



CORE Questions



1	State the definition of an element.	A substance which is made up of only one type of atom.
2	What does the periodic table show you?	All of the elements (118)
3	True or False. The majority of elements are non-metals.	FALSE
4	A student wrote the symbol for magnesium as MG. Explain why he is wrong.	It should be Mg. The first letter is always a capital, the second letter is lower case.
5	Use your periodic table to write the symbols for: Lithium, Sodium, Potassium, Oxygen, Hydrogen and Iron.	Lithium (Li), Sodium (Na), Potassium (K), Oxygen (O), Hydrogen (H) and Iron (Fe)
6	State the definition of a compound.	A substance made up of two or more elements, bonded together
7	True or False. Air is an example of a compound.	False. Air is a mixture.
8	True or False. Oxygen is a compound.	False. Oxygen is an element
9	True or False. Magnesium Oxide is a compound.	True.
10	Name the compound formed when sodium reacts with oxygen.	Sodium Oxide
11	Name the compound formed when magnesium reacts with chlorine.	Magnesium Chloride
12	Use the periodic table. Name the elements in MgF ₂	Magnesium and Fluorine
13	Use the periodic table. Identify the elements in CaCO ₃	Calcium, Carbon and Oxygen
14	Use the periodic table. Identify the elements and the number of atoms for each element in CuCO ₃ .	Copper - 1 atom, Carbon - 1 atom, Oxygen - 3 atoms
15	Use the periodic table. Identify the elements and the number of atoms for each element in H ₂ O	Hydrogen - 2 atoms, Oxygen - 1 atom
16	Use the Periodic Table. What are rows in the periodic table known as?	Groups
17	Use the Periodic Table. What are columns in the periodic table known as?	Periods
18	Use the Periodic Table. What is the name of group 1?	The Alkali Metals
19	Use the Periodic Table. What is the name of group 7?	The Halogens
20	Use the Periodic Table. What is the name of group 0?	The Noble Gases
21	What is the center block of the periodic table called?	The Transition Metals
22	What type of metals are lithium, sodium and potassium?	Alkali Metals
23	Describe the trend in reactivity for the alkali metals.	Reactivity increases down the group.
24	What gas is released when sodium reacts with water?	Hydrogen
25	What alkali is made when potassium reacts with water?	Potassium Hydroxide
26	Describe the trend in reactivity for the halogens.	Reactivity decreases down the group.
27	Write the word equation for the reaction between lithium and fluorine.	Lithium + Fluorine -> Lithium Fluoride
28	What two elements reacted to form the product potassium chloride.	Potassium and Chlorine
29	Use the Periodic Table. Put the following elements in order of reactivity from most to least. Chlorine, Bromine, Fluorine, Iodine.	Fluorine, Chlorine, Bromine, Iodine
30	A student tries to react chlorine with potassium fluoride. Suggest why this will not work.	Fluorine is more reactive than chlorine.
31	Complete the word equation. Lithium Bromide + Chlorine -> _____ + _____	Lithium Bromide + Chlorine -> Lithium Chloride + Bromine
32	What type of gases are helium, neon and argon?	Noble Gases
33	The noble gases are chemically inert. What does that mean?	They are unreactive.
34	Use the Periodic Table. Which element has a lower boiling point, helium or Xenon?	Helium