a) About 1 gram

Key

Name : _____ Score : _____

Teacher : _____ Date : _____

Converting English and Metric

1) _____ pounds = 7.5 kilograms

2) _____ ounces = 18 grams

3) 13.5 pounds = _____ kilograms

4) 15 ounces = _____ grams

5) _____ pounds = 16 kilograms

6) 12.5 pounds = _____ kilograms

7) 8 ounces = _____ grams

8) _____ ounces = 14.5 grams

9) _____ pounds = 4 kilograms

10) _____ ounces = 18.5 grams

11) _____ pounds = 21.5 kilograms

12) 2.5 ounces = _____ grams

13) _____ ounces = 9.5 grams

14) _____ ounces = 19.5 grams

15) 20 pounds = _____ kilograms

16) 17 pounds = _____ kilograms

17) 6.5 pounds = _____ kilograms

18) _____ pounds = 7 kilograms

19) 8.5 ounces = _____ grams

20) 22 ounces = _____ grams

Converting English and metric :

1) $7.5\ kg \times \frac{2.2\ lb}{1\ kg} = \boxed{16.5\ lb}$

2) $18\ g \times \frac{1\ kg}{1000\ g} \times \frac{2.2\ lb}{1\ kg} \times \frac{16\ oz}{1\ lb} = \boxed{0.6336\ oz}$

3) $13.5\ lb \times \frac{1\ kg}{2.2\ lb} = \boxed{6.14\ kg}$

4) $15\ oz \times \frac{1\ lb}{16\ oz} \times \frac{1\ kg}{2.2\ lb} \times \frac{1000\ g}{1\ kg} = \boxed{426.14\ g}$

5) $16\ kg \times \frac{2.2\ lb}{1\ kg} = \boxed{35.2\ lb}$

6) $12.5\ lb \times \frac{1\ kg}{2.2\ lb} = \boxed{5.68\ kg}$

7) $8\ oz \times \frac{1\ lb}{16\ oz} \times \frac{1\ kg}{2.2\ lb} \times \frac{1000\ g}{1\ kg} = \boxed{227.8\ g}$

8) $14.5\ g \times \frac{1\ kg}{1000\ g} \times \frac{2.2\ lb}{1\ kg} \times \frac{16\ oz}{1\ lb} = \boxed{0.51\ oz}$

9) $4\,kg \times \frac{2.2\,lb}{1\,kg} = \boxed{8.8\,lb}$

10) $18.5\,g \times \frac{1\,kg}{1000\,g} \times \frac{2.2\,lb}{1\,kg} \times \frac{16\,oz}{1\,lb} = \boxed{0.65\,oz}$

11) $21.5\,kg \times \frac{2.2\,lbs}{1\,kg} = \boxed{47.3\,lbs}$

12) $2.5\,oz \times \frac{28.4\,g}{1\,oz} = \boxed{71.\,g}$

13) $9.5\,g \times \frac{1\,oz}{28.4\,g} = \boxed{0.33\,oz}$

14) $19.5\,g \times \frac{1\,oz}{28.4\,g} = \boxed{0.69\,oz}$

15) $20\,lbs \times \frac{1\,kg}{2.2\,lbs} = \boxed{9.1\,kg}$

16) $17\,lbs \times \frac{1\,kg}{2.2\,lbs} = \boxed{7.7\,kg}$

17) $6.5\,lbs \times \frac{1\,kg}{2.2\,lbs} = \boxed{2.95 \rightarrow 3\,kg}$

18) $7\,kg \times \frac{2.2\,lb}{1\,kg} = \boxed{15.4\,lbs}$

19) $8.5\,oz \times \frac{28.4\,g}{1\,oz} = \boxed{241.4\,g}$

20) $22\,oz \times \frac{28.4\,g}{1\,oz} = \boxed{624.8\,g}$

Section 5.3 - Mass in a SI System

~~Pass in for marks~~

PRACTISE YOUR NEW SKILLS

1. Convert the following weights.

a) 2.5 t = _____ kg

b) 2.8 kg = _____ g

c) 125 g = _____ kg

d) 2.4 g = _____ kg

e) 1 t = _____ lb

f) 3.6 tn = _____ kg

2. How many tons are in 1 tonne?

3. What is the total weight in grams of 3 packages of nuts weighing 1.2 kg, 0.75 kg, and 1.5 kg?

4. Win weighs 78 kg, and his dog weighs 18 kg. If his truck weighs 1.9 t and there are 5 boxes of books each weighing 9.8 kg in the truck, what is the total weight of the truck, including Win, his dog, and the books?

5. Karen is making a batch of potato soup. She needs 8 potatoes, and each potatoe weighs about 375 g. How many pounds of potatoes does she need?

6. If a 10-lb bag of grass seed costs $75.45, how much does the seed cost per kilogram?

7. How many quarter-pound (before cooking) hamburgers can you make from 1.9 kg of ground beef?

PRACTISE YOUR NEW SKILLS, P. 200

1. a) 2500 kg b) 2800 g
   c) 0.125 kg d) 0.0024 kg
   e) 2200 lb f) 3272.4 kg
2. 1 tonne (t) ≈ 1.1 tons (tn)
3. 3450 g
4. 2045 kg
5. 6.6 lb
6. $16.61/kg
7. 16 hamburgers

Section 5.3 : Mass in a SI System

1) $2.5\,t \times \frac{1000\,kg}{1\,t} = \boxed{2500\,kg}$

b) $2.8\,kg \times \frac{1000\,g}{1\,kg} = \boxed{2800\,g}$

c) $125\,g \times \frac{1\,kg}{1000\,g} = \boxed{0.125\,kg}$

d) $2.4\,g \times \frac{1\,kg}{1000\,g} = \boxed{0.0024\,kg}$

e) $1\,t \times \frac{1000\,kg}{1\,t} \times \frac{2.2\,lb}{1\,kg} = \boxed{2200\,lb}$

f) $3.6\,tn \times \frac{2000\,lb}{1\,tn} \times \frac{1\,kg}{2.2\,lb} = \boxed{\cancel{3274.4\,kg}}$ 3272.7

2) $1\,t \times \frac{1000\,kg}{1\,t} \times \frac{2.2\,lb}{1\,kg} \times \frac{1\,tn}{2000\,lb} = \boxed{1.1\,tn}$

3) $1.2\,kg + 0.75\,kg + 1.5\,kg$
$= 3.45\,kg$

$3.45\,kg \times \frac{1000\,g}{1\,kg} = \boxed{3450\,g}$

4) $78\,kg + 18\,kg + 5(9.8\,kg) + 1900\,kg$

$78\,kg + 18\,kg + 49\,kg + 1900\,kg$

$= \boxed{2045\ kg}$

$1.9\,t \times \frac{1000\,kg}{1\,t} = 1900\,kg$

5) $8 \times 375\,g = 3000\,g \times \frac{1\,kg}{1000\,g} \times \frac{2.2\,lb}{1\,kg} = \boxed{6.6\ lb}$

6) $\frac{\$75.45}{10\,lb} = \frac{\$7.545}{1\,lb} \times \frac{2.2\,lb}{1\,kg} = \frac{\$16.60}{1\,kg}$

or

$10\,lb \times \frac{1\,kg}{2.2\,lb} = 4.\overline{54}\,kg$ $\quad \$75.45 \div 4.\overline{54} = \$16.60/kg$

7) $1.9\,kg \times \frac{2.2\,lb}{1\,kg} = 4.18\,lb \div 0.25 = 16.72$ hamburgers

↓

really 16