An Interdisciplinary Approach to Kepler's Laws

Guide for Curriculum Unit 96.06.11
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Mathematics is one of the core academic subjects which is generally considered to be more difficult. Students complain that it is boring, difficult, and to some extent, irrelevant to their needs. Despite these feelings, educators and the adult public recognize its vital importance. The challenging task is to devise approaches in order to convince and interest our students into devoting more time and effort to the study and practice of mathematics.

This unit is intended for the seventh grade level. It has not been tested. The choice of an interdisciplinary approach promises to sneak in the mathematics through the door of astronomy. Students will have the opportunity to develop a broader knowledge base in astronomy, and maybe, an interest in space travel.

In this unit, there is enough room for a teacher to adjust and tailor the lessons to fit his or her particular class. It is of great importance that a part of the instruction be given to establishing the basic concepts of the science. This will lead to a better understanding of the relevance of the mathematics.

(Recommended for Mathematics, grade 7)