

## Excel Spreadsheet Activity

### Objective

- The students will create a double bar graph in Excel by using the Chart Wizard
- The students will format the graph by changing colors and fonts on.

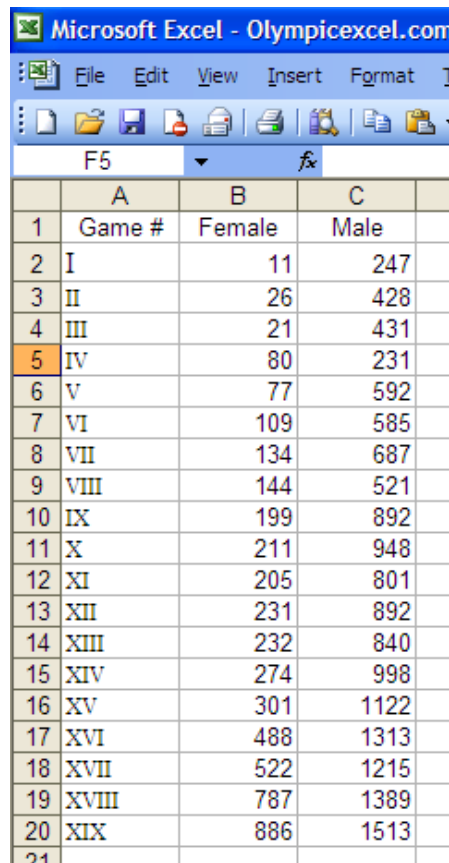
### Activity

Today we are going to learn how to make a double bar graph. Charts and graphs display data in a visual way and make it easier to interpret the data. Making charts can be beneficial in subjects other than math. Today, we will use an example from your social studies class. You are studying the development of the Olympics. We will create a chart showing how many women and men took part in the different winter Olympics.

## Direction

### 1. Open Excel

- Go to the **File** menu.
- Click on **Open**.
- Open the file **OlympicExcel** by double clicking on it.
- You will see this




The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Olympicexcel.com". The menu bar includes File, Edit, View, Insert, and Format. The toolbar contains icons for file operations. The active cell is F5. The spreadsheet data is as follows:

	A	B	C
1	Game #	Female	Male
2	I	11	247
3	II	26	428
4	III	21	431
5	IV	80	231
6	V	77	592
7	VI	109	585
8	VII	134	687
9	VIII	144	521
10	IX	199	892
11	X	211	948
12	XI	205	801
13	XII	231	892
14	XIII	232	840
15	XIV	274	998
16	XV	301	1122
17	XVI	488	1313
18	XVII	522	1215
19	XVIII	787	1389
20	XIX	886	1513
21			

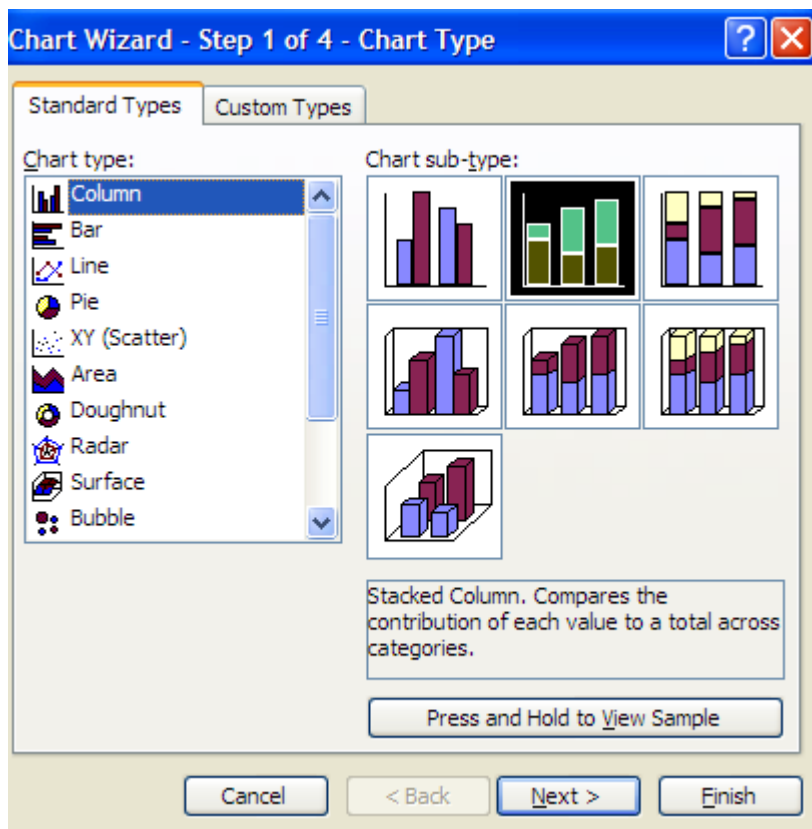
- The numbers of the games are in column A. It is in Roman numerals because that is how the Olympics number their games.
- Column B contains the number of female athletes in each game.
- Column C contains the number of male athletes in each game.

