

Exercise 1.27

Two positively charged particles are first brought close together and then released. Once released, the repulsion between particles causes them to move away from each other. (a) This is an example of potential energy being converted into what form of energy? (b) Does the potential energy of the two particles prior to release increase or decrease as the distance between them is increased.

[**TYPO: Change the period at the end to a question mark.**]

Solution

Part (a)

Potential energy converts to kinetic energy once the particles are released.

Part (b)

The potential energy of two similarly charged particles decreases as the distance between them increases (page 16).