**Unit 4 Materials List**

**Investigation 1**

* Motion detector such as those by Vernier, together with either (a) a calculator with view screen to project to class OR (b) a computer that projects to entire class. The calculator software is under the APPS key. You may see CBL/CBR or Ranger, for example. You can also download programs like RANGER, HIKER or DATA MATCH from the website www.Education.TI.com . The software for the computer called LOGGER LITE is free on the Vernier website http://www.vernier.com/products/software/logger-lite/ . To connect the motion detector to the computer, you will need a printer cable commonly used for many printers. The same printer cable is also sold as the Go Motion cable at Vernier.
* Timer, tape measure and chalk to mark floor location as person walks
* http://illuminations.nctm.org/LessonDetail.aspx?ID=U188 for an NCTM Illuminations lesson entitled “Movement with Functions”
* Time-Distance lessons under “Classroom Activities” on the Texas Instruments website: <http://education.ti.com/calculators/downloads/US/Activities/Search/Keywords?k=time+distance+graphs>
* Workbooks from Texas Instruments such as activities 1 and 13 in *Real World Math MadeEasy* by Chris Brueningsen et. al. or *CBR Explorations: Math and Science in Motion* by Brueningsen et. al. or *CBR Explorations: Modeling Motion: High School Activities with the CBR* by Linda Antinone et. al.

**Investigation 2**

* Straightedges for drawing linear graphs
* Graphing calculators

**Investigation 3**

* Straightedges for drawing linear graphs
* Graphing calculators

**Investigation 4**

* Straightedges for drawing linear graphs
* Graphing calculators

**Investigation 5**

* Rulers
* Graphing Calculators
* Slope intercept game links: <http://hotmath.com/hotmath_help/games/kp/kp_hotmath_sound.swf>
* Video on roof trusses <http://www.youtube.com/watch?v=FbQxN7iv-ns&feature=related>

**Investigation 6**

* Rulers
* Forest Elementary Students: <http://www.hometownlife.com/article/20120603/NEWS06/206030372/Forest-students-recycle-water-bottles-make-greenhouse>
* NY Times Bottled Water Archive: <http://topics.nytimes.com/topics/reference/timestopics/subjects/w/water/bottled_water/index.html?offset=0&s=newest>