IDENTIFYING ELEMENTS, COMPOUNDS AND MIXTURES

TASK 1: Count the number of atoms and elements in each substance. Then answer the questions below.

SUBSTANCE	NO. OF	NO. OF
O_2		
Fe_2O_3		
NH_3		
H_2SO_4		

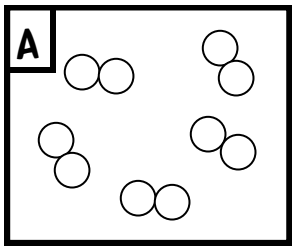
SUBSTANCE	NO. OF ATOMS	NO. OF ELEMENTS
Fe		
CO		
$C_6H_{12}O_6$		
N_2		

Which substances above are elements?

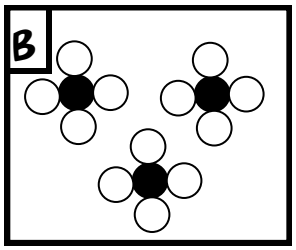
Which substances above are molecules of an element?

TASK 2: Look at the diagrams below and decide whether each one represents the particles in an element, a compound or a mixture (be specific with what it is a mixture of e.g. a mixture of compounds). Different colour atoms represent atoms of different elements.

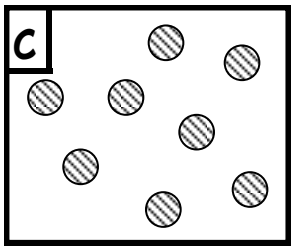
A



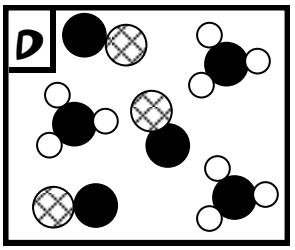
B



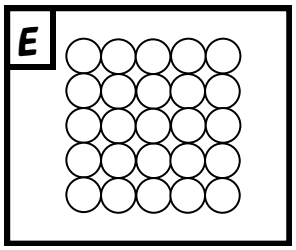
C



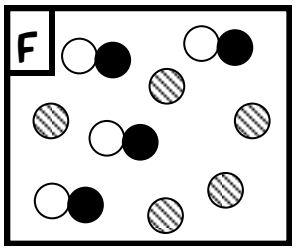
D



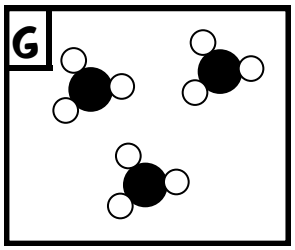
E



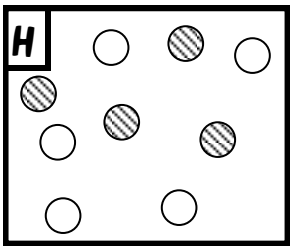
F



G



H



1. Which picture above (A-H) could represent oxygen (O_2) _____
2. Which picture above could represent ammonia (NH_3) _____
3. Which picture above could represent carbon monoxide and neon? _____
4. Write the formula for each of the following molecules in the diagrams.