

# CONVERSIÓN DE UNIDADES



Plantea los factores de conversión y resuelve empleando la información que se te proporciona. Arrastra y suelta las cantidades hasta los cuadros del mismo color. Después realiza la operación y anota el resultado sin unidades.

A) Convertir de **mm** (milímetros) a **Å** (Angstroms)  $1\text{m} = 1000\text{mm}$   $1\text{Å} = 10^{-10}\text{m}$

1 Å    1 Å     $10^{-10}\text{m}$      $10^{-10}\text{m}$     1 m    1 m    1000 mm    1000 mm

$$0.0721 \text{ mm} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{0.0721 \text{ mm} \times \quad \times \quad}{\quad \times \quad} = \boxed{\quad}$$



B) Convertir de **mi** (millas) a **años luz**  $1 \text{ año luz} = 9.461 \times 10^{15} \text{ m}$   $1 \text{ mi} = 1609.3 \text{ m}$

59.3 mi     $9.461 \times 10^{15} \text{ m}$      $9.461 \times 10^{15} \text{ m}$     1 año luz    1 año luz    1 mi    1 mi    1609.3 m    1609.3 m

$$59.3 \text{ mi} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad}{\quad \times \quad} = \boxed{\quad}$$



C) Convertir de **mg** a **u.m.a.** (unidad de masa atómica)  $1 \text{ u.m.a.} = 1.661 \times 10^{-27} \text{ kg}$   $1\text{g} = 10^3 \text{ mg}$   $1\text{kg} = 10^3 \text{ g}$

1 u.m.a.     $1.661 \times 10^{-27} \text{ kg}$     1 g     $10^3 \text{ mg}$     1 kg     $10^3 \text{ g}$   
 1 u.m.a.     $1.661 \times 10^{-27} \text{ kg}$     1 g     $10^3 \text{ mg}$     1 kg     $10^3 \text{ g}$

$$3.8 \times 10^2 \text{ mg} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad} = \boxed{3.8 \times 10^2 \text{ mg}}$$



D) Convertir de **kt** (nudos) a **km/h**  $1\text{kt} = 0.5144 \text{ m/s}$   $1\text{km} = 1000 \text{ m}$   $1 \text{ hora} = 3600 \text{ s}$

1 kt    0.5144 m/s    1 km    1000 m    1 h    3600 s  
 825 kt    1 kt    0.5144 m/s    1 km    1000 m    1 h    3600 s

$$825 \text{ kt} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad} = \boxed{\quad}$$



E) Convertir de **barriles** a **m<sup>3</sup>**  $1 \text{ barril} = 158.97 \text{ L}$   $1 \text{ m}^3 = 1000 \text{ L}$

1 barril    158.97 L     $1 \text{ m}^3$     1000 L    184 barriles    1 barril    158.97 L     $1 \text{ m}^3$     1000 L

$$184 \text{ barriles} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad}{\quad \times \quad} = \boxed{\quad}$$





F) Convertir de  $\text{km}^2$  a acres  $1 \text{ acre} = 4047 \text{ m}^2$

|        |        |                   |                  |        |        |                   |
|--------|--------|-------------------|------------------|--------|--------|-------------------|
| 1 km   | 1000 m | 1 acre            | 49 $\text{km}^2$ | 1000 m | 1 km   | 4047 $\text{m}^2$ |
| 1000 m | 1 km   | 4047 $\text{m}^2$ |                  | 1 km   | 1000 m | 1 acre            |



$$49 \text{ km}^2 \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad} = \boxed{\quad}$$

G) Convertir de BTU a kcal (kilocaloría)  $1 \text{ BTU} = 1054 \text{ J}$   $1 \text{ cal} = 4.184 \text{ J}$

|          |         |        |          |        |         |          |
|----------|---------|--------|----------|--------|---------|----------|
| 1 kcal   | 1 cal   | 1 BTU  | 3190 BTU | 1 BTU  | 1 cal   | 1 kcal   |
| 1000 cal | 4.184 J | 1054 J |          | 1054 J | 4.184 J | 1000 cal |



$$3190 \text{ BTU} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad} = \boxed{\quad}$$

H) Convertir de Lb (libras) a oz (onzas)  $1 \text{ oz} = 28.35 \text{ g}$   $1 \text{ Lb} = 0.454 \text{ kg}$

|         |          |        |          |         |          |        |
|---------|----------|--------|----------|---------|----------|--------|
| 1 oz    | 1 Lb     | 1 kg   | 120.4 Lb | 1 oz    | 1 Lb     | 1 kg   |
| 28.35 g | 0.454 kg | 1000 g |          | 28.35 g | 0.454 kg | 1000 g |



$$120.4 \text{ Lb} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad} = \boxed{\quad}$$

