

As a class, you will be designing a brand-new major telescope. A donation has been made for \$25 million to support this work, so don't worry about the cost. The class will be broken up into expert teams. Each team will work on one aspect of the project, and will have to report their results and make a recommendation to the next team before the next team can begin their work. The teams will research the following topics:

Team 1: What type of object should we study?

Team 2: What part of the electromagnetic spectrum should our telescope be sensitive to in order to study these objects?

Team 3: What will we learn about the objects by studying them in this part of the electromagnetic spectrum?

Team 4: Where should we locate the telescope?

Team 5: What instruments and technical systems will be necessary for the telescope to function?

Team 6: Final presentation summarizing the project

Grading: Each team must create a video 'infomercial' summarizing their research and final decision about their question. This infomercial will then be given to the next team so they can continue work on the project. It should include a summary of your question topic, discuss the options you researched while answering your question, and for each option you considered give an explanation of why you decided it was a good or bad option to choose. Finally, you should make a clear final decision for the next team to work from, and explain the strengths and weaknesses of your final decision. Each team should watch the infomercials from all the teams that came before it. Team 6 will make an infomercial summarizing the entire design process based on the infomercials from all the previous teams rather than researching a particular aspect of design.