***Egg bungee jump*** Planning ahead and equipment list

## Introduction

### Equipment needed per group

* ball of wool
* plastic sandwich bag containing small samples each of wool, pipe cleaner, curling ribbon, string, cotton thread, pop stick, rubber band, balloon.
* Student worksheet [Properties matrix](http://assist.asta.edu.au/sites/assist.asta.edu.au/files/Student_worksheet_Properties_matrix.docx)

## Investigation 1: Selecting materials

### Equipment needed per group

* plastic sandwich bag containing small samples each of wool, pipe cleaner, curling ribbon, string, cotton thread, pop stick, rubber band, balloon.
* student worksheet [Properties matrix](http://assist.asta.edu.au/sites/assist.asta.edu.au/files/Student_worksheet_Properties_matrix.docx) (distributed in previous activity)

## Investigation 2: Engineering challenge

### Equipment needed per student

* student worksheet [Engineering design](http://assist.asta.edu.au/sites/assist.asta.edu.au/files/Student_worksheet_Engineering_design.docx)

### Equipment needed per group

* 1 raw egg (plus some in reserve to account for breakages)
* 2 plastic sandwich bags or ziplock bags
* 2 wire bin-bag ties

### Equipment available per class

* large bulldog clip (for use as the launch pad)
* rulers, tape measures
* masking tape
* electric scales
* marbles or other weights
* quantities of all the sample materials for students to choose from, i.e. wool, pipe cleaners, curling ribbon, string, cotton thread, pop sticks, rubber bands, balloons.

**Notes**

1. Plastic sandwich bags work well to hold the egg.
2. The wire or paper clip should be tightly wound around the top of the plastic bag (maybe using pliers) to avoid the bag slipping and the egg breaking.
3. Make the length of the wire shorter than the length of the un-stretched rubber band so that the bottom of the egg can be lifted level with the clamp shaft on the first drop.