### 2. Open Chart Wizard

- Select the data by left clicking on the mouse in the left top corner, A1, and go down to the right bottom corner of the data, C20. The data will be highlighted.
- Click on the graph wizard in the tool bar. It looks  like this.

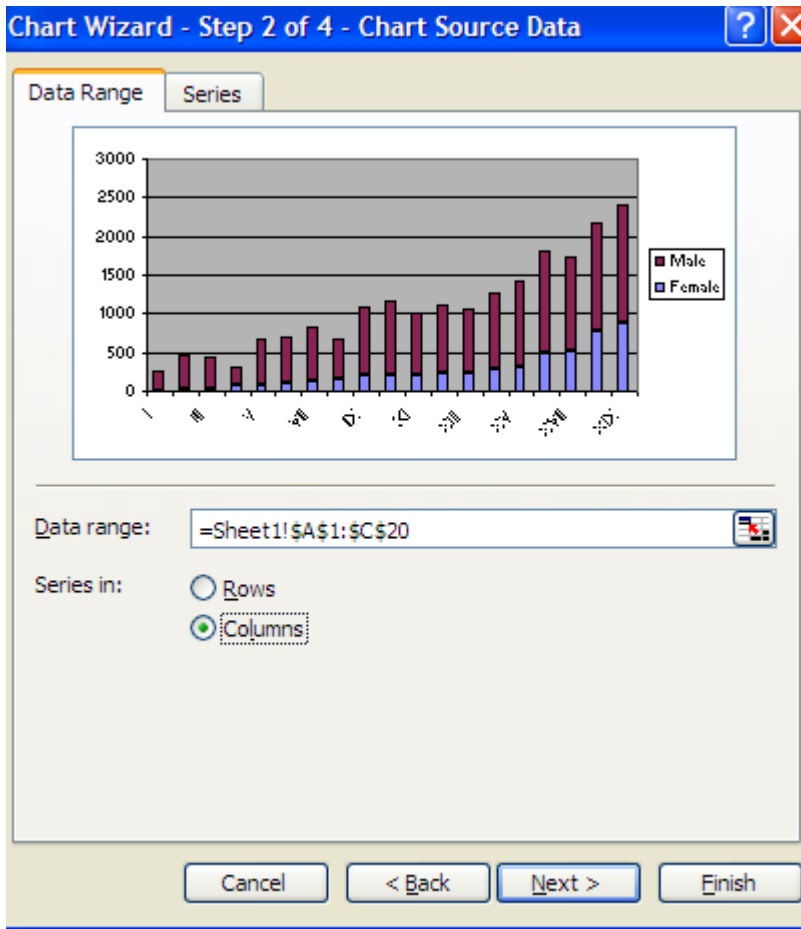
### 3. Chart Wizard - Step 1.

