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Sten F Odenwald* (sten.odenwald@nasa.gov), NASA Goddard Spaceflight Center, Code 672.1, Greenbelt, MD 20895. *Introducing Students and Teachers to the Connections Between Science and Mathematics using NASA Space Science Discoveries as a Vehicle for Mathematics Education.*

We all know that mathematics is the foundation of all scientific research, and a cornerstone of contemporary STEM education. However, mathematics tends to be overshadowed by the qualitative teaching of general scientific concepts in the 'K-12' classroom, primarily because mathematics is perceived as a difficult topic to most students, especially in elementary and middle-school classrooms. To make matters worse, the selection of applied math problems in most textbooks tends to favor economics or consumer math as popular themes. By high school, students are largely unaware that math is involved in the physical sciences, until they do poorly in their first course in chemistry or physics. What a shock!! The Space Math @ NASA (<http://spacemath.gsfc.nasa.gov>) was created in 2004 to show how basic math skills are woven into the process of scientific research and discovery. This program offers hundreds of 'one-page' math-oriented problems that focus on a wide range of real-world space science topics. I will present a few examples of math problems that capitalize on recent NASA discoveries, and introduce students to additional examples of how a variety of math skills were employed to create the quantitative information accompanying selected press releases. (Received September 21, 2009)