

# SCIENCE @ THE LIBRARY

## SCALES

Measure the weight of objects.

### **MATERIALS:**

2 bathroom scales  
1 pan balance  
assorted spring balances  
assorted weights

### **WHAT TO DO:**

Weigh yourself on the bathroom scale. Now stand with one foot on each of the scales and see how much each weighs. (The two together should add up to be the same as when using just one.) Shift weight from one foot to the other and see what happens. Notice the difference between your weight in kilograms and pounds.

Take a small weight and put it on the LEFT pan of the balance and try to get it to balance out with the weight bar on the front of the scale. Only a small weight will work for this.

Now try taking several weights of different amounts and try to get them to balance on the pan balance. Try other objects and see how much they weigh, by having the object on the LEFT pan and the weights on the right. You should try different combinations of weights on the right pan and then add them together to see how much the object on the left weighs.

Hold up the spring balances and hook the weights onto the spring at the bottom. Does the actual weight agree with the weight shown on the spring? Is it easier to use the pan balance or spring balance to weigh an object?

**WHAT IS HAPPENING:** Different scales have different purposes depending on the size and shape of the object.