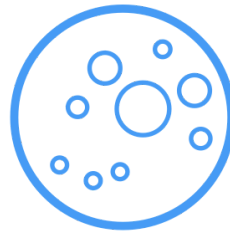# Universal Gravitational Energy Problem

Step 1: Below is a picture of your two objects in deep space before you move the one on the left. Record their masses and the distance between their centers. Calculate the gravitational energy of this system

Step 2: Below is a picture of your two objects in deep space after you move the one on the left. Record their masses and the distance between their centers. Calculate the gravitational energy of this system
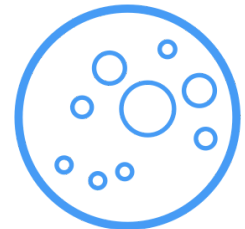
Step 3: Calculate the change in gravitational energy of this system. This is the work that was done in moving the object to the left from starting position to ending position at a very slow and steady speed Enter your answers into your program to check that you did everything properly

Step 4: If work equals force times distance, why can't you just find the force of gravity between the planets and then multiply it by the distance they moved apart?