## **Internet Speed Project**

Test your Internet connection speed to determine if you are getting speeds that your subscribed package indicates.

## Part 1: 30 points

Go to the <u>http://www.speakeasy.net/speedtest</u> web site to test the speed of your Internet connection. Choose the closest city to you for your test. Click start and let it test your Internet upload and download speed.

- 1. Do this twice a day at approximately the same times for 4 to 6 days. Note the date, time, upload speed and download speed.
- Data Entry Record your data in a spreadsheet. Use Excel if you have it. Otherwise, use Google Docs at <u>http://docs.google.com</u> or Excel on OneDrive at <u>http://onedrive.live.com</u>. include your name, class and a project title in your spreadsheet. See my video demonstration for creating a spreadsheet in GoogleDocs: <u>http://cisweb.mwcc.edu/st01/videos/newGoogleSpreadsheet/newGoogleSpreadsheet.html</u>

Organize your data so that you have a Download Speed section and an Upload Speed section. For each section, record the speed results for the dates and times you collected. For instance for the Download section you may have:

Date	7:00 a.m.	2:00 p.m.
Oct 22	1.47	1.21
Oct 23	1.39	1.33
and so forth		

See my video demonstration on entering data in GoogleDocs spreadsheet at: http://cisweb.mwcc.edu/st01/videos/EnteringData/EnteringData.html

Format your data using bold, shading, borders or other to create a professional, organized look.

 Functions - Once your data is recorded, calculate the average per day and the average per time. See my video demonstration on using functions in GoogleDocs at: <u>http://cisweb.mwcc.edu/st01/videos/EnteringFunctions/EnteringFunctions.html</u>

Find the minimum value of all download data you collected using the function =min(range of cells). Find the maximum value of all download data you collected using the function =max(range of cells). Repeat for the upload data.

Format the calculated values with a fixed number of decimal places.

4. Graph - Create one or more graphs. For instance, you might graph the average speed for each of the times or the individual data points for all the days and times. If graphing the individual data points, do not include the averages. If graphing the averages, do not include the individual data points because graphs that show both can be misleading. Also, graphs that show both upload and download can be confusing or misleading depending on the data. It may be best to create two separate graphs unless your intent is to show the relationship between the upload and download speeds. Choose an appropriate graph type that represents the data well. See my video demonstration on creating a graph in GoogleDocs at: http://cisweb.mwcc.edu/st01/videos/CreateGraphs/CreateGraphs.html

## Part 2: 40 points In a document using Word, Google Docs or Word on OneDrive, include the following:

- 1. Introduction Write an introduction to your work that includes:
  - your data collection methods
  - Internet Service connection type (cable, DSL, FiOS, WiFi, satellite, dialup, cellular or other)
  - the provider you use
  - the equipment that you use to hook up to your internet connection Include the brand, and model of each piece of equipment.
- 2. Interpretation Describe or interpret your graph(s) in a paragraph or two. Use quantitative terms in your description (i.e.: instead of saying "it is faster in the evening", describe how much faster using a percentage or other). Include the trends, highs, lows, highlights or relationships depicted in your graph. Copy and paste the graph into your document alongside or under your description. Label it as Figure 1 and provide a caption Reference the graph in your text using the figure number (i.e.: On average, the evening speed is double that of the morning speed as shown in Figure 1)
- 3. Results Describe your or your household's subscribed Internet service plan including the expected speed, cost and other relevant information. How does your test results compare with your subscribed service plan? Answer using quantitative terms. Are you getting the speed

stated in your plan? If not, describe what factors may be contributing to the decreased speed?

4. Conclusion – Are you satisfied with the service you are getting? Why or why not? Conclusions drawn should be based on the data you have collected, the expected speed based on the package you subscribe to, and other internet services available in your area.

**Part 3: 30 points** in an online discussion forum, click New Thread and include the following:

- 1. Initial Post post your average upload and download speed results, your Internet Service provider, and the type of internet service you subscribe to.
- 2. Reply Post Compare your data to one or more classmate's data. Post a reply to their thread. In the reply, make a comparison, and describe at least **two** factors that may be contributing to the similarity or difference. In your comparison, include references to related content from our book to support your reply. For example, a reply with something like "According to our book on page 266, fiber-optic cable..." would be expected.
- 3. Timing Post your initial post by mid-module so that replies can then be posted.

Your work may be reviewed by a third party for the assessment of quantitative literacy skills.