**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Candy Compounds**

Complete your key below based on the number and colors of gumdrops in your bag. Color each gumdrop in the key below to match the gumdrops in your bag.

 = Hydrogen  = Chlorine  = Oxygen

 = Sodium  = Carbon  = Calcium

**DIRECTIONS:** For each compound:

1. List the names of the elements and the number of each element.
2. State if each element is a metal, nonmetal, or metalloid.
3. State if the compounds are ionic or covalent.
4. Make the gumdrop model with the gumdrops and toothpicks.
5. Draw and color the gumdrop model.

| **Compound** | **Information**  List the names of the elements and number of each. | **Type of Element(s)**  State if the element(s) are metals, nonmetals, or metalloids. | **Type of Bond**  State if the bond is Ionic or Covalent. | **Gumdrop Model**  Make the gumdrop compound, and color the diagrams below according to your key. |
| --- | --- | --- | --- | --- |
| **H2**  Hydrogen Gas | H = Hydrogen = 2 | Nonmetal | Covalent Bond |  |
| **NaCl**  Sodium Chloride  Table Salt | Na = Sodium = 1  Cl = Chlorine = 1 | Na = Metal  Cl = Nonmetal | Ionic Bond |  |
| **H2O**  Water | H = Hydrogen = 2  O = Oxygen = 1 | H = Nonmetal  O = Nonmetal | Covalent Bond |  |
| **Na2O**  Sodium Oxide  Use: Ceramics | Na = Sodium = 2  O = Oxygen = 1 | Na = Metal  O = Nonmetal | Ionic Bond |  |
| **CaCl2**  Calcium Chloride  Use: De-icer | Ca = Calcium = 1  Cl = Chlorine = 2 | Ca = Metal  Cl = Nonmetal | Ionic Bond |  |
| **CH4**  Methane  (Cow Farts) | C = Carbon = 1  H = Hydrogen = 4 | C = Nonmetal  H = Nonmetal | Covalent Bond |  |
| **CO2**  Carbon Dioxide | C = Carbon = 1  O = Oxygen = 2 | C = Nonmetal  O = Nonmetal | Covalent Bond |  |
| **CHCl3**  Chloroform | C = Carbon = 1  H = Hydrogen = 1  Cl = Chlorine = 3 | C = Nonmetal  H = Nonmetal  Cl = Nonmetal | Covalent Bond |  |
| **CaCO3**  Calcium Carbonate  Use: Marble | Ca = Calcium = 1  C = Carbon = 1  O = Oxygen = 3 | Ca = Metal  C = Nonmetal  O = Nonmetal | Ionic Bond |  |
| **NaClO**  Sodium Hypochlorite/  Bleach | Na = Sodium = 1  Cl = Chlorine = 1  O = Oxygen = 1 | Na = Metal  Cl = Nonmetal  O = Nonmetal | Ionic Bond |  |
| **NaHCO3**  Sodium Bicarbonate  Use: Baking soda | Na = Sodium = 1  H = Hydrogen = 1  C = Carbon = 1  O = Oxygen = 3 | Na = Metal  H = Nonmetal  C = Nonmetal  O = Nonmetal | Ionic Bond |  |