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SEU 323

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EXCEL SPREADSHEET ACTIVITY

Excel is a spreadsheet application in Microsoft Office which you can use to organize and analyze data. A spreadsheet is a grid of rows and columns which can be thought of as an electronic accounting ledger. You can enter data and perform numerical calculations on the spreadsheet. Open Excel on your computer. Click on the "Start" button in the lower left of your computer; select "Programs" and click on "Excel." This is a spreadsheet in Excel:
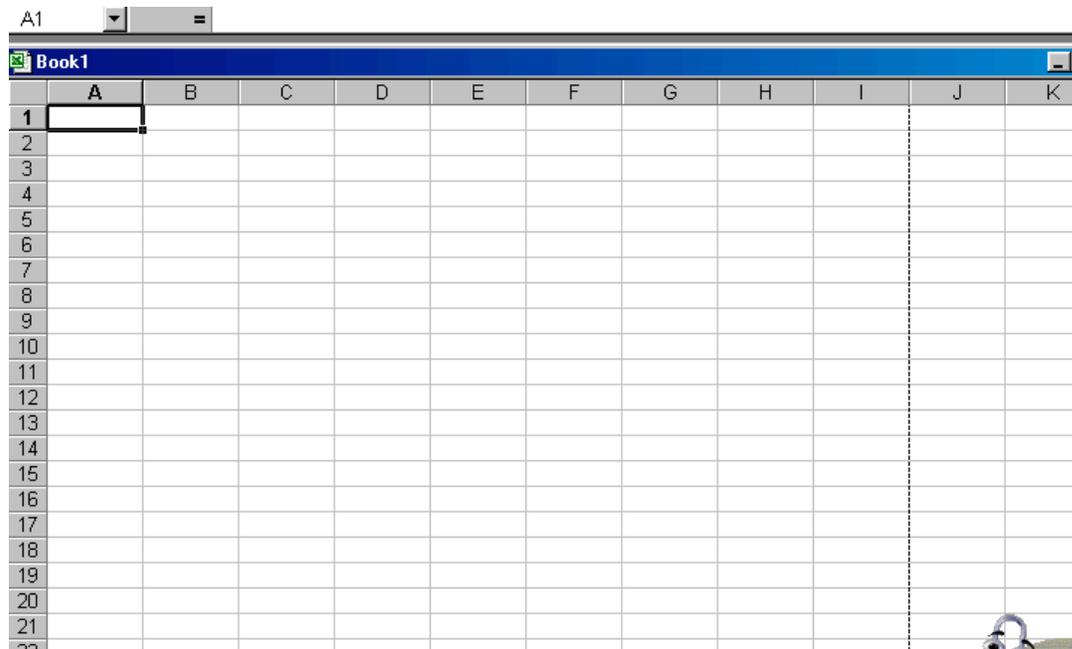
The columns are labeled A through Z; the rows are numbered in order. The block at which a row and column intersect is called a cell and its address is defined by the letter of the column and the number of the row. On the above spreadsheet, cell A1 is outlined, or selected. This is the cell in which numeric data and or text can be entered. Across the

top of the spreadsheet is a menu bar which you will utilize when necessary. This is the

menu bar:
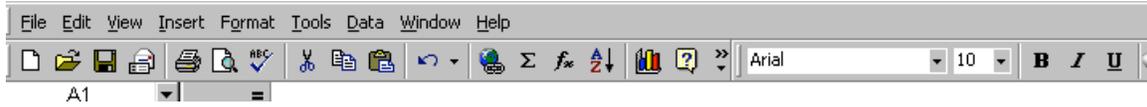
In this activity you will learn how to enter text and data onto the spreadsheet,

calculate an average of a data set, and create a bar graph representing the averages you

will calculate.

This activity focuses on the Christmas tree sales of three tree farms from

December 10th through December 24th.

Set up the spreadsheet!

A few basic instructions will be needed before you begin. To enter text or a

number into a cell, click on the specific cell using the mouse; the arrow becomes a white

cross on the spreadsheet. Type the text or number into the cell. To move to another cell

you have a few options: Push enter after you type the information; use the arrow keys; or

use the mouse to select the cell you want to be in next. The cell you are in displayed in

the top left of the spreadsheet:

You will now enter the text on the spreadsheet. Select cell C1 and type:

CHRISTMAS TREE SALES. This is the title of the spreadsheet. The words will run

into the adjoining cells. You will now enter the names of the three farms. First you will

make columns B, C, and D wider. Take your white cross to the top row which has the

letters of each column. Place the cross on the line between letters B and C; the cross will

change into a black cross. Left click the mouse and drag to the right and the column will widen. Repeat this process to widen columns C and D. (That is, place the black cross between C and D, click and drag. Place the cross between D and E, click and drag). Select cell B3 and enter BIG HILL FARM; move to cell C3 and enter WINTER MOUNTAIN; move to cell D3 and enter FROSTY ACRES. If your columns are not wide enough to contain the names, or are too wide, you can go back and adjust the width.

