Name

Unit VII: Formative Assessment 3

- 1. You and your lab partner perform an energy experiment. Your job is to take snapshots at 3 points in the experiment.
 - The 1st snapshot shows your lab partner (70kg) standing at the edge of a 10 m high building.
 - The 2nd snapshot shows him after he has jumped off and landed on a trampoline 1 m above the ground. At that instant, he is at ground level and not moving (Intermediate situation).
 - The 3rd snapshot shows him after the trampoline has launched him into the air; he is 5 m above the ground and still moving.

(Assume that all the energy can be recovered an ideal trampoline – frictionless environment with no dissipated energy).

Sketch the energy bars to describe this situation.



2. Consider the situation below: a cart, with velocity **v**, rolls toward a spring, compressing it as it comes to a stop. *(consider whoosies)*



Sketch energy pie charts representing the various ways the energy is stored in each stage.

1

Unit VII: Formative Assessment 3

- 1. You and your lab partner perform an energy experiment. Your job is to take snapshots at 3 points in the experiment.
 - The 1st snapshot shows your lab partner (70kg) standing at the edge of a 10 m high building.
 - The 2nd snapshot shows him after he has jumped off and landed on a trampoline 1 m above the ground. At that instant, he is at ground level and not moving (Intermediate situation).
 - The 3rd snapshot shows him after the trampoline has launched him into the air; he is 5 m above the ground and still moving.

(Assume that all the energy can be recovered an ideal trampoline – frictionless environment with no dissipated energy).

Sketch the energy bars to describe this situation.



2. Consider the situation below: a cart, with velocity **v**, rolls toward a spring, compressing it as it comes to a stop. *(consider whoosies)*



Sketch energy pie charts representing the various ways the energy is stored in each stage.