

Egg Drop – Master Materials and Equipment

Equipment by Activity

NOTE: Italicized entries indicate items not available from PASCO. The quantity indicated is per student or group.

Act	Title	Materials and Equipment	Qty
1	Reading Graphs Use a motion sensor to generate graph data for practice in interpreting graphs.	Data Collection System	1
		PASPORT Motion Sensor	1
		<i>Meter stick</i>	1
		<i>Pencils</i>	2
2	Acceleration and Gravity Use a motion sensor to analyze how gravity affects the motion of falling objects of different size and mass.	Data Collection System	1
		PASPORT Motion Sensor	1
		Large base and support rod	1
		Right angle clamp	1
		Small rod	1
		Balance, 1-g resolution	1 per class
		No-bounce pad	1
		<i>Three objects of different size and similar mass</i>	1
<i>Three objects of different mass and similar size</i>	1		
<i>Meter stick</i>	1		
3	Force Use a motion sensor and force sensor to analyze the relationships between force, mass, and acceleration.	Data Collection System	1
		PASPORT Motion Sensor	1
		PASPORT Force Sensor with hook	1
		Compact cart mass, 250-g	2
		Dynamics cart	1
		Dynamics track	1
		Super pulley with clamp	1
		Adjustable end stop	1
		Hanging mass, 40-g	1
		Balance, 1-g resolution	1 per class
<i>String</i>	85 cm		
4	Air Drag Use a motion sensor to analyze how the velocity of an object in free fall is related to the net force on the object and that air drag produces a force opposite the direction of fall.	Data Collection System	1
		PASPORT Motion Sensor	1
		Large base and support rod	1
		Small rod	1
		Right angle clamp	1
		Balance, 0.01-g resolution	1 per class
		<i>Coffee filters</i>	4
<i>Meter stick</i>	1		
5	Impact Force Use a force sensor to analyze force during a collision and determine the best material to cushion and protect fragile objects during a collision.	Data Collection System	1
		PASPORT Force Sensor with rubber bumper	1
		Discover Collision Bracket with spring bumpers	1
		Force sensor cup	1
		Large base and support rod	4
		Dynamics cart	1
		Dynamics track with feet	1

Act	Title	Materials and Equipment	Qty
		Track rod clamp <i>Different bumper materials</i> <i>Tape</i>	1 4 1 roll