

## *Factores de Conversión*

- 1.- 8 kg → g
- 2.- 8 t → kg
- 3.- 7 g → kg
- 4.- 12 kg → g
- 5.- 200 m → km
- 6.- 2 cm → m
- 7.- 20 km → m
- 8.- 8 cL → L
- 9.- 10 mL → L
- 10.- 10 L → cL
- 11.- 20 L → mL
- 12.- 10 m<sup>3</sup> → dm<sup>3</sup>
- 13.- 10 cm<sup>3</sup> → dm<sup>3</sup>
- 14.- 10 m<sup>3</sup> → cm<sup>3</sup>
- 15.- 8 dm<sup>3</sup> → m<sup>3</sup>
- 16.- 10 L → dm<sup>3</sup>
- 17.- 10 cm<sup>3</sup> → m<sup>3</sup>
- 18.- 10 m<sup>3</sup> → L
- 19.- 10 m<sup>3</sup> → mL
- 20.- 10 dm<sup>3</sup> → L
- 21.- 10 mL → dm<sup>3</sup>
- 22.- 10 cm<sup>3</sup> → mL
- 23.- 200 mL → m<sup>3</sup>
- 24.-  $1.3 \frac{g}{L} \rightarrow \frac{kg}{m^3}$
- 25.-  $6 \frac{g}{cm^3} \rightarrow \frac{kg}{m^3}$
- 26.-  $8 \frac{mg}{cm^3} \rightarrow \frac{g}{mL}$
- 27.-  $10 \frac{g}{L} \rightarrow \frac{kg}{m^3}$
- 28.-  $20 \frac{km}{h} \rightarrow \frac{m}{s}$
- 29.-  $20 \frac{m}{s} \rightarrow \frac{km}{h}$
- 30.-  $20 \frac{cm}{s} \rightarrow \frac{km}{h}$

## Soluciones

1.- 8 kg → g

$$m = 8\text{kg} \frac{1000\text{g}}{1\text{kg}} = 8000\text{g} = 8 \cdot 10^3\text{g}$$

2.- 8 t → kg

$$m = 8\text{t} \frac{1000\text{kg}}{1\text{t}} = 8000\text{kg} = 8 \cdot 10^3\text{kg}$$

3.- 7 g → kg

$$m = 7\text{g} \frac{1\text{kg}}{1000\text{g}} = 0.007\text{kg} = 7 \cdot 10^{-3}\text{kg}$$

4.- 12 kg → g

$$m = 12\text{kg} \frac{1000\text{g}}{1\text{kg}} = 12000\text{g} = 1.2 \cdot 10^4\text{g}$$

5.- 200 m → km

$$L = 200\text{m} \frac{1\text{km}}{1000\text{m}} = 0.2\text{km} = 2 \cdot 10^{-1}\text{km}$$

6.- 2 cm → m

$$L = 2\text{cm} \frac{1\text{m}}{100\text{cm}} = 0.02\text{m} = 2 \cdot 10^{-2}\text{m}$$

7.- 20 km → m

$$L = 20\text{km} \frac{1000\text{m}}{1\text{km}} = 20000\text{m} = 2 \cdot 10^4\text{m}$$

8.- 8 cL → L

$$V = 8\text{cL} \frac{1\text{L}}{100\text{cL}} = 0,08\text{L} = 8 \cdot 10^{-2}\text{L}$$

9.- 10 mL → L

$$V = 10\text{mL} \frac{1\text{L}}{1000\text{mL}} = 0,01\text{L} = 10^{-2}\text{L}$$

10.- 10 L → cL

$$V = 10\text{L} \frac{100\text{cL}}{1\text{L}} = 1000\text{cL} = 10^3\text{cL}$$

11.- 20 L → mL

$$V = 20\text{L} \frac{1000\text{mL}}{1\text{L}} = 20000\text{mL} = 2 \cdot 10^4\text{mL}$$

12.- 10 m<sup>3</sup> → dm<sup>3</sup>

$$V = 10\text{m}^3 \frac{1000\text{dm}^3}{1\text{m}^3} = 10000\text{dm}^3 = 10^4\text{dm}^3$$

13.- 10 cm<sup>3</sup> → dm<sup>3</sup>

$$V = 10\text{cm}^3 \frac{1\text{dm}^3}{1000\text{cm}^3} = 0,01\text{dm}^3 = 10^{-2}\text{dm}^3$$

14.- 10 m<sup>3</sup> → cm<sup>3</sup>

$$V = 10\text{m}^3 \frac{1000000\text{cm}^3}{1\text{m}^3} = 10000000\text{cm}^3 = 10^7\text{cm}^3$$

15.- 8 dm<sup>3</sup> → m<sup>3</sup>

$$V = 8\text{dm}^3 \frac{1\text{m}^3}{1000\text{dm}^3} = 0,008\text{m}^3 = 8 \cdot 10^{-3}\text{m}^3$$

