

Science Report

You will write a brief report (about 2 pages) on a topic of your choice that is related to science. Consider the scientific method in the way you develop your report. Start with a question to which you would like an answer. (e.g. *How does a laser work?*) Make sure you can answer the question in a two-page report.

The body of your report should contain three main items. First, you should explain why you chose this topic. (*Why are you interested in it?*) Second, you should describe the topic. (*What is a laser? What are its uses? Why is it important?*) Third, you should answer the question that you originally asked. Explain the scientific principles on which it is based. (*How does it work?*)

You need to have a minimum of two Internet sources. An excellent resource is How Stuff Works (<http://www.howstuffworks.com>). You should list the sources at the end of your report. The listing should include the title of the web site, author, and the URL (web address). The URL must be valid and available. In other words, anyone should be able to access the same information if they enter the URL you provide.

In the final portion of your report you explain your conclusions and results. This will include two parts.

First, you will assess the quality of the sources you chose. Decide if the sources you chose are reliable and valid. Reliability is equivalent to precision. Would you get similar information from other sources? Bias can have an impact on reliability of information. Do the author/s have a bias in a certain direction? You should find out who sponsors the web site or employs the author. Would that affect the information they provide? Validity is equivalent to accuracy. Are the facts presented by the source true? You should investigate the credentials of the author or publisher of the site. Do the credentials of the author/s make them more or less believable?

Second, discuss your reaction to the information you learned. Did you learn anything that surprised you? Do you agree with the information you read? (why or why not?) Has your research changed your mind about your topic? Is there anything else you would like to know about this subject?

Your report should be word-processed. It should contain complete sentences and correct spelling. The report should be in your own words.

If you are taking the course traditionally you may be required to present your report to the class. In that case, your presentation will be evaluated according to the following criteria. You should explain your report to the class. Don't just read it. Relevant diagrams, demonstrations, or activities help your audience understand the material and keep them involved. If you do the presentation as a team, all members of the team must do part of the presentation.

The following table explains how you will be graded on this report. Each line item will be assessed according to the scale below.

- Level 0 = Not Present
- Level 1 = Present but Doesn't Meet Expectations
- Level 2 = Present and Meets Expectations
- Level 3 = Present and Exceeds Expectations

Science Report Evaluation

Define Your Topic	Points Possible	Points Earned
Narrow your topic so it can be covered in a 2 page report	0 – 3	
Phrase your topic as a question. <i>What question are you trying to answer?</i>	0 – 1	
Content	Points Possible	Points Earned
Explain why you chose this topic. <i>How is it familiar to you?</i>	0 – 3	
Explain your topic. <i>How is it used? What does it do? Why is it important?</i>	0, 3, 6, 9	
Answer the question you asked about your topic. <i>On what scientific principles is it based?</i> <i>Can you relate it to anything we have studied in this course?</i> <i>How was it discovered?</i>	0, 3, 6, 9	
Sources	Points Possible	Points Earned
List two Internet sources minimum <i>Title of the Site, Author, and URL (web address)</i>	0 – 3	
URL (web address) must be valid <i>Other people should be able to find and access that site.</i>	0 – 3	
Conclusions	Points Possible	Points Earned
Source Analysis Are your sources reliable (precise)? <i>Are the sources biased? Who sponsors the web site or employs the author?</i> <i>Does the bias have an effect on the information?</i> Are your sources valid (accurate)? <i>How do you know if the authors know what they are talking about?</i> <i>What are their credentials? Do their facts check out?</i>	0, 2, 4, 6	
Your Reaction <i>Did you learn anything that surprised you?</i> <i>Do you agree with the information you read? (why or why not?)</i> <i>Has your research changed your mind about your topic?</i> <i>Is there anything else you would like to know about this subject?</i>	0, 2, 4, 6	
Appearance, Grammar, and Originality	Points Possible	Points Earned
The report is word processed, neat, and professional	0 – 3	
Report contains complete sentences and correct spelling	0 – 3	
Report is in your own words	0 – 3	
Presentation	Points Possible	Points Earned
Explain, don't read, your report to the class	0 – 3	
Include relevant diagrams, demonstrations, or activities	0 – 3	
All team members must do part of the presentation	0 – 3	
Total Report Points	52	
Total Report + Presentation Points	61	