**Background:** Between about 1500 and 1700, scientists, or “natural philosophers” as they were called, developed a new worldview that became the basis of modern scientific study. Planetary motion, the composition and movement of matter on earth, the biological systems of plants and animals all were the focus of study during this period. Scientists began to envision a complex universe which could best be understood through experimentation and mathematics. These curious investigators of nature organized into the scientific disciplines (physics, chemistry, biology, etc.) we know today during this period known by historians as the “scientific revolution”. The following primary documents are from this period.

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**Document 1**


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 science. 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.

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**Document 2**


Moses wrote in a popular style things which, without instruction, all ordinary persons endowed with common sense, are able to understand; but astronomers investigate with great labor whatever the wisdom of the human mind can comprehend. This study should not be prohibited, nor this science condemned, because some frantic and ignorant persons boldly reject whatever is unknown to them. For astronomy is not only pleasant, but also very useful: it cannot be denied that this art unfolds the admirable wisdom of God.

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**Document 3**

Giovanni Ciampoli, Italian monk, letter to Galileo, 1615.

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 other 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 Scripture.
Document 4

Men have sought to make a world from their own conception and to draw from their own minds all the material which they employed, but if, instead of doing so, they had consulted experience and observation, they would have the facts and not opinions to reason about, and might have ultimately arrived at the knowledge of the laws which govern the material world…

The great and powerful reason why the sciences have yet made little progress [is it] not possible to run a race when the goal itself has not been rightly chosen by [the church]. The true and lawful goal of the sciences is this: that human life be endowed with new discoveries and powers. Yet, the unknown is fearsome to those in power.

Document 5
The Papal Inquisition’s condemnation of Galileo, 1633

We say, pronounce, sentence, and declare that you the said Galileo, by reason of the matters discussed in trial, and by your confession as you rendered, are in the judgment of this Holy Office vehemently suspected of heresy, namely, of having believed and held the doctrine—which is false and contrary to the sacred and divine Scriptures—that the Sun is the center of the world and does not move from east to west and that the Earth moves and is not the center of the world…

Furthermore, your opinion has been declared and defined to be contrary to the Holy Scripture; and that consequently you have incurred all the censures and penalties imposed and stated in the sacred laws of the Church, for [breaking] this sacred law...

From which we are content that you be absolved, provided that, first, with a sincere heart and unfeigned faith, you renounce, curse, and detest before us the aforesaid errors and heresies and every other error and heresy contrary to the Catholic Roman Church in the form to be prescribed by us for you.

Document 6

The doctrine of what is right and wrong is perpetually disputed both by the pen and by the sword, but geometry is not. Why? Because in geometry few men care what the truth may be, since it affects no one’s ambition, profit, or lust. But if Euclid’s (Greek mathematician) proposition that the three angles of a triangle are equal to the two angles of a square, conflicted with the interests of those who rule, I know it would be suppressed.

Document 7

Were it allowable for our sex, I might set up my own school of natural philosophy. But I, being a woman, I 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 has grown the current self-conceit of the masculine and the disregard of the female sex.

*All represented as female goddesses in classical mythology*
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Why was challenging to be a scientifically minded person during the 16th & 17th Centuries? Use some specific examples from the documents in your answer below.