



N<sub>2</sub>O  
N<sub>2</sub>O

**Section 1** → with the candle

- In our lab experiment, we found two properties that are different for ionic substances versus molecular substances. What were those two properties? conduct electricity? and melts at low temperature OR high temperature?
- Based on Thomson's Plum Pudding model, what has to happen to an atom for it to become positive. Draw the Plum Pudding model as part of your explanation.
 

NEUTRAL

POSITIVE
- The substance C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> is ( a molecular substance / an ionic substance )
- The substance Br<sub>2</sub> is ( a molecular substance / an ionic substance )
- In the formula SO<sub>4</sub><sup>2-</sup>
  - What does the 2 mean? [⊖⊖] ← the charge of this entire five atom ion totals up to "minus two"
  - What does the 4 mean? four atoms of oxygen but one atom of sulfur.
- If dropped into water and dissolved, zinc chloride would probably ( conduct electricity / not conduct electricity )  
↑ metal ↑ nonmetal
- In the following pair of substances, circle the one that would be expected to melt at a LOWER temperature:  
Br<sub>2</sub> or NaBr  
(molecular, melts easily)
- In the following pair of substances, circle the one that would be expected to melt at a LOWER temperature:  
C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> or KNO<sub>3</sub>
- Write the name of each of the following compounds.
 

CF <sub>4</sub>	carbon tetrafluoride
NO <sub>2</sub>	nitrogen dioxide
N <sub>2</sub> O	dinitrogen oxide
SO <sub>2</sub>	sulfur dioxide
- Write the chemical formula for each of the given names.
 

nitrogen triiodide	NI <sub>3</sub>
dinitrogen tetrabromide	N <sub>2</sub> Br <sub>4</sub>
diboron hexahydride	B <sub>2</sub> H <sub>6</sub>
carbon monoxide	CO

Study using the web site and all of your old sheets.

Purpose: Prepare for tomorrow's test.

Warmup: (copy this and fill in)

	$N_2O$	$Na_2O$
ionic or molecular?	molecular	ionic
name	dinitrogen monoxide	sodium oxide
conduct electricity if solid?	doesn't cond. when solid	doesn't conduct when solid
if dissolved?	doesn't conduct	does
melt easily?	melts easily	doesn't