**Brown students care deeply about their work and the world around them. Students find contentment, satisfaction, and meaning in daily interactions and major discoveries. Whether big or small, mundane or spectacular, tell us about something that brings you joy. (200-250 words)\***

I love to “connect the dots”. Perhaps it’s by fate that this mostly happens when learning new concepts, especially in physics and mathematics. They don’t have to be about something complicated—it could be about middle-school material—as long as I gain a new understanding of the interconnectedness of the world, I experience what I can only describe as a “Wow! That’s so cool!”

For instance, upon learning the kinetic-energy formula, I wondered why it had to be proportional to the square of velocity rather than just velocity. After contemplating it, I realised that the answer lies within conservation of energy and Pythagoras’ theorem. Assume that you used one unit of energy to accelerate an object 1m/s northwards, and used another to accelerate it 1m/s eastwards. You have expended two units of energy into the object, but the object is only moving at 1.4m/s north-eastwards—the square-root of the energy expended—hence its velocity must be squared before it’s proportional to its energy in order to be consistent with conservation of energy.

In my example, emphasis should be placed on the word “consistent”; the universe is incredibly complex, and yet it’s laws are consistent: it leaves no room for contradictions. This is why I’m so interested in physics: it’s packed full of correlations to be deciphered as every interaction is somehow intertwined. Discovering these correlations brings me joy, it becomes a drug that I can’t stop wanting more-and-more. In return, I am inspired to think and encouraged to understand.