**Absence work**

**15 April 2020**

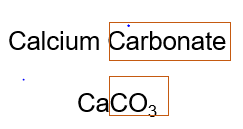
**Naming Compounds**

**Read the information below, then answer the questions that follow.**

Atoms are the smallest part of any element that can exist. Elements are made up of one type of atom. Elements can react together to produce compounds, which are two or more different elements chemically bonded. These bonds hold the atoms together.

The name that a compound is given is dependent on the number of different elements in the compound and whether one of the elements in the compound in oxygen. For example; let’s look at the compound NaCl (sodium chloride) formed by two different atoms, sodium and chlorine. The metal goes first, followed by the non-metal. We change the name endings of non-metals in compounds to show they are in a compound together. For any compound containing only two elements, a metal and non-metal, we change the ending to -ide.

There is a second ending which describes a compound containing more than two different elements, including oxygen. This is where it gets a bit more complicated.

 In the compound CaCO3, we have calcium, carbon and oxygen. Because we have more than two different elements, including oxygen, we change the ending to –ate and place the ending on the carbon.

**Copy out the questions below and write your answers in full sentences.**

In a compound which goes first, the metal or non- metal?

In a compound which goes second, the metal or non- metal?

Which do we change the ending of, the metal or non- metal?

In the compound calcium carbonate (CaCO3), which element is the metal?

Where do we put the metal when naming compounds?

**Checkpoint questions:**

**Copy the key knowledge table into your exercise books.**

Key knowledge- Do your look, cover, write check by learning the answers to the questions below.

|  |  |
| --- | --- |
| Define compound. | Two or more different elements chemically bonded. |
| Define a salt. | Compound containing at least one metal and one non-metal chemically bonded. |
| If a salt contains two elements only, what ending is given to the name? | "-ide" |
| If a salt contains more than two elements (including oxygen!), what ending is given to the name? | "-ate" |
| Does the metal or the non-metal come first when naming a salt? | Metal first e.g. sodium chloride |

**Complete the sentences below in your exercise book.**

Recall Quiz:

1. *A compound is…*
2. *A salt is…*
3. *A salt containing two elements only has the ending…*
4. *A salt containing more than two elements, including oxygen has the ending…*
5. *KCO3 would be named potassium carbon\_\_\_.*

**Application Task - I do**

Example: Write the name for the compound made by the following elements:

Silver + bromine 🡪 silver bromide

Explanation

1. Silver is the metal
2. Metal always come first, ending to non-metal is changed.
3. -ide ending because the salt only contains two elements.

**Application Task - We do**

Write the names for the compounds made by the following elements:

1. Lead + Chlorine 🡪 lead…..
2. Lithium + Iodine 🡪
3. Oxygen + Aluminium 🡪 …… oxide
4. Sodium + Bromine 🡪
5. Copper + Fluorine 🡪 ……..fluoride
6. Iron + Nitrogen 🡪

**Application Task - You do**

Naming Compounds

What is the name of each compound formed by these metal and non-metal elements?

|  |  |  |
| --- | --- | --- |
| Element 1 | Element 2 | Name of compound |
| Iron | Sulphur |  |
| Magnesium | Nitrogen |  |
| Sodium | Chlorine |  |
| Tin | Oxygen |  |

**Application Task - I do**

Example: Write the name for the compound made by the following elements:

Silver + bromine + oxygen 🡪 silver bromate

Explanation

1. Silver is the metal
2. Metal always come first, ending to non-metal is changed.
3. -ate ending because the salt contains more than two elements, including oxygen.

**Application Task - We do**

Write the names for the compounds made by the following elements:

1. Lead + Chlorine + oxygen🡪 Lead……
2. Lithium + Iodine + oxygen 🡪 ….iodate
3. Sodium + Bromine + oxygen🡪
4. Oxygen + Aluminium + carbon🡪
5. Calcium + Chlorine + oxygen🡪
6. Iron + Nitrogen + oxygen🡪…..nitrate

**Application Task - You do**

Naming Compounds

What is the name of each compound formed by these metal and non-metal elements?

|  |  |  |  |
| --- | --- | --- | --- |
| Element 1 | Element 2 | Element 3 | Name of compound |
| Iron | Sulphur | Oxygen |  |
| Magnesium | Nitrogen | Oxygen |  |
| Sodium | Chlorine | Oxygen |  |
| Tin | Carbon | Oxygen |  |