Section 3A Review

	Name:
Part 1: Given the formulas for the compound, we write the formula.	rite the name. Given the name of the compound,
1) ammonium chloride	6) SO ₂
2) disulfur pentaoxide	7) SrO
3) phosphorus trihydride	8) CoCO ₃
4) barium iodide	9) Cl ₂ O ₇
5) carbon tetrafluoride	10) SeBr ₂

Part 2: For each of the following;

a) Draw the Lewis diagram for the following compounds.

b) Determine whether the molecule is polar, nonpolar or ionic

c) Then, draw the molecule in it's proper shape using the structural drawing method.

1) nitrogen trihydride

4) sulfur difluoride

2) carbon tetrachloride

5) phosphorous trihydride

3) CH₂S

6) calcium chloride

Part 3: Draw structural diagrams for the following alkanes. In addition, draw at least 1 isomer for each structure.
1) nonane
2) hexane

Part 4: Answer the following questions.1) What is the difference between an ionic and covalent compound in terms of:a) what creates the bonds between two atoms?

3) How do branches affect the boiling point of isomers of a compound?

b) the elements that can be involved in each type of bond?

4) What is the relationship between a substance's boiling point and the intermolecular forces in the substance?

c) the naming structure for each kind of compound?

5a) What is the relationship between the viscosity of a substance and the number of carbon atoms?

2) What affect does increasing the length of a carbon chain in an alkane (number of carbons) have on the boiling point of the substance?

b) How do the intermolecular forces change with viscosity and density?

6) How are the substances of crude oil separated in a refinery?