You will now enter the dates of sale in column A. Starting in cell A5, enter DEC.10. Enter the date exactly this way. Enter the remaining dates in column A up until DEC.24, which will be in cell A19. Your spreadsheet should be similar to this:

	A	B	C	D	E
1			CHRISTMAS TREE SALES		
2					
3		BIG HILL FARM	WINTER MOUNTAIN	FROSTY ACRES	
4					
5	DEC.10				
6	DEC.11				
7	DEC.12				
8	DEC.13				
9	DEC.14				
10	DEC.15				
11	DEC.16				
12	DEC.17				
13	DEC.18				
14	DEC.19				
15	DEC.20				
16	DEC.21				
17	DEC.22				
18	DEC.23				
19	DEC.24				
20					
21					
22					

You will now enter the number of trees sold each day at each farm. The following data set will be entered for **BIG HILL FARM** in the order it appears: **12, 13, 18, 21, 28, 14, 12, 18, 17, 28, 26, 20, 12, 10, 6.** Enter the following data set for **WINTER MOUNTAIN**: **20, 25, 30, 17, 26, 25, 21, 31, 22, 24, 30, 31, 20, 14, 9.** The last data set is for **FROSTY ACRES**: **20, 16, 26, 19, 31, 22, 18, 32, 24, 22, 29, 19, 7, 11,**

4. You will now center the numbers in each column. Go to the menu bar at the top of the spreadsheet and select the middle button in the set of three buttons containing lines:

| 10 ▾ | **B** *I* <u>U</u> | ≣ ≣ ≣ |

Your spreadsheet should look like this:

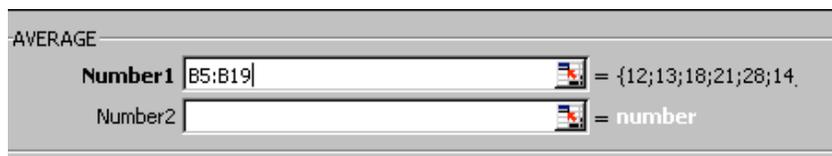|	A	B	C	D
1			CHRISTMAS TREE SALES	
2				
3		BIG HILL FARM	WINTER MOUNTAIN	FROSTY ACRES
4				
5	DEC.10	12	20	20
6	DEC.11	13	25	16
7	DEC.12	18	30	26
8	DEC.13	21	17	19
9	DEC.14	28	26	31
10	DEC.15	14	25	22
11	DEC.16	12	21	18
12	DEC.17	18	31	32
13	DEC.18	17	22	24
14	DEC.19	28	24	22
15	DEC.20	26	30	29
16	DEC.21	20	31	19
17	DEC.22	12	20	7
18	DEC.23	10	14	11
19	DEC.24	6	9	4
20				

Calculate the averages!

You will now calculate the average number of trees sold for each tree farm. Type the word "Average" in cell A23. Select the cell you want to record the average in. First select cell B23. On the menu bar click on "Insert"; from the drop-down list select "Function." This box will open on the screen:
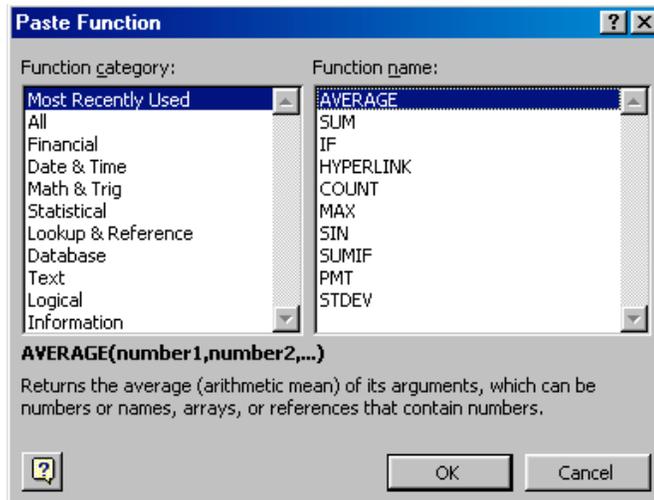
Select the "AVERAGE" function if it is not already highlighted. Click "OK." This box

