

Even More Metric System Practice

Find a bag of chips. How many milligrams of sodium per serving? **180mg** (e.g. Lays original)

Convert this to μg **180 000 μg**

Convert this to kg **0.00018kg**

You weigh 60 000g. What is this in kilograms? **60kg**

150 g = **150 000 000 000ng** 0.652g = **652 000 μg**

200 μm = **200 000nm** 0.065mm = **0.000000065 km**

Covert 681mL into μL **681 000 μL**

In 1962 Scientists from the University of Okalahoma, working with the CIA, injected a 3175kg elephant with 297mg of LSD. Their stated intent was to determine if LSD would induce "musth", a naturally occurring condition in which elephants become violent and uncontrollable. After a series of events, the elephant died. There is some controversy and confusion surrounding the cause of death.

http://www.erowid.org/chemicals/lsd/lsd_history4.shtml

What is the weight of the elephant in grams? **3 175 000g**

What is the weight of the LSD administered in micrograms? **297 000 μg**

What is this dosage in $\mu\text{g/g}$ (micrograms of LSD per gram of elephant)? **0.094 $\mu\text{g/g}$**

For a 70kg human, a dose of 0.2mg LSD is enough to cause substantial clinical effects. What is this dosage in $\mu\text{g/g}$ (micrograms of LSD per gram of human)? **0.0029 $\mu\text{g/g}$**

How many more times the human dose did the elephant receive? **33 times**

The International Space Station orbits at a height of 352km above the Earth. What is this in meters? **352 000m**

How many nl are in 0.02 μL ? **20nL**

Convert 681mL into centiliters **68.1cL**

A cell is 72 μm across. What is this in mm? **0.072mm**

Blood is pumped through the aorta at a speed of 30 cm/second. How many mm/second is this? **300mm/second**