3. PURE SUBSTANCES & MIXTURES.

heterogenous mixture

pure substance

homogeneous mixture (solution)

All material objects around us are made of different substances. Most of material systems are mixtures, but we can find pure substances in Nature. Gold, salt or diamonds are some examples of pure substances. River water or sea water are mixtures (water has many substances in solution), but distilled water is a pure substance.
Pure substances have fixed and constant properties (like density, melting point or boiling point). If we heat up pure water, it boils at 100 ºC, and the temperature is constant during the phase change.
On the other hand, mixtures don't have fixed properties. If we add different quantities of salt to a litre of water, the density of the solution will be different.
Some mixtures (mineral water, steel, air) seem to be pure substances, we can't appreciate their composition, even with a microscope. They are homogeneous mixtures. In other mixtures, which are called heterogeneous mixtures, components are visible.

3.1
a) Translate the text into Spanish.

b) What is the difference between pure substances and mixtures?

c) What is the difference between homogeneous and heterogeneous mixtures?