16.- 10 L → dm<sup>3</sup>

$$V = 10L \frac{1dm^3}{1L} = 10dm^3$$

17.-  $10 cm^3 \rightarrow m^3$

$$V = 10cm^3 \frac{1m^3}{1000000cm^3} = 0,00001m^3 = 10^{-5}m^3$$

18.-  $10 m^3 \rightarrow L$

$$V = 10m^3 \frac{1000dm^3}{1m^3} \frac{1L}{1dm^3} = 10000L = 10^4L$$

$$V = 10m^3 \frac{1kL}{1m^3} \frac{1000L}{1kL} = 10000L = 10^4L$$

19.-  $10 m^3 \rightarrow mL$

$$V = 10m^3 \frac{1000dm^3}{1m^3} \frac{1L}{1dm^3} \frac{1000mL}{1L} = 10000000mL = 10^7mL$$

$$V = 10m^3 \frac{1000000cm^3}{1m^3} \frac{1mL}{1cm^3} = 10000000mL = 10^7mL$$

20.-  $10 dm^3 \rightarrow L$

$$V = 10dm^3 \frac{1L}{1dm^3} = 10L$$

21.-  $10 mL \rightarrow dm^3$

$$V = 10mL \frac{1L}{1000mL} \frac{1dm^3}{1L} = 0,01dm^3 = 10^{-2}dm^3$$

$$V = 10mL \frac{1cm^3}{1mL} \frac{1dm^3}{1000cm^3} = 0,01dm^3 = 10^{-2}dm^3$$

22.-  $10 cm^3 \rightarrow mL$

$$V = 10cm^3 \frac{1dm^3}{1000cm^3} \frac{1L}{1dm^3} \frac{1000mL}{1L} = 10mL$$

$$V = 10cm^3 \frac{1mL}{1cm^3} = 10mL$$

23.-  $200 mL \rightarrow m^3$

$$V = 200mL \frac{1L}{1000mL} \frac{1dm^3}{1L} \frac{1m^3}{1000dm^3} = 0,0002m^3 = 2 \cdot 10^{-4}m^3$$

$$V = 200mL \frac{1cm^3}{1mL} \frac{1m^3}{1000000cm^3} = 0,0002m^3 = 2 \cdot 10^{-4}m^3$$

24.-  $1,3 \frac{g}{L} \rightarrow \frac{kg}{m^3}$

$$d = 1,3 \frac{g}{L} \frac{1kg}{1000g} \frac{1L}{1dm^3} \frac{1000dm^3}{1m^3} = 1,3 \frac{kg}{m^3}$$

$$d = 1,3 \frac{g}{L} \frac{1kg}{1000g} \frac{1000L}{1kL} \frac{1kL}{1m^3} = 1,3 \frac{kg}{m^3}$$

25.-  $6 \frac{g}{cm^3} \rightarrow \frac{kg}{m^3}$

$$d = 6 \frac{g}{cm^3} \frac{1kg}{1000g} \frac{1000000cm^3}{1m^3} = 6000 \frac{kg}{m^3} = 6 \cdot 10^3 \frac{kg}{m^3}$$

26.-  $8 \frac{mg}{cm^3} \rightarrow \frac{g}{mL}$

$$d = 8 \frac{mg}{cm^3} \frac{1g}{1000mg} \frac{1000cm^3}{1dm^3} \frac{1dm^3}{1L} \frac{1L}{1000mL} = 0,008 \frac{g}{mL} = 8 \cdot 10^{-3} \frac{g}{mL}$$

$$d = 8 \frac{\text{mg}}{\text{cm}^3} \frac{1\text{g}}{1000\text{mg}} \frac{1\text{cm}^3}{1\text{mL}} = 0,008 \frac{\text{g}}{\text{mL}} = 8 \cdot 10^{-3} \frac{\text{g}}{\text{mL}}$$

$$27.- 10 \frac{\text{g}}{\text{L}} \rightarrow \frac{\text{kg}}{\text{m}^3}$$

$$d = 10 \frac{\text{g}}{\text{L}} \frac{1\text{kg}}{1000\text{g}} \frac{1\text{L}}{1\text{dm}^3} \frac{1000\text{dm}^3}{1\text{m}^3} = 10 \frac{\text{kg}}{\text{m}^3}$$

$$d = 10 \frac{\text{g}}{\text{L}} \frac{1\text{kg}}{1000\text{g}} \frac{1000\text{L}}{1\text{kL}} \frac{1\text{kL}}{1\text{m}^3} = 10 \frac{\text{kg}}{\text{m}^3}$$

$$28.- 20 \frac{\text{km}}{\text{h}} \rightarrow \frac{\text{m}}{\text{s}}$$

$$v = 20 \frac{\text{km}}{\text{h}} \frac{1000\text{m}}{1\text{km}} \frac{1\text{h}}{60'60''} = 5,5 \frac{\text{m}}{\text{s}}$$

$$v = 20 \frac{\text{km}}{\text{h}} \frac{1000\text{m}}{1\text{km}} \frac{1\text{h}}{3600''} = 5,5 \frac{\text{m}}{\text{s}}$$

$$29.- 20 \frac{\text{m}}{\text{s}} \rightarrow \frac{\text{km}}{\text{h}}$$

$$v = 20 \frac{\text{m}}{\text{s}} \frac{1\text{km}}{1000\text{m}} \frac{60\text{s}}{1\text{min}} \frac{60\text{min}}{1\text{h}} = 72 \frac{\text{km}}{\text{h}}$$

$$v = 20 \frac{\text{m}}{\text{s}} \frac{1\text{km}}{1000\text{m}} \frac{3600\text{s}}{1\text{h}} = 72 \frac{\text{km}}{\text{h}}$$

$$30.- 20 \frac{\text{cm}}{\text{s}} \rightarrow \frac{\text{km}}{\text{h}}$$

$$v = 20 \frac{\text{cm}}{\text{s}} \frac{1\text{km}}{100000\text{cm}} \frac{60\text{s}}{1\text{min}} \frac{60\text{min}}{1\text{h}} = 0,72 \frac{\text{km}}{\text{h}}$$

$$v = 20 \frac{\text{cm}}{\text{s}} \frac{1\text{km}}{100000\text{cm}} \frac{3600\text{s}}{1\text{h}} = 0,72 \frac{\text{km}}{\text{h}}$$