

I would give geometric explanations and analogies; and show with pictures how the geometric explanations works for all vectors.

Then I would say that the idea of a vector space makes use of the properties common for all vectors, it allows the use of geometric ideas, images or pictures for such quantities as solutions to a (linear) differential equation; the notion of an abstract vector space makes much easier to understand, for instance, the properties of solutions to a PDE (and most explanations of nature are made with PDEs. . . )