Tropical mathematics is mathematics done over the tropical semiring, which is the real numbers with the operations of tropical addition $a \oplus b := \min(a, b)$ and tropical multiplication $a \odot b := a + b$. We will give a survey of the quirks and applications of this burgeoning field of mathematics, which ties together several already existing theories. This talk will be a gentle introduction to the sessions on tropical geometry, accessible to a general audience with no prior knowledge of tropical mathematics. (Received September 03, 2004)