

Scientist Research Assignment 1 – Quarter 2

This assignment will require a detailed study of a scientist and their accomplishments to be presented to the class. You will be educating yourself and proving your new understanding through your ability to explain your findings to your peers. The presentation will be a website, PowerPoint or other digital technology tool that can be accessed through the virtual classroom and shown in the classroom.

To begin, choose a scientist from the following list or another that you prefer to study. If you choose a name not on the list, provide a brief description of the research you intend to perform for approval before beginning.

Once the scientist is chosen, you should research the biographical material to provide a background for your presentation.

The major focus of the presentation however will be on the scientific accomplishments of the individual. Organize an overview of as many accomplishments as appropriate. Then prepare a detailed educational tour of one or two major accomplishments dealing with science.

Examine the environment (social, historical and physical) in which the scientist performed the work. (The worlds impact on the scientist.)

Provide an examination of the impact of the work on past and current societies. Hypothesize what society would be like had the accomplishments of the work not been realized. (The scientists impact on the world.)

This presentation will be graded using the rubrics in the writing guides when the material is presented to the class.

Archimedes

Albert Einstein

Aristotle

Sir Isaac Newton

Nicholas Copernicus

Benjamin Franklin

Euclid

Charles Darwin

John Dalton

Rachel Carson

Neils Bohr

Marie Curie

Rene Descartes

Robert Hooke

Daniel Bernoulli

Armadeo Avogadro

Robert Boyle

Michael Faraday

Stephen Hawking

Stephen J Gould

Gregor Mendel

Mendelev

This task provides a “real world” connection for the students because of its requirement to educate their fellow classmates on a concept of interest for them. The challenge to the students was to leave the standard book report behind and move to a level of understanding where they could create a lesson to educate others. Included in their lessons they had to design an experiment to simulate the major concepts being presented.

The design, create, and propose components of the assignment highlight the synthesis level of Bloom’s Taxonomy on which this assignment functions. The students worked to not merely present information that they found elsewhere through research. Instead, they had to learn, organize, prepare, and present their new knowledge to peers. The incorporation of an actual demonstration made the assignment work. Presentations such as these are too frequently practice in cut and paste functions. The demonstration included the classmates in the presentation and therefore made the presenters need to defend their information.

The student creativity could be expressed in any way they felt comfortable. This offered a way for special needs students and higher performing students to all feel comfortable. They had the opportunity to extend their understanding beyond the PowerPoint in the demonstration. Some students created experiments but a few produced artistic models to represent the concepts being presented. The PP that is attached has the two experiments that were presented in class. They generated an additional 30 minutes of discussion on the topic.

Overall, this assignment was a success and I will use it again. The next step may be to create a collection of the presentations in a class website. This would develop a greater value for the students because it will give a long term use for the products.