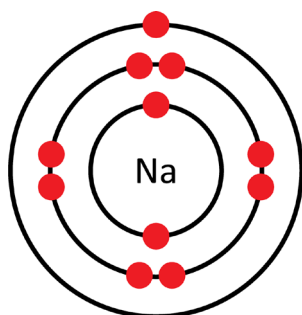
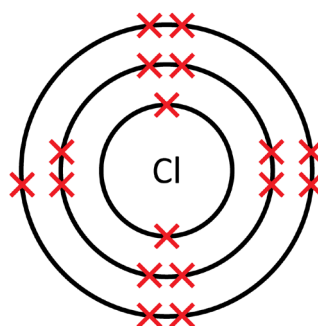
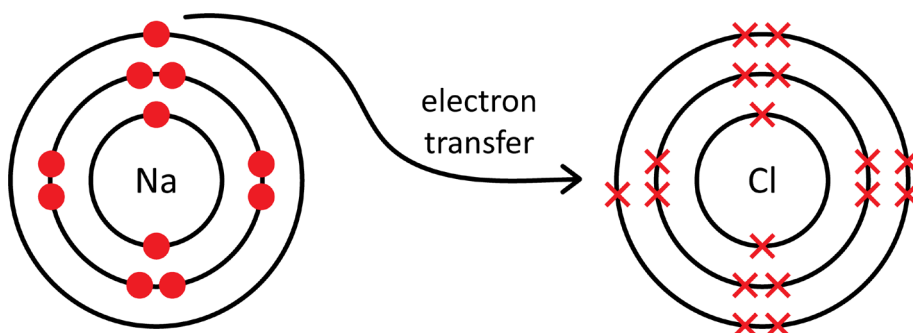
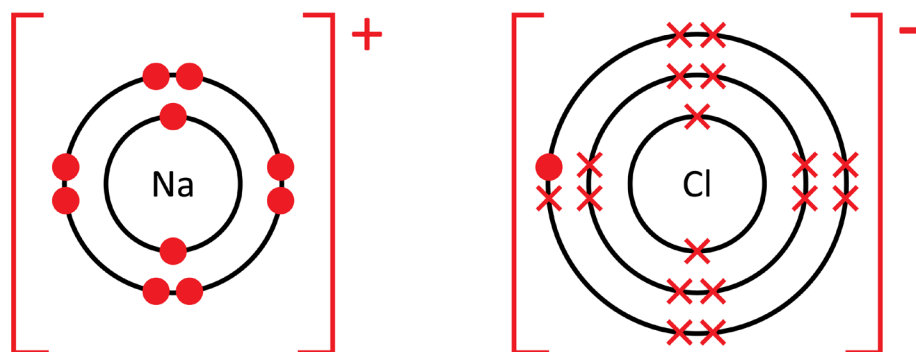


Name:

Class:



Complete the following diagrams

1. A diagram of a **sodium atom**.2. A diagram of a **chlorine atom**.3. A diagram showing the **electron transfer** between the sodium atom and the chlorine atom.4. The **ions that result** from the electron transfer.Calculate the total number of atoms in 10.0 g of sucrose, $C_{12}H_{22}O_{11}$.(relative formula mass: $C_{12}H_{22}O_{11} = 342$; Avogadro constant = 6.02×10^{23})

$$\text{Mol of sucrose} = \text{Mass} \div \text{Mr}$$

$$\text{Mol of sucrose} = 10.0 \div 342$$

$$\text{Mol of sucrose} = \frac{5}{171}$$

$$\text{Number of atoms} = 6.02 \times 10^{23} \times \frac{5}{171} \times 45$$

45 as there are 45 atoms in $C_{12}H_{22}O_{11}$

$$\text{Number of atoms} = 7.92 \times 10^{23}$$

Give the electronic configuration of a calcium **atom**.

2, 8, 8, 2

Describe what is meant by a covalent bond?

The attraction between a shared pair of electrons and the positive nuclei.