

Mechanics Module 3 – Equipment List and Setup

What	Qty	Activities
Sheets of graph paper	6	10
1-foot ruler	1	10
2.2 meter Track, Pasco ME-9452	1	15, 16
End-stop mounted on one end of track	1	15, 16
Pivot Clamp for Track, Pasco ME-9810	1	15, 16
Collision Cart, Pasco ME-9454	1	15, 16
Cart pin	1	15, 16
Economy Force Sensor, Pasco CI-6746	2	12
Eyebolt, 6-32 x ½ with knurled nut	1	12
Large Nylon Eyebolt	1	12
Large Table Clamp, Pasco ME-9472	2	12, 15, 16 (Activities 15 and 16 will use only one clamp)
Super Pulley with Clamp, Pasco ME-9338A	1	15, 16
Super Pulley, Pasco ME-9450	2	12
Pulley Mounting Rod, Pasco SA-9242	2	12
0.5 kg mass with a hook	2	12
Standard 12.7 mm rods, approx 18” long	4	12, 15, 16 (Activities 15 and 16 will use only one rod)
Bosshead Clamps	2	12
1 foot lengths of light string	6	12
50.0 gram mass with a hook	1	15, 16
3 foot length of light string	1	15, 16
Ball on a string	1	5, 9, 10, 11
Pan of water with Styrofoam, wooden stick tied on one end to a support. See the figure below.	1/group	14
Digital Angle Gauge, Matic B2646	1	15, 16

Setup Notes:

The Track should be set up with the end with the smallest reading on the scale closest to the wall.

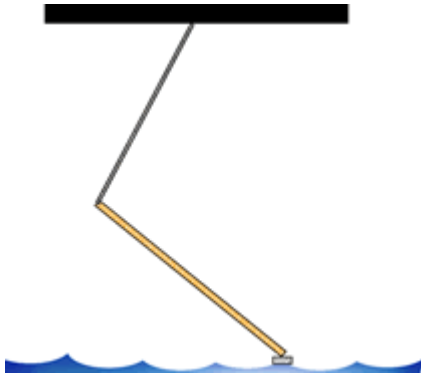
The feet brackets should be mounted so their thumbscrews are on the same side of the Track as the scale. One feet bracket should be mounted on the end of the track closest to the wall. The position of the other feet does not matter. **Note** that this placement differs from the standard one.

The Rod Clamp should be mounted on the end of the Track opposite the wall.

The Super Pulley with Clamp should be mounted on the end of the Track opposite the wall. The pulley should be attached to the higher / top hole of the pulley clamp so that the string pulling the cart can be parallel to the track.

The hooks should be attached to the sensor part of the two Force Sensors.

Here is a figure of the apparatus used by the Instructors for Activity 14:



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modified by Jason Harlow June 25, 2009

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Last revision April 2015, Sean al-Baroudi