

Task 1

Personally, I have never thought much about computer science as a science. In truth, I have not thought about the matter much at all. However after reading this article, I have realized the field of computer science deserves the title. Though born of human invention, computers are an evolving complex “phenomena” you could say. I thought it was very interesting to base the definition of science around phenomena but it is true if you look at the current fields of science. I was particularly interested in objection 6. I liked the idea that all fields of science are interrelated as well as related to other disciplines. The answer to objection two did seem a little flawed to me. It rebutted the idea that it does not matter that the definition and subject matter of computer science changes because so does the phenomena of all sciences. Although, it seems as though other scientists discover and study new things while computer science studies a continuously evolving thing. For example, the article points out that “astronomy did not originally include the study of interstellar gasses”. However, interstellar gasses have always existed in our universe whether we knew about them or not while computers are continuously new.

Task 2

Link to article: <https://amrita.edu/news/chemistry-inside-computer/>

One of the fields that I am interested in pursuing is Chemistry, so I found an article that links this field to computer science. The article is based around the concept of computational chemistry (CC) which employs computer programs to predict the probability of new materials and run chemical procedures and tests digitally. It is able to take theoretical aspects of other fields and chemistry and run tests to find possible outcomes that would be very hard to do in a proper lab setting. I wondered how a program can accurately represent settings such as extreme heat or cold accurately if no one has really experienced what it would be like, only in theory. It was interesting however, how everything can be broken down into an equation which can then be represented in a program. Then, creating and running experiments is just a matter of changing numbers around. I appreciate that this CC is much more efficient and, as the article discussed, more environmentally friendly because no large amounts of single use toxic chemicals are needed. My biggest question/takeaway from this article was the question: At what point does the computer systems need to be backed up by real life lab experiments?