| What   | Qty | Activities |
|--|-----|------------|
| 2.2 meter Track, Pasco ME-9452   | 1   | 11 - 13    |
| Cart Launcher, Pasco ME-9488   | 1   | 11 - 13    |
| End Stop, Pasco ME-9808  | 1   | 11 - 13    |
| Collision Cart, Pasco ME-9454  | 1   | 11 - 13    |
| Large Table Clamp, Pasco ME-9472                                       | 2   | 11 - 13    |
| Homemade rod assembly  | 1   | 11 - 13    |
| Set of risers, homemade  | 1   | 11 - 13    |
| • $4 \times 1.000$ cm thick blocks, $\sim 3'' \times 6''$              |     |            |
| • $4 \times 0.500$ cm thick blocks, $\sim 3^{"} \times 6^{"}$          |     |            |
| • $4 \times 0.1000$ cm thick blocks, $\sim 3^{\circ} \times 6^{\circ}$ |     |            |
| Level  | 1   | 11 - 13    |
| Caliper  | 1   | 11 - 13    |
| Deck of cards  | 1   | 11 - 13    |
| Stopwatch  | 1   | 11 - 13    |

## **Mechanics Module 1 – Equipment List and Setup**

## Setup Notes:

The feet brackets should support the Track at about 60 cm and 150 cm as measured on the Track's scale. They should be mounted so their thumbscrews are on the same side of the Track as the scale.

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

The rod assembly should be fixed to the two Table Clamps and up against the Track feet that are closest to the wall. The rod is between the feet and the wall and braces the feet.

The Cart launcher is mounted on the Track on the end closest to the wall. Its thumbscrew should be on the opposite side from the scale of the Track The Launcher needs to be far enough up the Track that when it is cocked at its maximum position it does not contact the wall.

The End Stop is mounted on end of the Track opposite the wall.

Note to technologists: The risers are used in this activity (instead of an end-clamp) in order to minimize sag in the track, keeping it as close to a straight line as possible.

DMH – July/07. Revisions: JH, LL – Dec/09, LL – Jan/13.