

# BALANCE EQUATIONS

**1** Center your beam and count what balances. Estimate halves or quarters as necessary.

**10 thumb tacks** =  **paper clips**

**10 paper clips** =  **popcorn**

**10 popcorn** =  **lentils**

**10 lentils** =  **rice**



**2** Fill in these boxes. Don't weigh again, just divide by 10.

**1 thumb tack** =  **paper clips**

**1 paper clip** =  **popcorn**

**1 popcorn** =  **lentils**

**1 lentil** =  **rice**

**3**

Plug in values from step 2.

Multiply by unit conversion factors to solve each equation ...

...then check each answer on your balance.

**a. 1 thumb tack = ? popcorn**

$$\frac{1 \text{ thumb tack}}{1} \times \frac{\boxed{\phantom{00}} \text{ paper clips}}{1 \text{ thumb tack}} \times \frac{\boxed{\phantom{00}} \text{ popcorn}}{1 \text{ paper clip}} = \boxed{\phantom{00}} \text{ popcorn}$$

**a. balance check:**

**b. 1 paper clip = ? lentils**

**b. balance check:**

**c. 1 popcorn = ? rice**

**c. balance check:**