**1ºESO SCIENCE**

**UNIT 1: MATTER**

**CHEMICAL COMPOUNDS, CHEMICAL ELEMENTS AND ATOMS.**

Dear language assistant,

You are using a presentation during this class. The first slides are for reviewing what the students learnt the week before. They deal with measurements: how long?, how wide?, how tall?, how high?, how far?, how heavy? Just five minutes for the review, please.

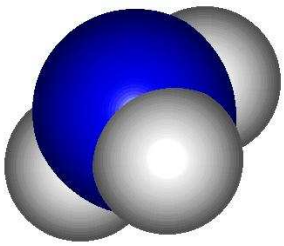
Then you will show them how to describe chemical compounds. This is the first class about this topic but the scientific ideas involved are very simple:

- Atoms: they are very small particles and they are drawn as balls.
- Chemical elements: they are balls in different colours.
- Chemical compounds or molecules are groups a several balls.

The English contents are also simple:

- How many...?
- There is/are.
- Numbers and colours.

Here you have an example of the questions and answers the students have to learn:



- How many elements are there in this molecule?
- There are two elements: blue and grey.
- How many atoms are there in this molecule?
- There are four atoms: three grey atoms and one blue atom.

Please, tell the students: "Ask me about this molecule" or "María, ask Antonio about this molecule" and "Antonio, answer Maria's question"

The second group of slides are chemical formulae. They are not drawings with balls, so they are harder to understand but not too much. The comments are similar but we don't say blue ball but oygen, hydrogen, iron and so on. The students know neither the chemical symbols nor the names of chemical elements in English so you will have to write them on the board as they appear in the slides. The following example belongs to water molecule ($H_2O$):

- How many different elements are there in this molecule?

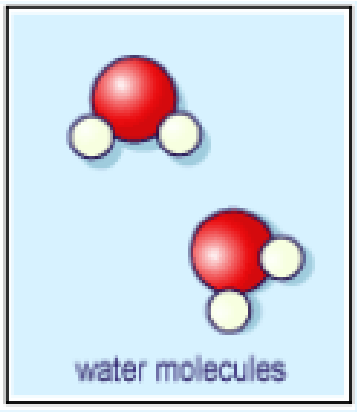
- There are two elements: hydrogen (H) and oxygen (O).
- How many atoms are there? There are three atoms: two atoms of hydrogen and one atom of oxygen.

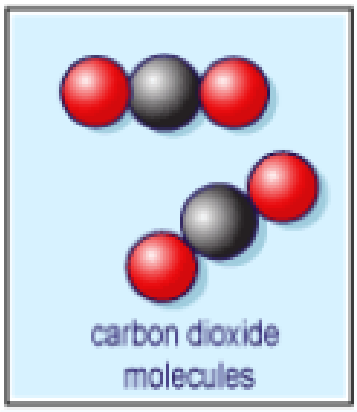
These are the formulae appearing in the presentation:

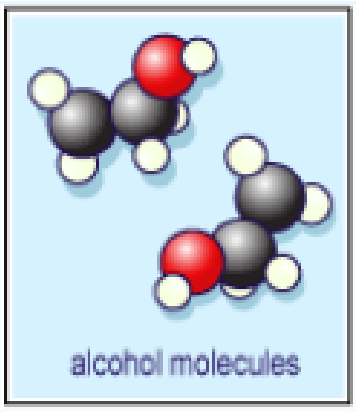
- $Fe_2O_2$: two atoms of iron (hierro) and three atoms of oxygen (oxígeno)
- $Au_2O$: two atoms of gold (oro) and one atom of oxygen
- $H_2SO_4$: two atoms of hydrogen, one atom of sulphur (azufre) and four atoms of oxygen
- $H_2O$ (water): two atoms of hydrogen and one atom of oxygen.
- $CaCO_2$: one atom of calcium (calcio), one atom of carbon (carbono) and two atomos of oxygen.

At the end they can open their Activity Book and do activity 35 in page 14 (they will have to draw balls in red because their sheets are not in colour).

35.Observa la descripción de la molécula de agua y haz lo mismo con la molécula de dióxido de carbono y con la de alcohol.




- How many elements are there in a water molecule? There are two elements: oxygen and hydrogen. How many atoms are there in a water molecule? There are three atoms.

Thank you