

Grade 7- Mathematics

13- Mass

The measuring units of mass are mg , g , kg,

Conversion of units

$$1\text{g} = 1000\text{mg}$$

$$1\text{kg} = 1000\text{g}$$

$$5.345\text{kg} = 5.345 \times 1000 = 5345\text{g}$$

$$785\text{g} = 785 \div 1000 = 0.785\text{kg}$$

$$56\text{mg} = 56 \div 1000 = 0.056\text{g}$$

$$0.038\text{g} = 0.038 \times 1000 = 38\text{mg}$$

Addition and Subtraction of mass

E.g.1	kg	g	mg
	8	78	9
+	5	89	8
	<u>13</u>	<u>167</u>	<u>17</u>

E.g.2	kg	g	mg
	19	52	3
-	7	98	7
	<u>11</u>	<u>953</u>	<u>996</u>

Multiplication and Division of mass

	1 kg	753 g	500 mg
4	7 kg	14g	
<u>4</u>			
3		<u>3000</u>	
		3014	
		<u>28</u>	
		21	
		<u>20</u>	
		14	
		<u>12</u>	
		2	2000
			<u>20</u>

	kg	g	mg
	9	8	7
x			5
	<u>45</u>	<u>40</u>	<u>35</u>

Exercise

Do the below text book (part 2) Exercises

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3-4	Exercise 13.1
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12	Exercise 13.6

1) Write the suitable units, to state the following materials.

- i) A capsule of medicine
- ii) Packet of milk powder
- iii) A sac of sugar
- iv) Amount of tea leaves for a family per day.

2) Convert the units

- | | | | |
|-------------|------------|--------------|------------|
| i) 5.7kg | = _____ g | vi) 347g | = _____ kg |
| ii) 456g | = _____ kg | vii) 456mg | = _____ g |
| iii) 7897mg | = _____ g | viii) 0.007g | = _____ mg |
| iv) 3 ½ g | = _____ mg | ix) 2337g | = _____ kg |
| v) 5 ¾ kg | = _____ g | x) 8 ¼ kg | = _____ g |

3) Simplify.

$$\begin{array}{r}
 \text{i) } \begin{array}{r} \text{kg} \quad \text{g} \quad \text{mg} \\ 5 \quad 7 \quad 6 \\ + \quad 8 \quad 9 \quad 7 \\ \hline \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{ii) } \begin{array}{r} \text{kg} \quad \text{g} \quad \text{mg} \\ 6 \quad 45 \quad 26 \\ - \quad 3 \quad 56 \quad 88 \\ \hline \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{iii) } \begin{array}{r} \text{kg} \quad \text{g} \quad \text{mg} \\ 45 \quad 947 \quad 56 \\ + \quad 8 \quad 489 \quad 97 \\ \hline \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{iv) } \begin{array}{r} \text{kg} \quad \text{g} \quad \text{mg} \\ 46 \quad 445 \quad 86 \\ - \quad 13 \quad 856 \quad 98 \\ \hline \end{array}
 \end{array}$$

4) Simplify

$$\begin{array}{r}
 \text{i) } \begin{array}{r} \text{kg} \quad \text{g} \quad \text{mg} \\ 5 \quad 7 \quad 6 \\ \times \quad \quad \quad 8 \\ \hline \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{ii) } \begin{array}{r} \text{kg} \quad \text{g} \quad \text{mg} \\ 6 \quad 45 \quad 26 \\ \times \quad \quad \quad 5 \\ \hline \end{array}
 \end{array}$$

5) Simplify

$$\text{i) } 5\text{kg} \quad 6\text{g} \quad 48\text{mg} \div 8$$

$$\text{ii) } 7\text{kg} \quad 58\text{g} \div 5$$

$$\text{iii) } 35\text{kg} \quad 67\text{g} \quad 5\text{mg} \div 4$$

$$\text{iv) } 38\text{kg} \quad 55\text{g} \div 3$$