DBQ #2: Scientific Revolution

Directions:
The following question is based on the accompanying Documents 1–7. The documents have been edited for the purpose of this exercise. This question is designed to test your ability to apply several historical thinking skills simultaneously, including historical argumentation, use of relevant historical evidence, contextualization, and synthesis. Your response should be based on your analysis of the documents and your knowledge of the topic.

For the document-based question, a good response should:
• respond to the question with an evaluative thesis that makes a historically defensible claim. The thesis must consist of one or more sentences located in one place, either in the introduction or the conclusion. Neither the introduction nor the conclusion is necessarily limited to a single paragraph.
• describe a broader historical context immediately relevant to the question that relates the topic of the question to historical events, developments, or processes that occur before, during, or after the time frame of the question. This description should consist of more than merely a phrase or a reference.
• explain how at least one additional piece of specific historical evidence, beyond those found in the documents, relates to an argument about the question. (This example must be different from the evidence used to earn the point for contextualization.) This explanation should consist of more than merely a phrase or a reference.
• use historical reasoning to explain relationships among the pieces of evidence provided in the response and how they corroborate, qualify, or modify the argument, made in the thesis, that addresses the entirety of the question. In addition, a good response should utilize the content of at least six documents to support an argument about the question.
• explain how the document’s point of view, purpose, historical situation, and/or audience is relevant to the argument for at least three of the documents.

Task:
Using the following documents, identify and analyze factors that affected the work of scientists in the sixteenth and seventeenth centuries.
Document 1

“There is another great and powerful reason why the sciences have made little progress; it is not possible to run a race when the goal itself has not been rightly chosen. The true and lawful goal of the sciences is this: that human life be endowed with new discoveries and powers.”

— Francis Bacon, *The Great Instauration*, a plan to reorganize the sciences, 1620

Document 2

“My book is still in your hands and subject to your private judgment. If you object to anything, I am ready to remove it entirely. Know, however, that you will not find a single word which is not true in my experiments, which many times confirm those of Galileo. Whatever may be, the whole thing is up to you. At least I am assured my experiments have been repeated more than 30 times, and in some more than 100 times, before reliable witnesses, all who agree with my conclusions.”

— Marin Mersenne, French monk and natural philosopher, letter to his noble patron, 1635

Document 3

“Because the splendor and happiness of the State consists not only in maintaining the glory of arms abroad, but also in displaying at home an abundance of wealth and in causing the arts and sciences to flourish, we have been persuaded for many years to establish several academies for both letters and sciences.”

— Jean-Baptiste Colbert, French finance minister under Louis XIV, letter, 1676
Document 4

“The learned and unlearned alike may see that I shrink from no man’s criticism. It is to your Holiness rather than to anyone else that I have chosen to dedicate these studies of mine. In this remote corner of the Earth in which I live, you are regarded as the most eminent by virtue of the dignity of your Office, and because of your love of letters and sciences. You, by your influence and judgment, can readily hold the slanderers from biting. Mathematics are for mathematicians, and they, if I be not wholly deceived, will hold that my labors contribute even to the well being of the Church.”


Document 5

“Were it allowable for our sex, I might set up my own school of natural philosophy. But I, being a woman, do fear they would soon cast me out of their schools. For though the Muses, Graces, and Sciences* are all of the female gender, yet they were more esteemed in former ages, than they are now. Nay, could it be done handsomely, they would turn all from females into males, so great is grown the self-conceit of the masculine and the disregard of the female sex.”

— Margaret Cavendish, English natural philosopher Observations on Experimental Philosophy, 1666

*All represented as female goddesses in classical mythology
Document 6

“Your opinion of the phenomena of light and shade on the clear and spotted surfaces of the Moon assumes some analogy between the Earth and the Moon. Someone adds to this and says you assume that the Moon is inhabited by humans. Then another starts discussing how they could be descended from Adam or how they could have gotten out of Noah’s ark, and many of the extravagant ideas that you never even dreamed of. It is indispensable, therefore, to remove the possibility of malignant rumors by repeatedly showing your willingness to defer to the authority of those who have jurisdiction over the human intellect in matters of the interpretation of Scriptures.”

—Giovanni Campioli, Italian monk, letter to Galileo, 1615
— Drawing to commemorate Louis XIV’s visit to the French Royal Academy, published 1671