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Curriculum Units by Fellows of the National Initiative
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Math Facts of Natural Gas & Pollution

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This curriculum unit is focused on the benefits of using natural gas, but without ignoring the problems created by its production. Calculations related to efficiency including cost and usage of natural gas in comparison to the usage of gasoline is as well included. The impact of the use of natural gas in the health of the population is also analyzed.

The lessons can be used for grades 6 to 12, Algebra-1, Algebra-2 and Geometry. Concepts included are volume, percent, solving equations and formulas, linear and quadratic functions.

Students will be able to calculate how much money they can save using natural gas instead of regular gasoline. Another benefit of using natural gas is decrease of pollution, under the name of the Air Quality Index (AQI). Health benefits are also included with data related to air pollution vs. lung disease.

Math lessons including environmental facts and up-to-date scientific background are embedded in this unit. I hope to persuade the audience that conserving our environment is important. How much can mother earth take from careless people who keep using the resources without looking at the consequences? It is true that the use of certain resources is a great commodity for most of us; and a large part of our society is not willing to let it go that easily.

(Developed for Algebra II, grades 9-12; recommended for Algebra I and II, grades 9-12)

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