Atoms, elements and compounds

- 1. Which of these is the smallest particle?
 - An atom
 - A molecule
 - A speck of dust
- 2. Which of these is the correct symbol for magnesium?
 - o MG
 - o mg
 - o Mg
- 3. Which statement about atoms and molecules is correct?
 - Elements always exist as separate atoms
 - o Elements always exist as pairs of atoms called molecules
 - \circ $\;$ Elements and compounds can exist as molecules
- 4. How many different atoms are there in a compound?
 - \circ One
 - o Always two
 - Two or more
- 5. Approximately how many elements are there?
 - ° 100
 - o **4**
 - o **1,000,000**
- 6. Which one is a compound?
 - o Water
 - o Hydrogen
 - o Helium
- 7. Which of these contains two carbon atoms and six hydrogen atoms?
 - $\circ \quad CH_4$
 - C₂H₆
 - o C₂H₄
- 8. Which of these contains four hydrogen atoms?
 - o CH₃OH
 - o H₂O
 - o H₂O₂
- 9. How many atoms are there in total in a molecule of sulfur trioxide, SO₃?
 - o Two
 - \circ Three
 - o **Four**
- 10. Why does air not have a definite formula?
 - \circ $\;$ It contains different amounts of water depending on where you are
 - \circ It depends on the temperature
 - \circ It is not a compound