

## NATURALS SCIENCE HOMEWORK

### DENSITY WORD PROBLEMS

Use the following formulas to answer the questions below.

$$M = D \times V$$

$$D = M / V$$

$$V = M / D$$

1. What is the density of an object with a mass of 120g and a volume of 7ml?
2. What is the volume of an object that has a mass of 220 grams and a density of 55g/ cm<sup>3</sup>?
3. We have an object with a density of 620 g/cm<sup>3</sup> and a volume of 75 cm<sup>3</sup>. What is the mass of this object?

### ATOMS, ELEMENTS AND COMPOUNDS

Here are some names of some elements and their symbols.

Hydrogen	He	Ca	O	N	Calcium
Chlorine	Na	Helium	F	Fe	Oxygen
Argon	C	Carbon	Fe	Na	Fluorine
Potassium	Mg	Nitrogen	K	Mg	Sodium
Iron	H	Ar	Cl		Magnesium



1. Match the names to their correct symbols.  
You can either draw lines between them or colour code them.
2. After the name of each element write in whether it is a solid, a liquid or a gas. Do not write the full words just (s) for solid, (l) for liquid or (g) for gas.

1. Write each of these chemicals in the correct column in the table:

carbon      nitrogen      carbon dioxide      hydrogen oxide (water)      iron  
 hydrogen      iron oxide (rust)      copper      sodium chloride (table salt)

Elements	Compounds

2. Complete the table.

Name	Particle diagram	Formula	Number of different elements in the compound	Number of atoms in each molecule
EXAMPLE water		$H_2O$	2 HYDROGEN OXYGEN	3 H H O
carbon dioxide				
Sulfur Dioxide		$SO_2$		
Sulfur Trioxide		$SO_3$		
ammonia		$NH_3$		