## Statistics SL Grade 11 Mini-project 1 iTunes digital sales

Your group has data of the top 20 music iTunes sales for February 8th, 2016. In this activity you will be using statistics to analyze the information. All the other groups have different countries and we will want to compare our results as a class to answer the question:

Are there types of music that are universally top sellers?

1.	Have the recorder in your group write down observations about your data. This could be dealing with values, ranges, and what you notice.
2.	What do you want more information about?
3.	How can we classify the music into genres? Brain storm different music genres limit yourself to 10-15 genres. <i>Feel free to do research online</i> .

- 4. As a class we will discuss the genres before assigning them to specific songs.
- 5. Make a bar chart indicating the amount of songs from the various genres on your big paper.
- 6. Compare your results to another country's results. What are the similarities and differences in values and genres? What other data could you look at to put the similarities and differences in context?

## Part 2

Once we are done comparing the top 20 sales you will be given the data for the top 100 digital sales

7. a. Find the range of the digital sales.

b.If you break the data into approximately ten groups, how many digital sales should be in each of your groupings?

c. Tally up your results in a frequency chart.

grouping	Tally	frequency	cumulative frequency

- 8. Compare your results to another group. You can also do these types of calculations with excel. What excel function would be best applied to this? (if you do not know that is ok)
- 9. What could you explore mathematically about the data? What does this make you curious about? How can that be related to math?
- 10. What have you seen in the news about this topic or a related topic? Find the articles and include hyper-links.
- 11. Using your book look up the definitions in section 8A of the following terms and identify when you used those concepts through this activity (some concepts were not used but we will discuss where they fit in).

## Vocabulary list:

- Data.
- qualitative,
- quantitative,
- discrete,
- continuous,
- population,
- sample,
- random,
- frequency table,
- bar chart,
- grouped frequency table,
- histogram.