

Conversions using the Metric System Practice Problems

Now you get a chance to work out some problems. You may use a calculator if you would like. Study each of these problems carefully; you will see similar problems on the lesson knowledge check. You will need paper and a pencil to complete the following practice problems.

- 1) The weight of a flash drive is 3 grams. Convert the measurement to centigrams.

- 2) The distance between Cell Phone Company A and B is 87 m. Convert the measurement to cm.

- 3) 76.2 m of — CL2 in-wall speaker cable was installed in an office for background music.
 - A) Calculate that length in decameters.

 - B) Calculate that length in centimeters.

- 4) A wireless router supports a range of up to 4,572 cm indoors.
 - A) Calculate that length in meters.

 - B) Calculate that length in kilometers.

- 5) When storing and stacking laptop computers you need to take into account the mass of the object. A typical laptop computer has a mass of about 4 kg.
 - A) Calculate that mass in grams.

 - B) Calculate that mass in milligrams.

- 6) According to specifications the voltage drop for any wire within office cannot exceed 1 Volt. A typical 10 AWG copper wire can only be run 152.4 m before a voltage drop of 1 volt occurs.
 - A) Calculate that length in hectometers.

 - B) Calculate that length in decimeters.

7) Convert 411 kg to g.

8) Convert 5.626 l to cl.

9) Convert 80 ml to kl.

10) Convert 2.5 cm to m.

11) Convert 16,005 mg to g

12) Convert 48.66 L to daL

13) Convert 11.161 kL to L

14) Convert 521.85 cm to mm

15) Convert 1.26 dag to dg

16) Convert 99.04 dam to cm

17) Convert 0.51 kL to daL

18) Convert 0.05 m to dm

19) Convert 0.001 km to mm

20) Convert 8.106 hg to cg

21) Convert 17.0186 kL to mL

22) Convert 3 cm to m

23) Convert 9 mm to m

24) Convert 4 g to mg

25) Convert 2 L to kL

Resources:

Measurement and Geometry: Area and Volume of Geometric Figures and Objects by Ellis, W., & Burzynski, D. © 2010 retrieved from <http://cnx.org/content/m35023/1.2/> and used under a Creative Commons Attribution <http://creativecommons.org/licenses/by/3.0/>. This is an adaption of the lesson titled, *Metric Measurement*, by the National Information Security and Geospatial Technologies Consortium (NISGTC) is licensed under the Creative Commons Attribution 3.0 Unported License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/3.0/>.

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