**8 February 2021**

**Topic: Conversions**

**Distance**

|  |  |
| --- | --- |
| mm 🡪 cm ( ÷ 10)  cm 🡪 m ( ÷ 100)  m 🡪 km ( ÷ 1000) | cm 🡪 mm ( x 10)  m 🡪 cm ( x 100)  km 🡪 m ( x 1000) |

**Square units** 🡪 Multiply and divide by the factor squared.

|  |  |
| --- | --- |
| mm2     🡪     cm2   ( ÷ 10)2  cm2      🡪     m2      ( ÷ 100)2  m2        🡪     km2     ( ÷ 1000)2 | cm2    🡪     mm2   ( x 10)2  m2      🡪     cm2     ( x 100)2  km2    🡪     m2     ( x 1000)2 |

**Cubic units** 🡪 Multiply and divide by the factor cubed.

|  |  |
| --- | --- |
| mm3     🡪     cm3   ( ÷ 10)3  cm3      🡪     m3      ( ÷ 100)3  m3        🡪     km3     ( ÷ 1000)3 | km3    🡪     mm3   ( x 10)3  m3      🡪     cm3     ( x 100)3  km3    🡪     m3    ( x 1000)3 |

**Mass / Weight**

|  |  |
| --- | --- |
| mg 🡪 g ( ÷ 1000)  g 🡪 kg ( ÷ 1000)  kg 🡪 tonne ( ÷ 1000) | g 🡪 mg ( x 1000)  kg 🡪 g ( x 1000)  tonne 🡪 kg ( x 1000) |

**Capacity**

|  |  |
| --- | --- |
| ml 🡪 lites ( ÷ 1000)  litres 🡪 kl ( ÷ 1000) | litres 🡪 ml ( x 1000)  kl 🡪 litres ( x 1000) |

**Example 1**

Convert 5 kl to l

**Kl    🡪    l    (x 1000)**

Therefore:

5 x **1000**= 5 000 litres

**Example 2**

Convert 3 km2 to m2

**Km 🡪 m (x 1000)**

**Km2 🡪 m2 (x 1000)2**

Therefore:

3 x **1000 2** = 3 000 000 m2

**Example 3**

Convert 165 mm3 to cm3

**mm     🡪   c m    (÷ 10)**

**mm3    🡪    cm3   (÷ 10)3**

Therefore:

165 ÷ **10 3** = 0,165 m3

**Activity 1:**

Convert the following:

1. 5 263 mm to m.

2. 943 kg to tonnes.

3. 650 000 cm2 to m2.

4. 36 m3 to cm3.