

Name: _____
 Date: _____
 Period: _____

NEWTON SCOOTERS

For every action there is an equal and opposite reaction!

Grading (for teacher use only):

Newton Scooter Vehicle:

_____ Lab Notebook: Idea #1 (10pts), Idea #2 (10pts), Idea #3 (10pts)
 Diagram (w/ measurements), 3rd Law Explanation, Results (w/measurements), Discussion
 of success & Failure, Suggested improvements (seen in next iteration)
 _____ Construction of Vehicle (How well it stays together) (10 pts)
 _____ Traveled at least 1.5 meters (10 pts)
 _____ Stayed within a width of 1 meter (10 pts)
 _____ **Total (60)**

Presentation:

_____ Presentation Proposal & Outline Due Monday April 4th

	Exceeds Goal 4	Meets Goal 3	Progressing Toward Goal 2	Limited Progress 1
Engineering Design Process	Poster meets standard, but clearly identifies intermediate steps used through design/test/redesign process	Poster clearly uses EDP to show how final vehicle evolved from the prototype	Poster uses EDP to show steps of constructing final Vehicle	Fails to use 5 major steps in EDP process
Application of Newton's Laws	Meets goal, plus uses scientific/mathematical measurements to explain Newton's Laws	All Newton's Laws of Motion are explained and applied to the Newton Scooter	Newton's Third Law of Motion is applied to the working of the Newton Scooter	Some of Newton's Laws are incorrectly applied
Use of Prior Learning	Meets goal plus integrated prior learning seamlessly into discussion of project	Discussion of Project involves proper use and connection to prior learning, such as friction	Few concepts, such as force and friction are used in the discussion	Fails to use concepts like force and friction in the discussion of the project
Scientific Vocabulary	Meets Goal plus properly uses new vocabulary such as Work and Kinetic Energy	Scientific Vocabulary is used properly throughout poster: Force, Inertia, Friction, mass, etc.	Attempts to use scientific vocabulary properly throughout discussion	Vocabulary either limited or incorrectly applied

