# Scientific Wonder Assignment

### **Purpose:**

- To develop a meaningful scientific question/topic that will engage you in purposeful research
- To research information about your topic using a variety of quality sources
- To communicate your research to your classmates
- To familiarize yourself with your device and Edublogs

## Part One: Develop a Meaningful Question

A meaningful question	A meaningful question IS NOT
<ul> <li>Guides your research</li> <li>Is not simple</li> <li>Is clear and concise</li> <li>Tells your audience what your project will address</li> <li>Has no single "right" answer</li> <li>Probes for deeper meaning</li> <li>Allow for further questioning</li> <li>Focuses on major issues, problems, concerns, interests</li> </ul>	<ul> <li>Meaningful question 15 NOT</li> <li>Something that can be answered with YES or NO</li> <li>Something that can be answered in one sentence</li> <li>Too large of a question</li> </ul>
<ul> <li>and themes relevant to your life and your community</li> <li>Is open-ended</li> <li>Invites the exploration of ideas</li> </ul>	
Promotes deep and enduring understanding	

#### Part Two: Research

Our goal here is to:

- Use a variety of quality sources
- Document all sources of information
- To be critical and purposeful in our use of sites on the internet

## **Part Three: Communicate Your Findings**

- Communicate your findings as blog post on your Edublogs
- Your post must include the following:
  - Your information be careful that you are not "copying" and "pasting" your information but rather summarizing your findings in your own words
  - At least 1 embedded image
  - At least 1 embedded video
  - At least 3 reliable sources that you used to gather information
- Be prepared to present and discuss your research to a small group of your peers

# Part Four: Comment on your classmates' post

• Comment on at least two of your classmates' posts

TAG YOUR POST!
BrandsmaSci9Wonder2018

Part Five: Have one other person (outside of class) comment on your post

Scientific Wonder Project Checkpoints				
#	Checkpoint	Date Assigned	Date Due	Complete
1	10 "What do you Wonder" Questions	Friday Sept 7	Monday Sept 10	
2	1 Meaningful Question Refer to "Meaningful Questions" guidelines	Monday Sept 10	Tuesday Sept 11	
3	Research template 3 – 5 sources used and documented in template	Tuesday Sept 11	Friday Sept 14	
4	Edublog Post One embedded image One embedded video			
5	Comment on two classmates' posts			
6	Have one outside source comment on your post			
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	Scie	ntific Inquiry Assignn	nent Rubric	
Criteria	Not Meeting (0 – 1)	Developing (2)	Meeting (3)	Exceeding (4)
Part One: Problem/ Question	Student relied on teacher-generated questions or developed a questions that required very little research/thought.	Student constructed a question that lends itself to readily available answers.	Student posed a focused question that involved them in research.	Student posed a focused, thoughtful, creative question that engaged them in challenging and meaningful research.
Part Two: Research	Student gathered information that lacked relevance, quality and depth.	Student gathered information from a limited range of sources and displayed minimal effort in selecting quality resources.	Student gathered information from a variety of sources.	Student gathered in- depth information from a variety of quality sources.
Part Three: Communication of Findings	Student demonstrates a minimal understanding of their topic.	Student demonstrates a basic understanding of their topic.	Student demonstrates a good understanding of their topic in their blog post.	Student demonstrates a deep understanding of their topic in their blog post.
Project Checkpoints	0 – 2 checkpoints completed.	Some checkpoints completed.	Most checkpoints completed.	All 6 checkpoints completed in full.

Final Project due date: \_\_\_\_\_\_

# Part 2: Add your Information Fluency reflection to your post

You will reflect on how you gathered the information. Please answer the questions below, add this to your post in your <u>Science</u> <u>9</u> category, and tag it <u>BrandsmaSci9Wonder2019</u>.



Ask Acquire Analyze Apply Assess

- 1) What questions did you need to research in order to research your topic?
- 2) What new or familiar digital tools did you try to use as you worked through this project?
- 3) What was the process you used to investigate the topic?
- 4) How did you verify and cite the information you found?
- 5) How did the process of completing this challenge go? What could you have done better?

Part 2: What your Applications of Digital Literacy 10 teacher is looking for:

	Does not meet 1-2	Minimally Meets 3	Fully Meets 4	Exceeds 5
What are the questions you are trying to answer?	No guiding questions included in the post.	Shared 1 or 2 guiding questions	Found some guiding questions but could have probed deeper.	Successfully found good questions to guide research.
ACQUIRE  How did you try to answer your questions?	Struggled to find tools to gather the necessary details to answer the questions.	Used a single search engine to gather information.	Used a search engine and 1 other tool to gather information (Google, Youtube, Destiny, Ebsco).	Successfully provided evidence of multiple digital tool use (Google, Youtube, Destiny, Ebsco, Citation Machine)
Did you find relevant information to answer your questions and cite where you found it?	Information does not answer your questions in your assignment; partial or complete copies of digital sources used (UNACCEPTABLE)	Found information to answer your questions but information is minimal; the work is original but the sources are not cited.	Found accurate information to answer your questions; Simple citing of sources.	Successfully answered your questions with information from a variety of sources; complete citing of sources
ASSESS  How did the process go?	No reflection on the product or the process of completing the assignment	Simple reflection on the product of the project. No insight into examining the process or the final outcome of the assignment.	Examines the product/process but limited or no improvements for the final product.	Honestly and critically examines the product and process and can demonstrate where improvements could have been made.