I) Convertir de acres a ha (hectáreas)  $1 \text{ acre} = 4047 \text{ m}^2$   $1 \text{ ha} = 1 \text{ hm}^2$

|                   |                 |       |       |          |                   |                 |       |       |
|-------------------|-----------------|-------|-------|----------|-------------------|-----------------|-------|-------|
| 1 acre            | 1 ha            | 1 hm  | 1 hm  | 53 acres | 1 acre            | 1 ha            | 1 hm  | 1 hm  |
| 4047 $\text{m}^2$ | 1 $\text{hm}^2$ | 100 m | 100 m |          | 4047 $\text{m}^2$ | 1 $\text{hm}^2$ | 100 m | 100 m |

$$53 \text{ acres} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad \times \quad \times \quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad \times \quad \times \quad \times \quad \times \quad \times \quad} = \boxed{\quad}$$



J) Convertir de  $\text{km/h}$  a  $\text{mi/min}$  (millas/minutos)  $1\text{mi} = 1609.3\text{m}$   $1\text{km} = 1000\text{m}$   $1\text{hora} = 60\text{min}$

|        |        |          |                                  |        |        |          |
|--------|--------|----------|----------------------------------|--------|--------|----------|
| 1 km   | 1 h    | 1 mi     | $8.1 \frac{\text{km}}{\text{h}}$ | 1 km   | 1 h    | 1 mi     |
| 1000 m | 60 min | 1609.3 m |                                  | 1000 m | 60 min | 1609.3 m |

$$8.1 \frac{\text{km}}{\text{h}} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right)$$

$$= \frac{\quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad} = \boxed{\quad}$$



K) Convertir de g (gramos) a Lb (libras)  $1\text{lb} = 0.454\text{kg}$   $1\text{kg} = 1000\text{g}$

|          |      |        |      |        |      |        |      |          |
|----------|------|--------|------|--------|------|--------|------|----------|
| 0.454 kg | 1 Lb | 1000 g | 1 kg | 1200 g | 1 kg | 1000 g | 1 Lb | 0.454 kg |
|----------|------|--------|------|--------|------|--------|------|----------|

$$1200 \text{ g} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) = \frac{\quad \times \quad \times \quad}{\quad \times \quad} = \boxed{\quad}$$



L) Convertir de  $\text{m}^3/\text{s}$  a  $\text{ft}^3/\text{min}$  (pies cúbicos/minutos)  $1\text{ft} = 0.3048\text{m}$   $1\text{min} = 60\text{s}$

|          |          |          |       |                                   |          |          |          |       |
|----------|----------|----------|-------|-----------------------------------|----------|----------|----------|-------|
| 1 ft     | 1 ft     | 1 ft     | 1 min | $118 \frac{\text{m}^3}{\text{s}}$ | 1 ft     | 1 ft     | 1 ft     | 1 min |
| 0.3048 m | 0.3048 m | 0.3048 m | 60 s  |                                   | 0.3048 m | 0.3048 m | 0.3048 m | 60 s  |

$$118 \frac{\text{m}^3}{\text{s}} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right)$$

$$= \frac{\quad \times \quad \times \quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad \times \quad \times \quad \times \quad} = \boxed{\quad}$$



M) Convertir de  $\text{kg}/\text{cm}^2$  a  $\text{Lb}/\text{in}^2$  (libras/pulgadas cuadradas)  $1\text{Lb} = 0.45\text{kg}$   $1\text{in} = 0.0254\text{m}$   $1\text{m} = 100\text{cm}$

|          |          |          |        |        |       |        |        |     |     |
|----------|----------|----------|--------|--------|-------|--------|--------|-----|-----|
| 1 Lb     | 1 in     | 1 in     | 1 m    | 1 m    | 1     | 1      | 1      | 1   | 1   |
| 0.454 kg | 0.0254 m | 0.0254 m | 100 cm | 100 cm | 0.454 | 0.0254 | 0.0254 | 100 | 100 |
|          |          |          |        |        |       |        |        |     | 75  |

$$75 \frac{\text{kg}}{\text{cm}^2} \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right) \left( \frac{\quad}{\quad} \right)$$

$$= \frac{\quad \times \quad \times \quad \times \quad \times \quad \times \quad}{\quad \times \quad \times \quad \times \quad \times \quad \times \quad} = \boxed{\quad}$$