will then open:
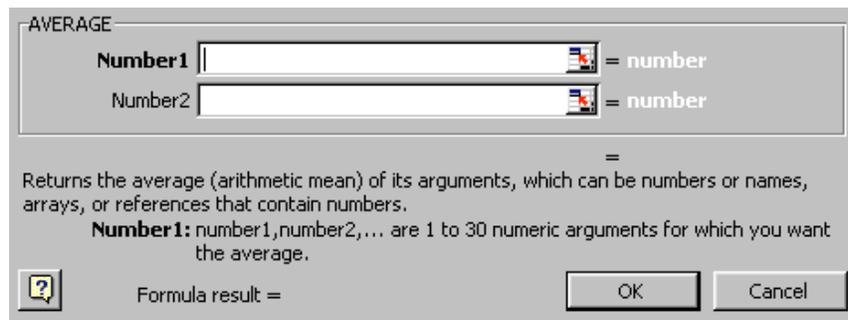
In the box on the "Number 1" line, enter the sequence of cells you want to calculate an

average for. If there is text in this line when it opens, delete that text. The syntax is as

follows: B5:B19. This is the box with the cells defined:

Click "OK" and the average should display in the cell you selected, B23. Record the

average on the attached worksheet. Repeat this process for the remaining two tree farms.

Remember to first select the cell you want the average to display in. For Winter Mountain select C23; for Frosty Acres select D23. Record the averages for both on the attached worksheet. Your spreadsheet should be similar to this:

4			
5 DEC.10	12	20	20
6 DEC.11	13	25	16
7 DEC.12	18	30	26
8 DEC.13	21	17	19
9 DEC.14	28	26	31
0 DEC.15	14	25	22
1 DEC.16	12	21	18
2 DEC.17	18	31	32
3 DEC.18	17	22	24
4 DEC.19	28	24	22
5 DEC.20	26	30	29
6 DEC.21	20	31	19
7 DEC.22	12	20	7
8 DEC.23	10	14	11
9 DEC.24	6	9	4
20			
21			
22			
23 Average	17	23	20
14			

Creating a bar graph!

You will now create a bar graph using "Chart Wizard" to visually display the averages you calculated. On the menu bar click on "Insert,"; from the drop-down list select "Chart." This box will be displayed:
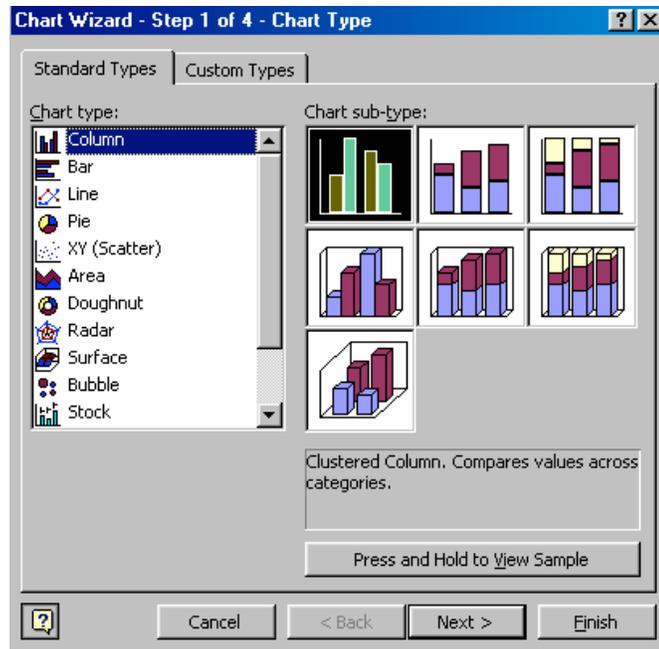
Select "Column" as chart type; click on the first graph for chart sub-type. Click "Next"