Click on the second chart. (The one in the middle of the top row) It will be highlighted like this:



- Click on **Next**.

#### 4. Chart Wizard – Step 2



It will look like this click on **Next**.

## 5. Chart Wizard – Step 3

Chart Wizard - Step 3 of 4 - Chart Options

Titles   Axes   Gridlines   Legend   Data Labels   Data Table

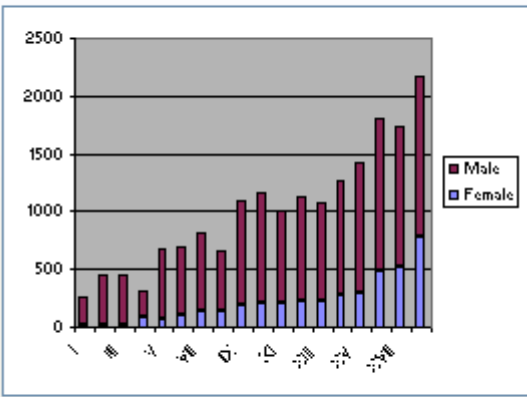
Chart title:

Category (X) axis:

Value (Y) axis:

Second category (X) axis:

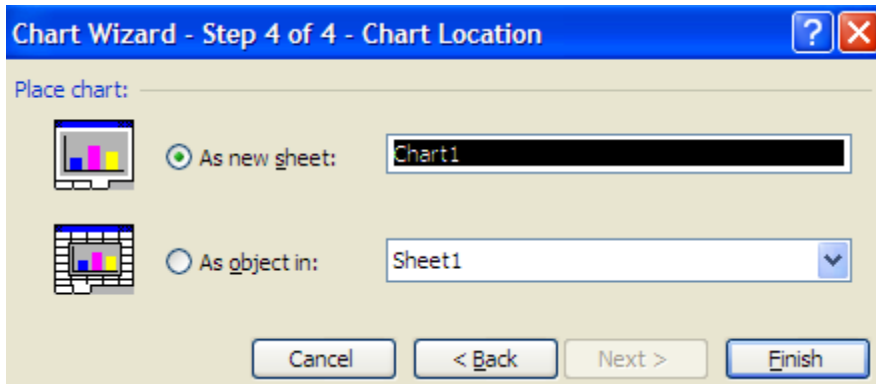
Second value (Y) axis:



