



Name: \_\_\_\_\_



Calculate the density of an object:

Clearly state the units of your answers

a) With a mass of 24g and volume 6cm<sup>3</sup>**4g/cm<sup>3</sup>**d) With a mass of 4kg and volume 500cm<sup>3</sup>**8g/cm<sup>3</sup>**b) With a mass of 49kg and volume 7m<sup>3</sup>**7kg/m<sup>3</sup>**e) With a mass of 6300g and volume 2.1m<sup>3</sup>**3kg/m<sup>3</sup>**c) With a mass of 96g and volume 12cm<sup>3</sup>**8g/cm<sup>3</sup>**f) With a mass of 3600g and volume 0.8m<sup>3</sup>**4.5kg/cm<sup>3</sup>**

Calculate the mass of an object:

g) With a volume of 5cm<sup>3</sup> and density 6g/cm<sup>3</sup>**30g**j) With a volume of 45cm<sup>3</sup> and density 1.5g/cm<sup>3</sup>**67.5g**h) With a volume of 7m<sup>3</sup> and density 9kg/m<sup>3</sup>**63kg**k) With a volume of 4m<sup>3</sup> and density 5.4kg/m<sup>3</sup>**21.6kg**i) With a volume of 5cm<sup>3</sup> and density 24g/cm<sup>3</sup>**120g**l) With a volume of 7.2m<sup>3</sup> and density 3.5kg/m<sup>3</sup>**35.2kg**

Calculate the volume of an object:

m) With a mass of 32kg and density 4kg/cm<sup>3</sup>**8cm<sup>3</sup>**p) With a mass of 1400g and density 2kg/m<sup>3</sup>**0.7m<sup>3</sup>**n) With a mass of 24g and density 3g/cm<sup>3</sup>**8cm<sup>3</sup>**q) With a mass of 6.6kg and density 12g/cm<sup>3</sup>**550cm<sup>3</sup>**o) With a mass of 15.8kg and density 10kg/m<sup>3</sup>**1.58m<sup>3</sup>**r) With a mass of 840g and density 0.5g/cm<sup>3</sup>**1520cm<sup>3</sup>****Exam question:**

24K Gold has a density of 19.3g/cm<sup>3</sup>.  
 If the volume of a 24K Gold statue is 14 cm<sup>3</sup>  
 Find the mass of the statue to the nearest gram.

**270g**