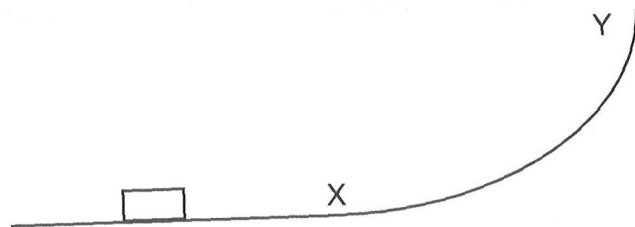
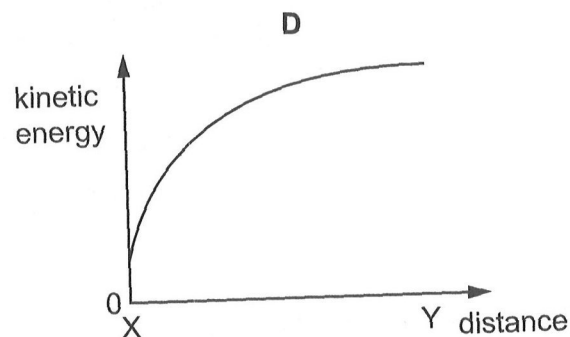
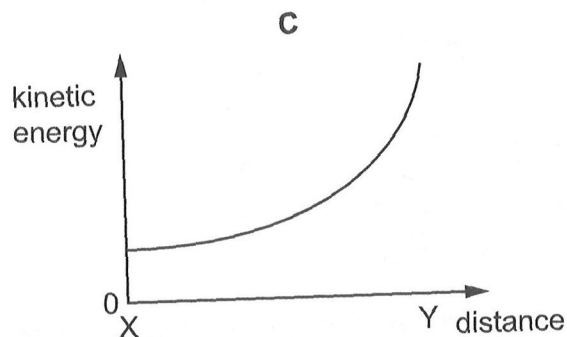
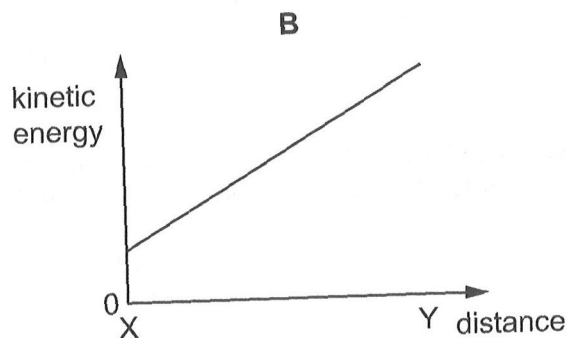
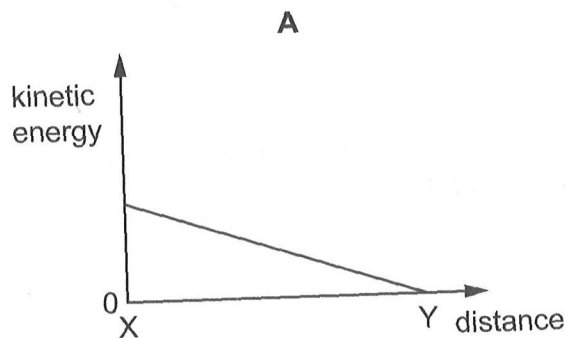


- 8 A force is applied to an object that is moving across a frictionless surface. Initially, the surface is horizontal before starting to slope upwards at a point X. The magnitude of the force is equal to the weight of the object, and its direction is the same as the object's velocity at any instant.



Which graph shows how the kinetic energy of the object varies with distance travelled between X and Y?



- 9 An area of land is a distance of 2.0m below sea level. To prevent flooding, pumps are used to lift