Mass word problems (mixed units)
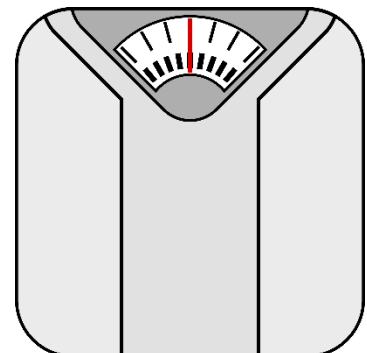
1. Jack is professional weightlifter. His personal lifting record was 125.8 kg. At a weightlifting competition, he broke his own record by 540 g. What is his new record?

2. The table is 19 lbs 4 oz. The chair is 11 lbs 9 oz. Compared to the table, how much heavier are two chairs?

3. There are 8 small dumbbells in a box. Each of the dumbbells is 850 g and the box weighs 0.45 kg. What is the total weight (measured in kg) of the dumbbells set?

4. In a batch of 6 cupcakes, 3 oz of butter are used. In a batch of 40 cookies, 2 lbs of butter are used. Is there more butter in a cupcake or a cookie?

5. Last year, Mike weighed 34.5 kg. This year, Mike weighed 36.8 kg. If he is going to game the same weight like he did last year, what will be his weight next year?

6. Each bunny born in a litter is about 10 oz. If the litter has 11 bunnies, the weight of the litter is about _____ lbs.

    a. 6
    b. 7
    c. 8

Answers

1.   540 g = 0.54 kg
     125.8 + 0.54 = 126.34
     His current record is 126.34 kg.

2.   11 lbs 9 oz x 2
     = 22 lbs 18 oz
     = 23 lbs 2 oz
     Two chairs are 23 lbs 2 oz.

     23 lbs 2 oz – 19 lbs 4 oz
     = 22 lbs 18 oz – 19 lbs 4 oz
     = 3 lbs 14 oz
     Two chairs are 3 lbs 14 oz heavier than the table.

3.   850 x 8 = 6,800
     6,800 g = 6.8 kg
     6.8 + 0.45 = 7.25
     The weight of the dumbbells set is 7.25 kg.

4. $3 \div 6 = \frac{1}{2}$
     There is $\frac{1}{2}$ oz of butter in a cupcake.
     2 lbs = 32 oz
     $32 \div 40 = \frac{4}{5}$
     There is $\frac{4}{5}$ oz of butter in a cookie.
     $\frac{4}{5} > \frac{1}{2}$
     There is more butter in a cookie.

5.   36.8 + (36.8 – 34.5) = 36.8 + 2.3 = 39.1
     His weight next year will be 39.1 kg.

6.   10 x 11 = 110 oz
     110 oz = 6.87 lbs
     Answer is (b).