

Name _____ Period _____

UNIT V WORKSHEET 3: ENERGY

ENERGY BAR GRAPHS/FLOW DIAGRAMS—QUALITATIVE

Initial state: A rubber band is stretched and about to release a block along a track. *The system is ideal, with no friction anywhere in the system.*



Final state: The block is moving along the track.

In each system definition below, a) complete the energy bar graphs for each state, b) identify the system in the circle, c) draw arrows signifying energy transferring either into or out of the system, and d) identify the forces transferring energy into or out of the system.

1. System definition: block.

Initial	During	Final
$E_k + E_g + E_e$		$E_k + E_g + E_e + E_{int}$

2. System definition: block and rubber band.

Initial	During	Final
$E_k + E_g + E_e$		$E_k + E_g + E_e + E_{int}$

3. System definition: block, rubber band, and track.

Initial	During	Final
$E_k + E_g + E_e$		$E_k + E_g + E_e + E_{int}$