to continue. This box then appears:
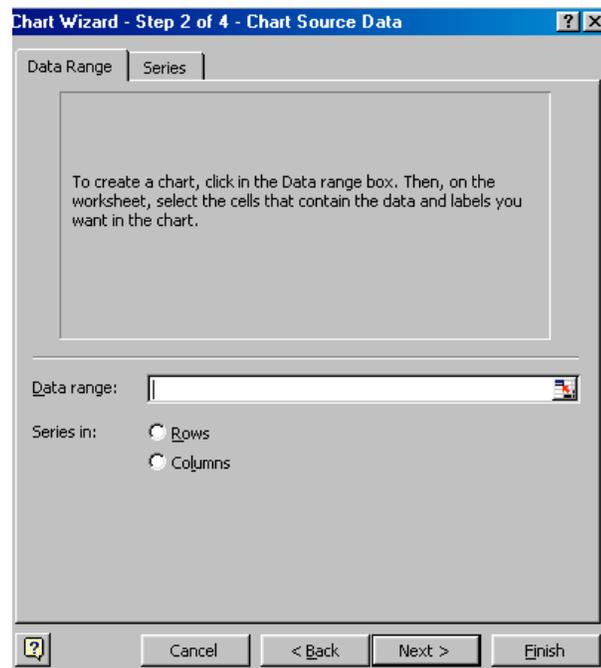
The instructions tell you to select the data to be included on the chart or graph.

Using the mouse, left click on cell B23 and drag to the right to select cells C23 and D23.

Dotted black lines will be activated around the three cells and the bar graph will be

displayed in the open box. If you can not read the average line because it is behind the
open box, you can scroll down until the average line is visible and can be accessed to
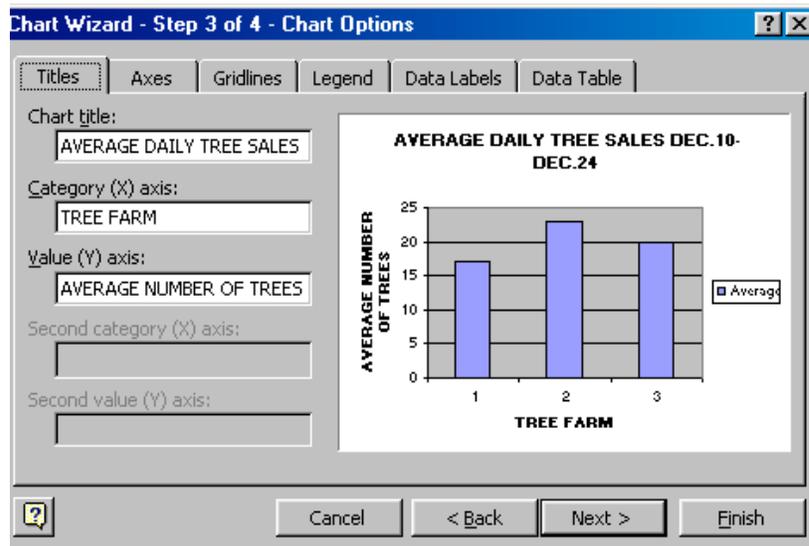select. A box similar to this will be displayed:
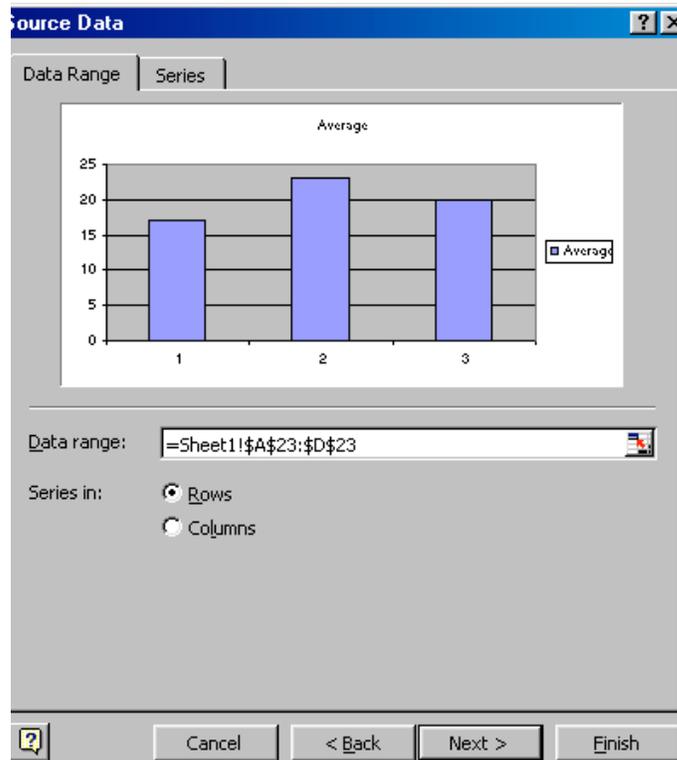
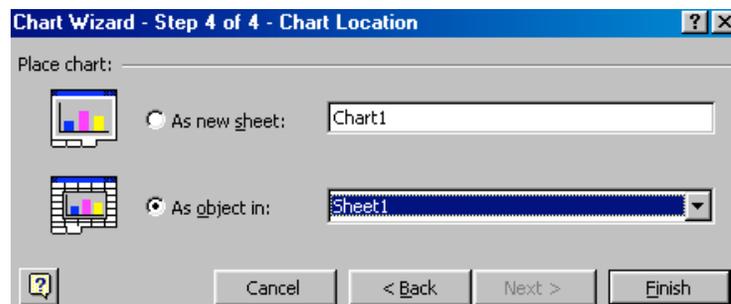Click "Next." A box similar to this appears:
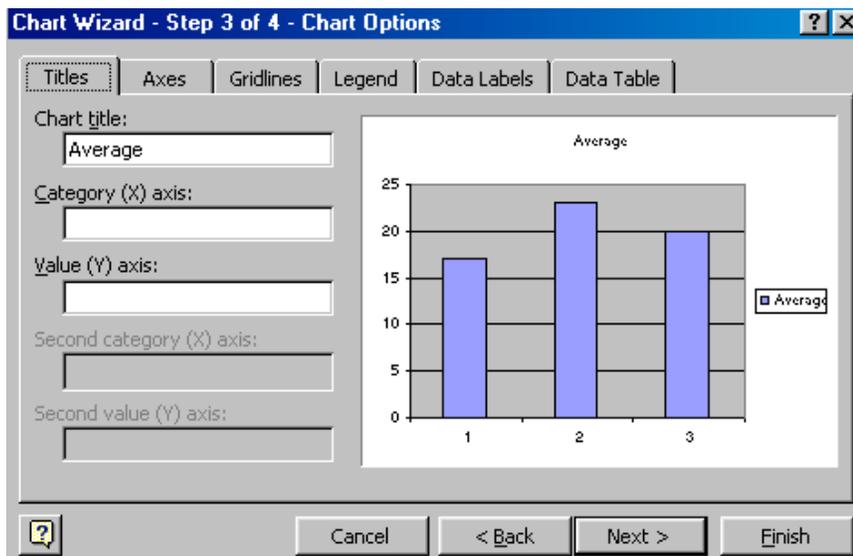
For "Chart Title," type "Average Daily Tree Sales Dec. 10-Dec. 24." For "Category (X) axis," type "Tree Farm." For "Category (Y) axis", type "Average Number of Trees." This is a preview of the chart:


