

Metric Worksheet # 2 (*Derived Units*)

The density of a substance was measured at 3.5 g/cm^3 . Convert the density into the following units. Show all relationships and cancellations of dimensional units.

1.

kg
cm^3

2.

g
hm^3

3.

dg
dm^3

4.

mg
m^3

5.

hg
dam^3

6.

hg
dm^3

7.

cg
dam^3

8.

cg
dm^3

9.

dg
mm^3

10. How many dekagrams are there in 35 kilograms?

and the other student measured 33 centimeters for the width . What was the area in dm^2 ?

11. Convert 22 hectometers to decimeters.

11. How many kilometers are there in 500 decimeters?

15. A rectangular solid has a length of .4 hectometers and a width of 30 cm and a volume of 2400 dm^3 .

a). What is the height of the solid?

b). What is the volume of the solid in cm^3 ?

12. How many cm^3 are there in 7 deciliters?

13. How many cm^3 of water are there in 248 ml of water?

Please show all conversions in the following two problems.

14. Two students measured a table to determine its area. One student measured .5 dekameters for the length

g
km ³

mg
dm ³

dag
cm ³

10.

mg
km ³

11.

12.

mg
mm ³

13.

14.