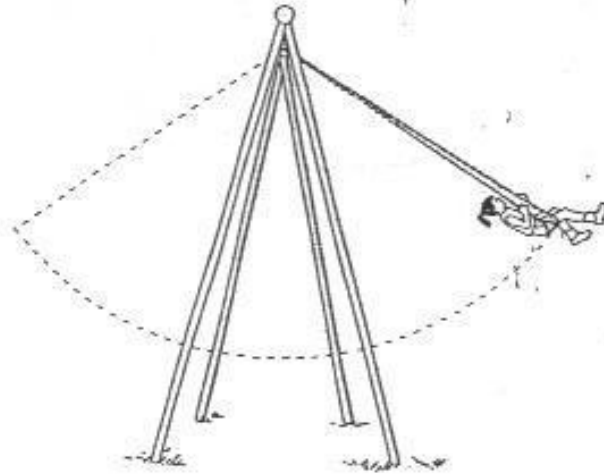


Name:

Date:

Hour:

Honors Physical- Earth Science A+ Objective 3 Assessment



A child is swinging back and forth.

- 1. Label** the position(s) where she has maximum gravitational potential energy “PE” and where she has the most kinetic energy “KE”.
- If mechanical energy (ME) is conserved, **explain** the relationship between the amount of PE at its maximum and the amount of KE at its maximum.
- When the girl relaxes and quits moving her legs, the swing gradually stops at the lowest position. **Name** any net force(s) that caused her to stop swinging.
- The law of conservation of energy states that energy may not be created or destroyed. Use this and your analysis of the girl’s motion to **explain** where her kinetic and potential energy went. (Into what type of energy was her energy transferred?)