Click "Next." Here you will define the chart location. This is the box that will be displayed:

You will select the Excel Sheet you are working on; Sheet 1, Sheet 2, or Sheet 3. You can see this in the bottom left corner of the spreadsheet. Click "Finish." The chart will appear on your spreadsheet. You can size and move the chart on the spreadsheet. Your chart should be similar to this:

AVERAGE DAILY TREE SALES
DEC. 10-DEC. 24
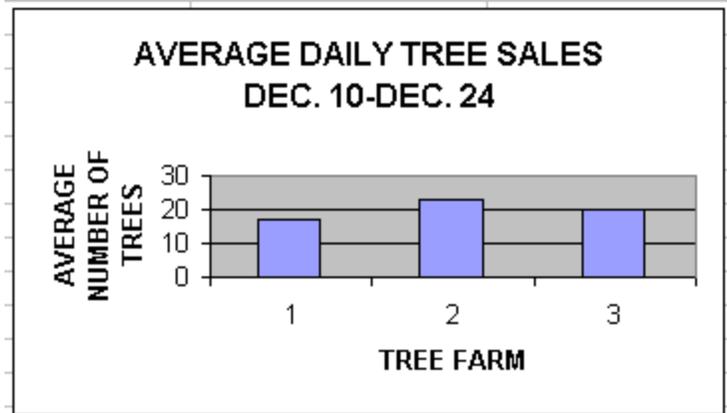
Please print a copy of your spreadsheet.

WORKSHEET

Name: _____

Directions: Please answer the following questions relating to the Excel activity.

1. What is the average daily number of trees sold at Big Hill Farm?_17_____

2. What is the average daily number of trees sold at Winter Mountain?_23_____

3. What is the average daily number of trees sold at Frosty Acres?__20_____

4. Describe a situation in daily life when someone would use Microsoft Excel.

    Answers will vary. Businesses calculating sales; banks computing interest; car

dealerships computing monthly payments for customers.

5. Describe a reason you as a student might use Excel.

    Answers will vary. Calculating an average in a class; calculating sports

averages.