top 20
5	Mariah Carey	All I Want for Christmas Is	\$0.99	30
6	Wiz Khalifa	Black And Yellow	\$1.29	8
7	Trey Songz	Bottoms Up	\$1.29	16
8	Bruno Mars	Grenade	\$0.99	4
9	Waka Flocka Flame	No Hands	\$1.29	13
10	Rihanna	What's My Name	\$1.29	5
11	Nelly	Just A Dream	\$1.29	16
12	Nicki Minaj	Right Thru Me	\$1.29	9
13	Katy Perry	Firework	\$0.99	6
14	Bruno Mars	Just The Way You Are	\$0.99	19
15	Keri Hilson	Pretty Girl Rock	\$1.29	4
16	Pink	Raise Your Glass	\$1.29	7
17	Sugarland	Stuck Like Glue	\$1.29	19
18	Eartha Kitt	Santa Baby	\$0.99	19
19	Rihanna	Only Girl	\$1.29	12
20	Eminem	Love The Way You Lie	\$1.29	25
21	Jason Aldean	My Kinda Party	\$1.29	8
22	Alvin and The Chipmunks	The Chipmunk Song	\$0.99	7
23	The Band Perry	If I Die Young	\$1.29	19
24	Lil Wayne	Right Above It	\$1.29	13

FIGURE 47-1



www.billboard.com

Raise

New Skills

1. Use conditions in formulas to determine a desired result.

Activity Overview

The City of Fort Worth, Texas, is changing its criteria for calculating raises for city employees. Instead of everyone getting the same raise, the City Council has decided to base raises on the condition of number of years of service to the city. Employees who have been employed by the city for five or more years will receive a 5.5 percent raise. All other employees will receive a 4 percent raise.

The following activity illustrates how spreadsheets can be used to calculate the raise percentage and raise amount, and determine each employee's salary for 2011.

Instructions

1. Create a NEW spreadsheet.
- * Unless otherwise stated, the font should be 10 point Arial.
2. Type the data as shown.
3. Bold rows 1 – 6 and row 21.
4. Format the width of columns A and B to 15.0 and left align.
5. Format the width of column C to 25.0 and left align.
6. Format the width of column D to 13.0 and center align.
7. Format the width of columns E, F, G, and H to 13.0 and right align.
8. Format cells E8 – E21 and cells G8 – H21 as currency displaying 2 decimal places and the \$ symbol.
9. Format cells F8 – F20 as percentages displaying 2 decimal places.
10. Compute the formulas for the first employee as follows:
 - a. In column F, % INCREASE, a conditional formula is required to determine if each employee's YEARS OF SERVICE is greater than or equal to 5 years. If the condition is true, the employee receives a 5.5% increase to his/her 2010 SALARY. If the condition is false, the employee receives a 4% increase to his/her 2010 SALARY. The conditional formula for the first employee to be entered into cell F8 is, type =IF(D8>=5, 5.5%,4%)
 - b. 2011 RAISE=2010 SALARY*% INCREASE → In cell G8, type =E8*F8
 - c. 2011 SALARY=2010 SALARY+2011 RAISE → In cell H8, type =E8+G8
11. Use the AutoFill feature to copy the formula down for the remaining employees.
12. Enter the formulas to compute the totals for columns E, G, and H.

NEW SKILL



Raise

INPUT DATA

	A	B	C	D	E	F	G	H
1	City Of Fort Worth Employee Salary							
2	Schedule of Raises							
3	Effective Date: 1/1/2011							
4								
5				YEARS OF	2010	%	2011	2011
6	LAST	FIRST	POSITION	SERVICE	SALARY	INCREASE	RAISE	SALARY
7								
8	Fisser	Dale	City Manager	25	228,595			
9	Crumb	Stephen	Water Director	3	147,347			
10	Allen	Darlene	City Auditor	5	139,049			
11	Best	Wenona	Legal Secretary	10	40,290			
12	Garrett	Bridgette	Utility Administrator	16	131,934			
13	Garcia	Marion	Field Operations Crewleader	1	40,269			
14	Streffert	Steven	Assistant ITS Director	6	135,429			
15	Smith	Christine	Account Technician	3	40,290			
16	Irwin	Pamela	Compliance Specialist	4	40,165			
17	Thomas	Cheryl	Senior Librarian	17	45,448			
18	Washington	Dean	Librarian	4	50,232			
19	Moorland	Blake	Public Events Manager	12	62,008			
20	Mendoza	Chris	Operations Manager	11	50,107			
21	TOTALS							

Raise

13. Insert a header that shows:
 - a. Left Section Activity 48-Student Name
 - b. Center Section RAISE
 - c. Right Section Current Date
14. Insert a footer that shows:
 - a. Center Section PAGE number
15. Display formulas in your spreadsheet by using <CTRL> + * to check for accuracy.
16. Carefully proofread your work for accuracy.
17. Save the spreadsheet as RAISE.
18. Analyze the changes made to the data in the spreadsheet.
19. Set the Print Area to include all cells containing data in the spreadsheet.
20. Print Preview and adjust the Page Setup so that the spreadsheet fits on one page. Set the Page Orientation to Landscape.