Student Letter Guidelines

**Topics:** Each student letter should be related to a topic covered in the online course notes. Find something in the notes that you would like to know more about.

**Format:** Each student letter should be formatted in three sections,

| Introduction | states the topic and gives a few details such as where it came from in the notes and why you think it might be interesting |
| Search Log | describes how you looked for information on that topic A diary of what happened during your search. |
| Result | a short paper, with proper citations and online links describing what you found in your own words. |

**Grading Rubric:** The following rubric is used for grading each letter and is also a good summary of what you should be thinking about as you write the letter. Note that the criteria for getting more than zero points are arranged so that each box includes what is in the ones to the left of it. For example, to get 50 points for “Describe Search” you would need to have a search log that lists basic search strategies, says what combinations of keywords and advanced options that you tried and, finally, the procedure that you describe would need to be well designed and appropriate for your topic. Similarly, to get 50 points for “Distinguish your ideas from others” you would need to cite the sources and make use of stylistic devices to produce a well-written document that clarifies the distinctions between common knowledge, your ideas, and ideas and information from sources.

<table>
<thead>
<tr>
<th>Task</th>
<th>0 points</th>
<th>20 points</th>
<th>35 points</th>
<th>50 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Topic</td>
<td>Not stated</td>
<td>Stated</td>
<td>Topic is one that you can treat in a short letter</td>
<td>You refined the topic as you searched.</td>
</tr>
<tr>
<td>Describe Search</td>
<td>No search log</td>
<td>Basic search strategies</td>
<td>Keyword choices, advanced options</td>
<td>Well designed search procedures</td>
</tr>
<tr>
<td>Evaluate Source Reliability</td>
<td>Not done</td>
<td>States opinions about source reliability</td>
<td>Justifies opinions about source reliability</td>
<td>Provides evidence for source reliability</td>
</tr>
<tr>
<td>Stay on Topic</td>
<td>Includes irrelevant material</td>
<td>Most material is related to the topic</td>
<td>Most material is directly relevant to the topic</td>
<td>ALL material is directly relevant to the topic</td>
</tr>
<tr>
<td>Write about what you found</td>
<td>Result is not related to what was found</td>
<td>Result includes the material that was found</td>
<td>Result organizes the material that was found</td>
<td>Result is a coherent and well-written statement</td>
</tr>
<tr>
<td>Distinguish your ideas from others</td>
<td>No distinction between common knowledge, your ideas, and ideas from sources</td>
<td>Cites sources for material that is not your idea or common knowledge</td>
<td>Uses stylistic devices — paraphrasing, summarizing, quoting.</td>
<td>Makes clear distinctions between your ideas, common knowledge and ideas from sources</td>
</tr>
</tbody>
</table>

**Example:** Here is an example of a letter in the correct format. Notice that the letter itself is very short and ends up using only one source. Student Letters are not supposed to be term papers, so keep them short and focused. In the example I could have included lots of interesting facts, like the discovery of Triton was financed by revenues from a brewery and Nereid was discovered by Gerard Kuiper, who we hear a lot about in the notes. Including those interesting facts would have lost “Stay on Topic” points.
Moons of Neptune

Introduction

I noticed a news article saying that a new (14th) moon of Neptune was just discovered. Our notes (page 12.4) indicate that there are 13 so far but name only two of them. I would like to know the names of the other moons. I would also like to know how well-regarded the new discovery is.

Search Log

I typed “Moons of Neptune” into the search engine “Google.”

The first two links were to Wikipedia which gave the names and even listed the new discovery.

Wikipedia is a secondary source, so I wanted to find something more authoritative. The Wikipedia article gave a list of sources, including one titled “Hubble Finds New Neptune Moon”. Clicking on that link took me to the original news release at the Hubble website, hubblesite.org.

So far I have a secondary source and a news release. There has not been time for an article about the new moon to appear in a peer-reviewed journal but I would still like to know what other scientists think about the new moon. For that I need to go to a website that is run by scientists who review everything that is posted there. That means I need a government laboratory.

Type “Moons of Neptune” into Google, go to the bottom of the page and select “advanced search”. In the “site or domain” blank, type .gov to bring up only government websites. Now all of the links are to NASA websites and there is one link for the whole system of moons and a link for each individual moon, including the new one.

The link for the whole system of moons leads to an article that is MUCH easier to read than the Wikipedia article, so I will use that one as the source for my letter.

Result

The Moons of Neptune*:

Here is the list of names: Triton, Nereid, Naiad, Thalassa, Despina, Galatea, Larissa, Proteus, Halimede, Psamathe, Sao, Laomedeia, Neso

The NASA site lists the new moon separately under “Provisional Moons.” Aha! Just as I suspected, it will need more than one news release to become an official moon. So far, it just has a catalog number S/2004 N1.

According to the NASA site (and the news releases) the new moon was discovered by Mark Showalter on July 1, 2013 using Hubble Space Telescope images that were taken between 2004 and 2009. It is called S/2004 N1 because it is the first satellite of Neptune to be found using images taken in 2004.

The NASA site describes the new moon as follows:

“Initial astrometry indicates that S/2004 N1 travels in a near-circular, uninclined orbit and has a mean radius of about 8-10 km, assuming an albedo of 0.01. This makes S/2004 N1 much smaller than any of Neptune’s previously known satellites, and below the detection threshold of the Voyager cameras sent there in 1989. S/2004 N1 is so small and dim that it is roughly 100 million times fainter than the faintest star that can be seen with the naked eye.”

*NASA Solar System Exploration website
http://solarsystem.nasa.gov/planets/profile.cfm?Object=Neptune&Display=Sats
Grade the “Moons of Neptune” Example

State Topic: 35 points (No refinement of the topic was needed.)

Describe Search: 35 points (Some advanced search options were used but nothing fancy.)

Evaluate Source Reliability: 35 points (Opinions about source reliability were stated and justified, but no evidence was given.)

Stay on Topic: 50 points (There were no digressions.)

Write about what you found: 50 points (The result hangs together as a unified statement.)

Distinguish your ideas from others: 50 points (The source is cited, paraphrasing and quoting are used appropriately, there is no doubt about where any of the material came from.)

Total: 35+35+35+50+50+50 = 255 points out of a possible 300.

To get the full 300 points, you would need to pick a topic that turned out to be more difficult to research and you would need to provide some evidence (beyond saying that NASA is a government lab) for the reliability of this particular article. You might, for example, note that the article won a “Webby” award. This article does not give the author’s name. If it did, you could look up what else that author has written.

Would the sample letter make up for missing a week of class?

Yes, it pretty much would make up for the three in-class quizzes. The score of 255 points is equivalent to getting 85% on all three quizzes. If you want to get the missing 45 points that you might have gotten in class, you can make 5 comments on what others have published.

How much student letter credit could the sample letter provide?

If you do nothing else in that particular issue of the journal, then you would add 155 points to your student letter score. You can increase that by commenting on other letters in the same issue. The maximum number of comments is 10, so you could raise your student letter score to 255. That is still short of the 300 that you need for a 100% student letter grade, but 85% is not too shabby. If you want the 100%, then you have to do another letter in another issue.

What if you just miss one class? Do you still need to submit a letter to the journal?

No. You are allowed up to 10 comments on the letters in any issue of the journal. Each comment gains 10 points and 10 of them would be equivalent to getting 100 on the in-class quiz that you missed. Of course, you could do a letter anyway and store up some extra credit points while adding to your student letter score.