

A Matter Quiz

Choose the best answer:

- Which is a substance?
 - Al (an element)
 - H₂O (a compound)
 - Both of these
- _____ is a substance in which all the **atoms** in it are alike.
 - NaCl
 - MgO
 - Cu
- Which is a compound? (compounds have one identity and are always put together the same way)
 - Air --- it contains about 80 % nitrogen and somewhere around 20% oxygen
 - blood --- it contains a water, sugar, protein, hemoglobin, red blood cells, white blood cells and a lot of other stuff...
 - Blood Sugar---it **always** has 6 atoms of carbon, 12 atoms of hydrogen and 6 atoms of oxygen in each molecule.
 - Brass --- it contains about 3/4 copper and about 1/4 zinc that has been melted and mixed. The actual composition of brass can vary a little.
- A _____ is a substance in which all the atoms are exactly the same.
 - solution
 - compound
 - mixture
 - element
- The diatomic substance HCl has:
 - only one atom
 - two of the same atoms
 - two different kinds of atoms
- Which of the following is a substance? (substances have **ONLY ONE** identity)
 - MgO
 - salt dissolved in water
 - sugar dissolved in water
 - milk
- Which is a solution?
 - nitrogen
 - milk (scatters a beam of light)
 - kool aid (doesn't scatter a beam of light)
 - sand mixed with water
- Which is heterogeneous?
 - dirt
 - iron
 - salt (NaCl)
 - ALL of THESE
- Which is heterogeneous, but looks like it is homogeneous? (a colloid)
 - copper
 - tin
 - coffee
 - sugar
- If you can separate a sample of matter **ONLY** by doing a chemical reaction, the matter was:
 - a solution
 - a mixture
 - a compound
 - heterogeneous