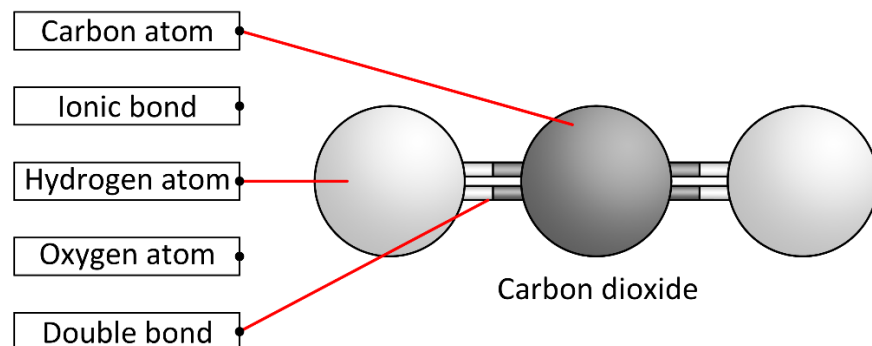


Name: .....

Class: .....



Here is a model of a molecule of carbon dioxide. Draw lines to link parts of this model to the correct labels. Some of the labels are incorrect.



What type of bonding is present in a molecule of carbon dioxide?

**Covalent (bonding)**

Is carbon dioxide a conductor of electricity?

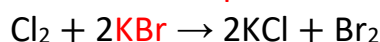
**No**

Amir reacts some chlorine solution with a solution of potassium bromide.

The solution turns brown.

i. Complete word and chemical equations for the reaction that happens.

chlorine + potassium bromide → **potassium chloride** + bromine



ii. Use the equations in part (i) to explain why the solution turns brown.

**Bromine is produced which is brown/orange in colour.**

**Accept: aqueous bromine is formed, which turns the solution brown/orange**

Give the formula of a sulfate ion.

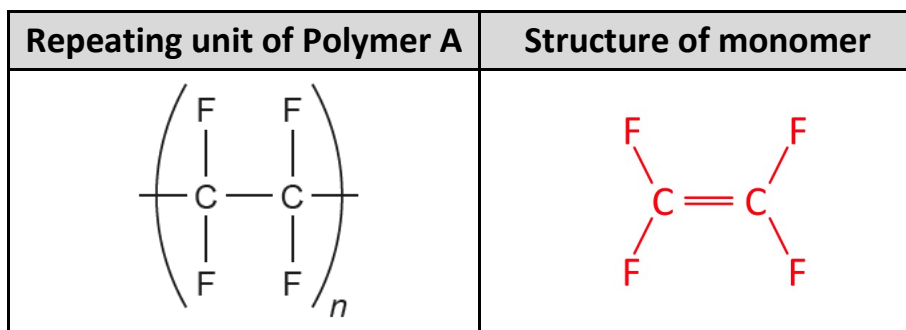


Name the following ion.



Polymer A is an addition polymer.

Draw the structure of the monomer that forms polymer A.



Explain how ionic compounds conduct electricity.

**An explanation to include:**

**Ionic compounds must be molten or aqueous for the ions to be able to move and so carry charge.**