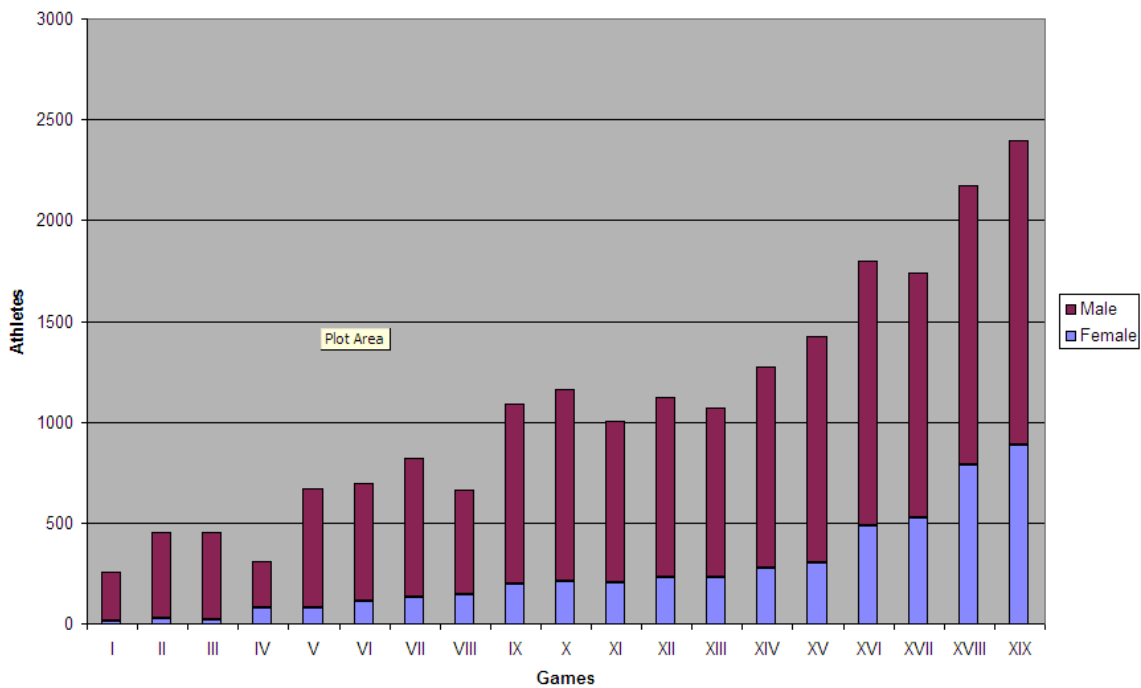
Cancel   < Back   Next >   Finish

- In the chart title box, type **Winter Olympic Games**.
- In the Category (Y) axis, type **Athletes**.
- In the Value (Y) axis, type **Games**.
- Click **Next**.

## 6. Chart Wizard – Step 4



- Click on **As new sheet** option button.
- Click on **Finish** (The original data is in sheet 1 you can go back to it by using the tab on the bottom of the screen).
- Your chart school look something like this:

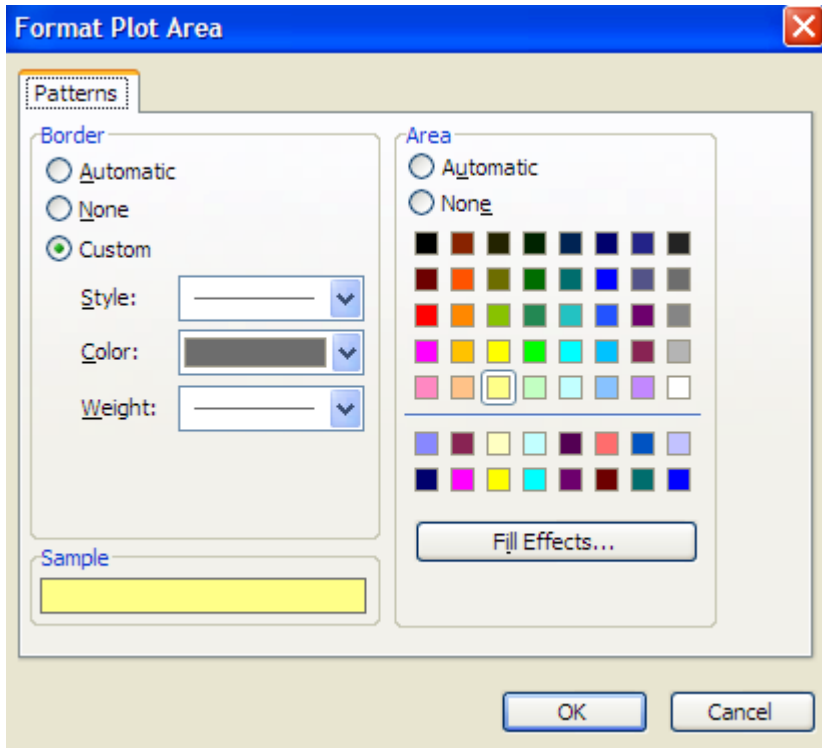


- You can now change the look of you chart.

