

Other Ways to Interpret Data: Using Excel

Name: _____

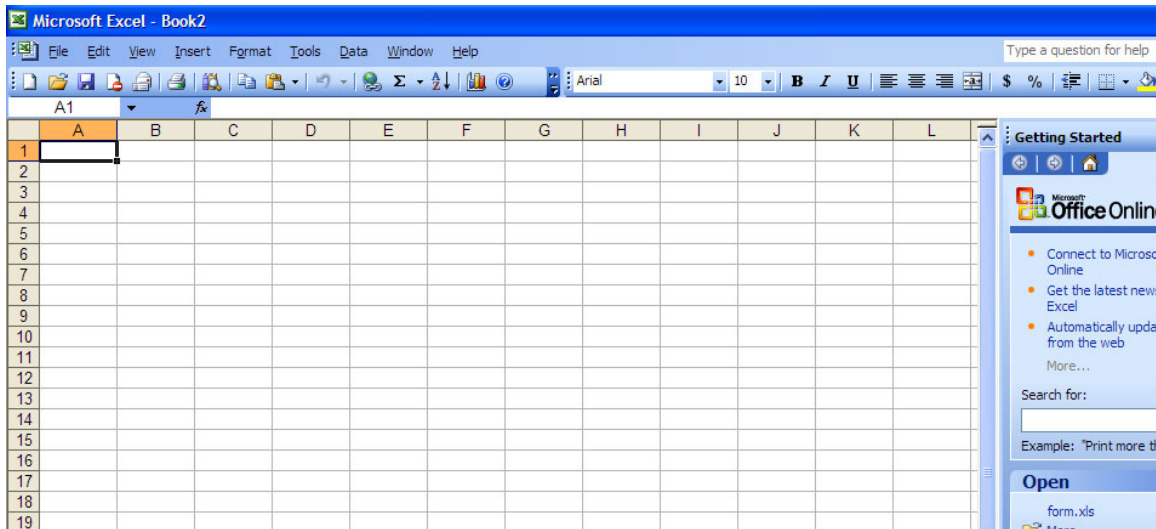
Date: _____

Directions: Follow the steps to create a bar and line graph from a particular set of data.

Answer any questions that arise throughout the activity.

Step 1: Click on the start button of your computer. Go to All Programs and up to Microsoft Office. Then click on Microsoft Excel.

Step 2: The home screen will come up of Excel. It looks like the page below.



Step 3: Click on cell A2, which is in the first column 2nd row down. Enter the words, “Student Name”, and press Enter. You will notice that the box now moves to A3.

Step 4: Next move the mouse to cell C2, and enter the words, “Test 1”, then press Enter.

Step 5: Repeat steps 3 and 4 to enter the following:

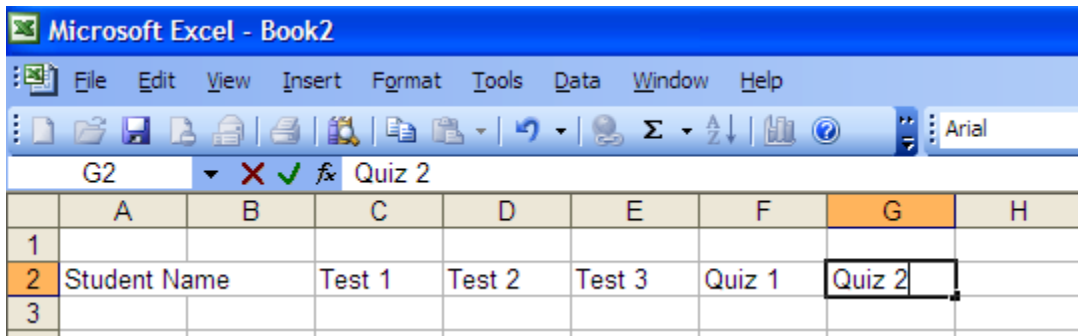
Cell D2- Test 2

Cell E2- Test 3

Cell F2- Quiz 1

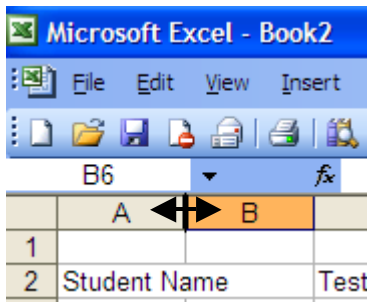
Cell G2- Quiz 2

Your sheet should now look like the following:



	A	B	C	D	E	F	G	H
1								
2	Student Name		Test 1	Test 2	Test 3	Quiz 1	Quiz 2	
3								

Step 6: In order to make the column width larger for column A so that all of the words fit, move the arrow to the line between columns A and B, like below:



	A	B
1		
2	Student Name	Test

When the arrow appears, hold down the left mouse button and pull the line to the right until the words, Student Name, are on the left hand side of the dotted line. Then let go of the mouse button. This makes the column width larger.

Step 7: Now we must enter in the rest of our data, click on cell A4, and enter in the name Mary Allen. Then Click on cell C4, and enter the grade 75, click on the Tab key and notice that this moves you to the next column but keeps you in the same row. Enter in the grade 92. Click Tab and enter the grade 82. Click Tab again and enter the grade 78. Click Tab and enter the grade 85.

