

Third Grade – Trimester Two

Physical Science Design Challenge

Background/Scenario:

The Egg Harbor Township Recreational Department has been receiving complaints about the Canale Park playground equipment being outdated and unsafe.

Problem Statement:

The EHT Recreational Department has to shut down the playground until all building and safety requirements have been met. They would like to build a new, modern playground that would satisfy all EHT residents. They have hired your team to design a 21st century swing that would use magnetic force.

Requirements:

- * Engineers must work in a small groups
- * Engineers must design a swing using magnetic forces.
- * Must meet the requirements listed in the rubric below:

Swing Design Criteria	\$1,000.00	\$100.00	\$10.00	\$1.00
Moves in multiple directions	Four directions	Three directions	Two directions	One direction
How long it swings	8 seconds or more	5-7 seconds	4-3 seconds	2 -0 seconds
Safety	Stays away from objects	Hits something once	Hits something more than once	Design falls apart

Constraints:

- * Only use assorted construction materials provided
- * You have 3 class periods to complete the challenge
- * Your pay will be based on meeting the criteria listed in the rubric.

