The role of the cross product in three dimensions (R^3) is well known, and has widespread use in physics and engineering. But does it have an N-dimensional analogue? Or is there some other definition of a vector product which gives the same results as the cross product $\vec{a} \times \vec{b}$ in R^3 but is in fact general to R^N ? It turns out there is such a thing and it is known as the wedge product, $\vec{a} \bigwedge \vec{b}$. In this talk the objective is to explain in simple terms the nature of the wedge product and how to use it. Along the way a little bit of the history of vector analysis will be introduced to highlight the previous struggles in mathematics this has been responsible for over the previous 200 years. The final topic (if time permits) is to deduce an N-dimensional cross product from the wedge product and then to recover the well known R^3 form of $\vec{a} \times \vec{b}$.