Conservation of Energy Worksheet #2

In this activity you will analyse an example of motion and break up the motion into different stages in order to determine the different forms of energy present and how they change during the motion.

Apparatus:	spring brass masses and mass hanger totalling 1 kg retort stand boss head and clamp
Method:	Mount the boss head and clamp on the retort stand. Hang the spring from the clamp and hang the masses and mass hanger from the spring. Pull the masses down a few cm and observe carefully the motion of the spring and masses.

Analysis: Represent this motion on three diagrams below showing the bottom position, middle position, and top position of the masses. Complete the type of energy present at the various positions during the motion. Use zero, minimum, maximum, or medium in your answers. GPE can be measured as zero at position 1.



Remember:

KE is kinetic energy, the energy of moving objects. The faster the motion, the higher the KE.

GPE is gravitational potential energy. The higher above Earth's surface, the higher the GPE.

EPE is elastic potential energy. The more something is stretched or compressed, the higher the EPE.

Choose the most appropriate graph from the following options for each type of energy during the motion. Ignore air resistance.

