Atoms and elements

1. Rearrange the letters to make the name we give to the ‘basic bits’ that all materials are made from.
LEN MEETS .................................................

2. Write true or false for each statement.
   a. An element contains different types of atom. .........................
   b. A compound contains atoms of different elements combined together. .........................
   c. An oxide is formed when a metal is burned in oxygen. .........................
   d. Gases are at the far left-hand side of the periodic table. .........................
   e. There are about 100 different elements. .........................
   f. More of the elements are non-metals than are metals. .........................
   g. The name of the chart in which all elements and symbols are shown is the periodic table. .........................

3. Rearrange these letters to give the name of the element whose symbol is shown.
Fe NIOR .........................................................
Ca CLAMIUC .........................................................
Au LOGD .........................................................
Zn IZCN .........................................................
C ARCNOB .........................................................
Mg MGEUNSMIA .........................................................

4. Complete the following sentences about metals and non-metals.
   a. The ways an element looks and reacts are called its ..........................
   b. Most metals are solid, shiny and conduct ..........................
   c. Non-metals are mostly solids or ..........................
   d. ......................... is a liquid metal.
5 Choose from this list of substances to answer the questions.

- calcium
- copper oxide
- magnesium
- nitrogen
- iron
- oxygen
- sodium chloride

a Which are elements?

b Which are compounds?

c Which are non-metallic elements?

d Which are elements made of molecules with two atoms?

e Which substance has the formula CuO?

6 Complete the table.

<table>
<thead>
<tr>
<th>Name of compound</th>
<th>Elements present</th>
</tr>
</thead>
<tbody>
<tr>
<td>magnesium oxide</td>
<td>magnesium and oxygen</td>
</tr>
<tr>
<td>copper oxide</td>
<td></td>
</tr>
<tr>
<td>carbon dioxide</td>
<td></td>
</tr>
<tr>
<td>potassium oxide</td>
<td></td>
</tr>
<tr>
<td>magnesium sulphide</td>
<td></td>
</tr>
<tr>
<td>potassium chloride</td>
<td></td>
</tr>
</tbody>
</table>

7 Copper sulphide is formed when copper and sulphur react. The diagram shows the reaction. Write labels to show what each part represents.

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