Step 8: Enter the following information into the cells starting with A5, by repeating step 7.

Joe Smith	80	88	89	79	84
Jamie Doe	87	88	88	76	83
Chris Dole	65	66	78	70	69
Bruce Jones	50	54	57	60	67
Caitlyn Cross	89	88	90	92	94
Sarah Simmons	76	77	75	79	75
Mike Johnson	87	88	85	83	89

Your spreadsheet should look like the following.

Microsoft Excel - Book1

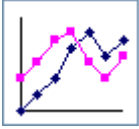
File Edit View Insert Format Tools Data Window Help

15 fx

	A	B	C	D	E	F	G	H
1								
2	Student Name		Test 1	Test 2	Test 3	Quiz 1	Quiz 2	
3								
4	Mary Allen		75	92	82	78	85	
5	Joe Smith		80	88	89	79	84	
6	Jamie Doe		87	88	88	76	83	
7	Chris Dole		65	66	78	70	69	
8	Bruce Jones		50	54	57	60	67	
9	Caitlyn Cross		89	88	90	92	94	
10	Sarah Simmons		76	77	75	79	75	
11	Mike Johnson		87	88	85	83	89	

Step 9: Now we want to make a line graph comparing each student's scores from tests 1-

3. First click on the bar graph icon . Then click on line the one that looks like



. Then click on Next.

Chart Wizard - Step 2 of 4 - Chart Source Data

Data Range Series

To create a chart, click in the Data range box. Then, on the worksheet, select the cells that contain the data and labels you want in the chart.

Data range:

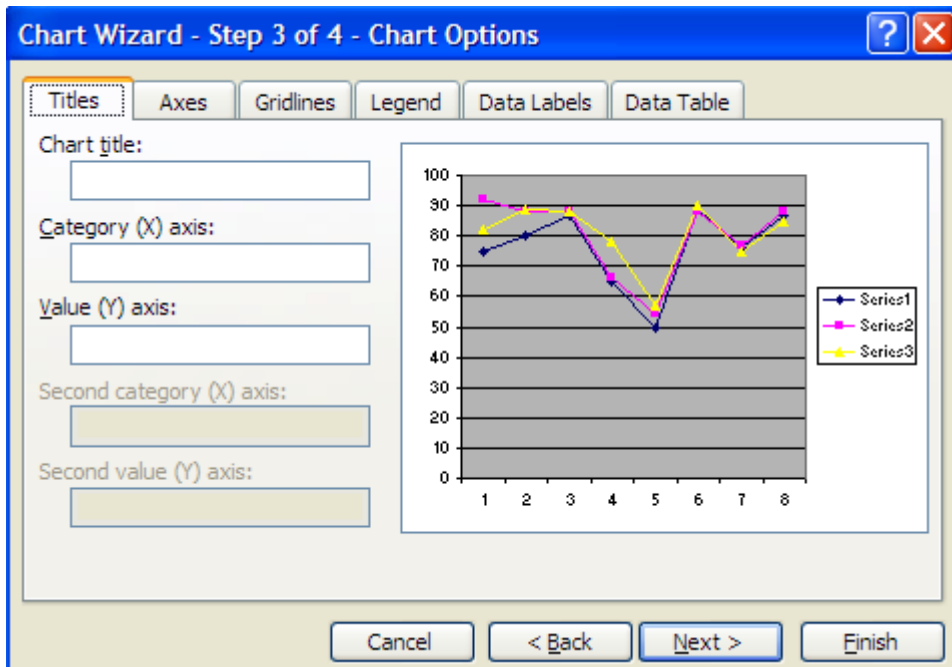
Series in:

Rows

Columns

Cancel < Back Next > Finish

A box like this is what will be on your screen. Click on columns, under the “Series in”:. Then on the spreadsheet hold down the left mouse key on cell C4 and drag the dotted box until it reaches cell E11. This means that you should have a box with corners at cells C4, C11, E4, and E11. Then click on Next.



Step 10: A box like the one above appears. In the Chart Title box enter, Tests 1-3 Comparison.

Step 11: In the Category (X) axis enter, Student 1-8.

Step 12: In the Value (Y) axis enter, Grade. Then click Next.

Step 13: The next box that comes up asks you where you want to put the chart, click on “As new sheet”, labeled Chart 1. Click on Finish. Print this Line Graph out.

Challenge:

- Create a column graph for quizzes 1-2, comparing each student’s two grades.
Make sure to give your graph a title and label both axes. Print out this graph.

Interpretations:

- For each graph write a one paragraph report on what the graph is telling you. Explain it as if someone who was unfamiliar with graphs, could look at your graph and summary and be able to tell someone else what it was about. Turn in this summary with both of your graphs.

Sample Summary of Graphs:

Summary of graphs

The line graph shows the three test scores compared for each student. Series 1 is test 1, series 2 is test 2, and series 3 is test 3. If you look at student 1, you can look at the three different points to see what their grades were. It also shows you how the grades were distributed.

The bar graph shows a comparison of the two quiz scores for each student. Series 1 is quiz 1 and series 2 is quiz 2. The way that you read the graph is for example, student one had a 78 on quiz 1 and 85 on quiz 2.