## 7. Change Colors and Pattern

### Change background

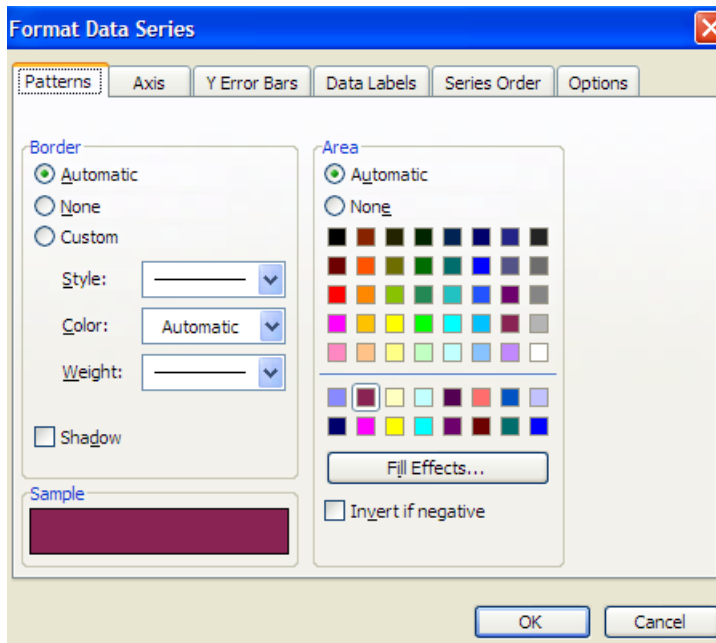
- Start with changing the color of the plot area.
- Double click in the plot area. (The gray background area) This menu will come up.



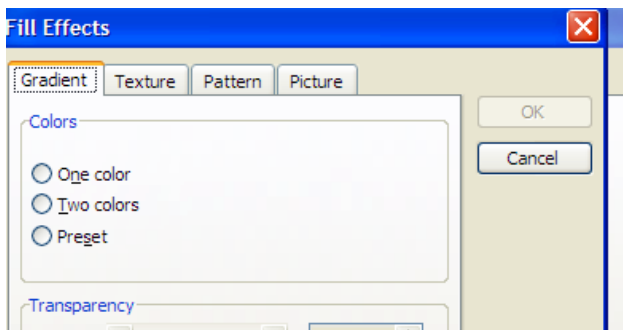
- Click on a color you prefer for your Plot Area.
- Click **OK**.

### Change Pattern

- Double click on one of the burgundy (male) bars in your graph.



- Click on a color you prefer for your male part of the bar.
- Click **OK**.
- Double click on one of the purple bars in you chart (female).
- Click on a color you prefer for your female part of the bar.
- Click on **Fill Effect**.

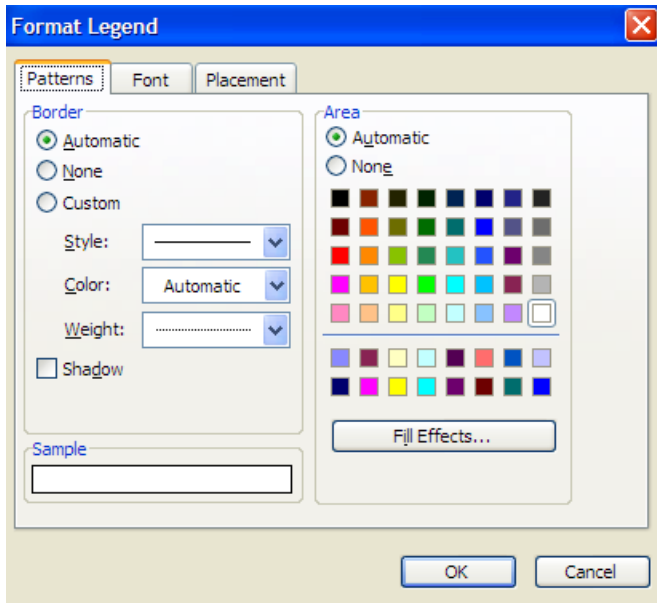
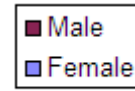


- Click on the **Pattern** tab.
- Pick a pattern you think is appropriate.
- Click **OK**.

