Unit 9 - Activity 2 - Crystal Structure of Compounds

Examine the crystal structures of the following compounds and complete the table below.

Compound	Type of Particles in the Compound (metal, nonmetal, both)	Connections Within and Between Particles in the Compound (connected throughout, connected some, not connected)
1. Dry Ice (CO_2)		
2. Peroxide (H_2O_2)		
3. Sugar ($C_{12}H_{22}O_{11}$)		
1. Table Salt (NaCl)		
2. Marble ($CaCO_3$)		
3. Baking Soda ($NaHCO_3$)		

1. Based on the information in your data table divide the compounds in to two groups.

2. On a whiteboard, write a **"Rule for Identification"** for each group.

Your rule for identification must:

- Allow for correct classification of any compound.
- Identify the types of elements involved in each of the groups.
- Specify how the particles of each group are connected (connected throughout, connected some, not connected at all).