In 1688, the warlord Renato dall’Acquafredda leads a rebellion in the Mark of Codemondo and establishes a briefly independent state, with capital in the town of Buco del Signore in the Po River valley of Italy.

Renato is not only concerned with the longevity of his domain, but also with the cultural reputation of his court, for he would like Buco del Signore to be known as “The Athens of the lesser capitals of the lesser regions of the Plains” (he had thought of extending invitations to his court to Michelangelo, Leonardo and Shakespeare, until he learned that they had been dead for many decades).

You are Testaleve da Sacrobosco, the resident egghead and cultural adviser at Renato’s court. Although relatively uneducated, Renato has heard of a major “revolution” in the description of natural laws, which started with a fellow named Copernicus and most recently has been reset by the writings of an Englishman named Isaac Newton. Some of the new findings are not new but, being aware of how slowly any knowledge propagates to Buco del Signore (with the notable exception of techniques to improve the production of cheese), you assume that Renato has never heard about any of them. You describe the new findings to Renato, factually, but he soon gets bored about “he discovered this” and “the other discovered that”; he wants to know what was revolutionary about the new way of thinking, what is this business of the “scientific method” which apparently is at the root of the new thinking. He asks that you put your report in writing. In a letter of about 1000 words (double-space text lines, for Renato has trouble reading otherwise, after he got hit in battle right between the eyes by a flying crucifix), you’ll produce such a report.

You are an educated lay person, and know well the previously accepted Ptolemaic ideas on the structure of the heavens, as well as the revision promoted by the work of Copernicus, Galileo, Kepler and Newton. You should start your report illustrating the philosophical bias underpinning the Ptolemaic description of the heavens. In the second part of your letter to Renato, you should summarize how the new discoveries of Galileo and Kepler validated Copernicus’ new system. You should conclude explaining how Newton’s ideas go much farther than just giving a mathematical framework for the new discoveries: they in fact present in full form the idea of the scientific method. Tell Renato about it and devote most of your effort to this part, for this is what he wants to hear about. He may be poorly educated, but as all cheese lovers he is clever and open-minded.

Note: Renato dall’Acquafredda and Testaleve da Sacrobosco are fictional characters, while Copernicus, Galileo, Kepler and Newton are not. Codemondo (which means “End of the World”) and Buco del Signore (which means “Hole of the Lord”) are real villages in the flatlands of northern Italy.