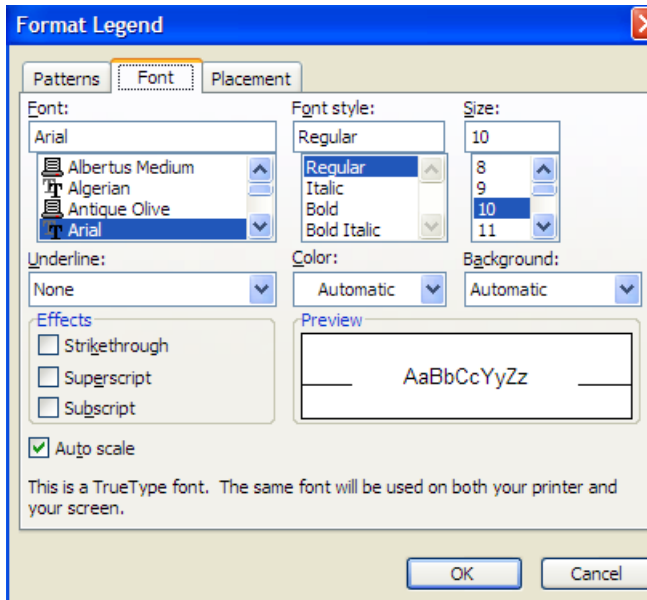


## 8. Format the Legend

- Double click on the legend. This is the legend:



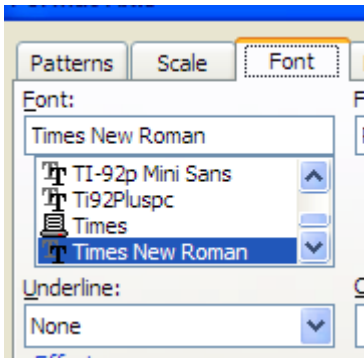
- Click on the **Font** tab.



- Pick a font and size you think is appropriate.
- Click on **OK**.

## 9. Change the font on the x-axis.

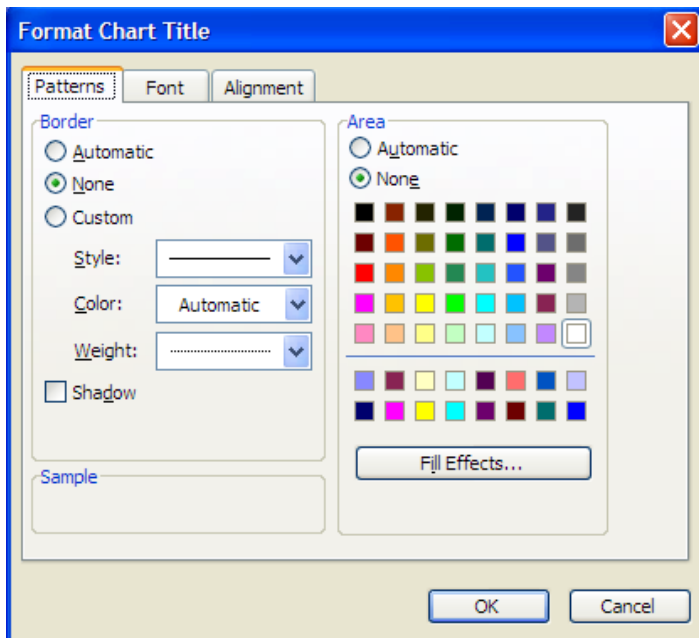
- Double click on the on the x-axis.
- Click on **Font**.



- Scroll down the menu to **Times New Roman**. Click on **Times New Roman**.
- Click **OK**.

## 10. Change the Font and Color on the Title

- Click on **Pattern** tab.
- Double click on the title.



- Click on the color you prefer for the background.
- Click on **Font**.
- Pick a size and font you think is appropriate.

## 11. Print Out Your Graph

- Click on **File** in the toolbar.
- Click on **Print**.