

1°ESO SCIENCE

UNIT 1: MATTER

MIXTURES, CHEMICAL ELEMENTS, MOLECULES AND BINGO

Dear language assistant,

Our next class deals with simple concepts of chemistry. Most of it is a review of concepts already studied but we would like the students to pay attention to the English pronunciation. These are the activities:

1. Write on the board: "Pure substances and mixtures". Remind them the meaning of these words (have one or more than one component). Then you can say some substances and they have to tell you if they are pure or mixed substances. Write them on the right place like this

Pure substances	Mixtures
Gold	Sea water (with salt)
Salt	Salad
Oxygen	Air (many gases)
Oil	Wine (includes alcohol)
Iron	Smoke

The students will copy this on their notebook and they will practise the pronunciation with your help.

2. Then you can teach how to translate some chemical elements into English and how to pronounce them. Write them on the board, please.

- Hidrógeno: hydrogen
- Oxígeno: oxygen.
- Oro: gold.
- Cobre: copper.
- Plata: silver.
- Hierro: iron.
- Carbono: carbon
- Nitrógeno: nitrogen.
- Calcio: calcium.

3. After that you can tell them that there are chemical symbols which are used all over the world. Sometimes the symbol is one letter (a capital one) and sometimes the symbol is a pair of letters (the second one is not a capital letter). You can dictate the symbols and, at the end, you can check if they are right.

- Hidrógeno: hydrogen → H
- Oxígeno: oxygen → O
- Oro: gold. → Au
- Cobre: copper. → Cu
- Plata: silver. → Ag
- Hierro: iron. → Fe

- Carbono: carbon → C
- Nitrógeno: nitrogen. → N
- Calcio: calcium. → Ca

4. Chemical compounds include several chemical elements. Let's practise with these formulae:

- H₂O: two atoms of hydrogen and one atom of oxygen.
- Fe₂O₃: two atoms of iron and three atoms of oxygen.
- AgO: one atom of silver and atom of oxygen.
- CuCO₃: one atom of copper, one atom of carbon and three atoms of oxygen.
- CO₂: one atom of carbon and two atoms of oxygen.

5. Bingo using 17 words (mixture, pure, iron, gold, water, oxygen, atom, wine, sand, oil, salt, filtration, magnet, air, smoke, ruler, scale). Each student gets a card with nine words. Then you define one of the seventeen words. They have to guess which word you are talking about. The students who have this word have to tick it on their paper. Then you choose another word and repeat the process. The students can say LINE or, at the end, BINGO.

You can see it in the seas, in the rivers... (water)
 It's a liquid, a yellow liquid and it is for cooking (oil).
 It has got two or more substances (mixture).
 It's a yellow metal. It costs a lot of money (gold).
 It is a gas and you need it to live (oxygen).
 It's white and you put it on the food (salt).
 It's the way to separate sand from water (filtration).
 It's a mixture of gases. It is in the atmosphere (air).
 It is a gas. The gas coming from a cigarette (smoke).
 An instrument to measure length (ruler).
 It has only one substance (pure)
 It is metal, a grey metal (iron).
 It's a solid thing that attracts metals (magnet).
 It is something very very small (atom)
 It's a liquid, a purple liquid and it has got alcohol (wine).
 You can see it at the beach. Children like playing with it (sand)
 An instrument to know the mass of a body (scale).

Thank you

Mixture	Iron	Water
Atom	Sand	Salt
Filtration	Magnet	Wine

Pure	Gold	Oxygen
Scale	Oil	Filtration
Magnet	Mixture	Air

Ruler	Pure	Iron
Air	Magnet	Filtration
Salt	Wine	Gold

Gold	Water	Oxygen
Atom	Sand	Mixture
Oil	Ruler	Wine

Pure	Smoke	Iron
Scale	Atom	Sand
Ruler	Magnet	Filtration

Salt	Air	Magnet
Wine	Water	Atom
Oxygen	Smoke	Pure

Salt	Ruler	Wine
Atom	Water	Sand
Iron	Smoke	Air

Ruler	Scale	Atom
Smoke	Oxygen	Iron
Gold	Pure	Mixture

Mixture	Iron	Water
Atom	Sand	Salt
Filtration	Magnet	Wine

Pure	Gold	Oxygen
Scale	Oil	Filtration
Magnet	Mixture	Air

Ruler	Pure	Iron
Air	Magnet	Filtration
Salt	Wine	Gold

Gold	Water	Oxygen
Atom	Sand	Mixture
Oil	Ruler	Wine

Pure	Smoke	Iron
Scale	Atom	Sand
Ruler	Magnet	Filtration

Salt	Air	Magnet
Wine	Water	Atom
Oxygen	Smoke	Pure

Salt	Ruler	Wine
Atom	Water	Sand
Iron	Smoke	Air

Ruler	Scale	Atom
Smoke	Oxygen	Iron
Gold	Pure	Mixture

