

## Arch Bridge Challenge

**Supplies:** 2 pieces of 2 inch by 10 inch pieces of paper, 2 pieces of 2 inch by 10 inch pieces of recycled cardboard, a ruler, 2 equal stacks of books and the same weights as yesterday ~ pennies, legos, washers, etc.

### **Procedure:**

1. Set up supports 8 inches apart.
2. Place one paper between the supports in an arch (see picture on the blog)
3. Place the second piece of paper on the arch and supports to make the deck.
4. Add weights slowly one at a time
5. Count the weights as you add them
6. When the bridge becomes unsafe (the deck is lifting off the supports) or collapses, record the number of weights the bridge held right before the collapse.

### **Trial 1 ~ The Paper Bridge**

Draw a picture of your bridge just before it fell or insert a photograph

Number of Weights Held:

### **Trial 2 ~ The Cardboard Bridge**

Draw a picture of your bridge just before it fell or insert a photograph

Number of Weights Held: