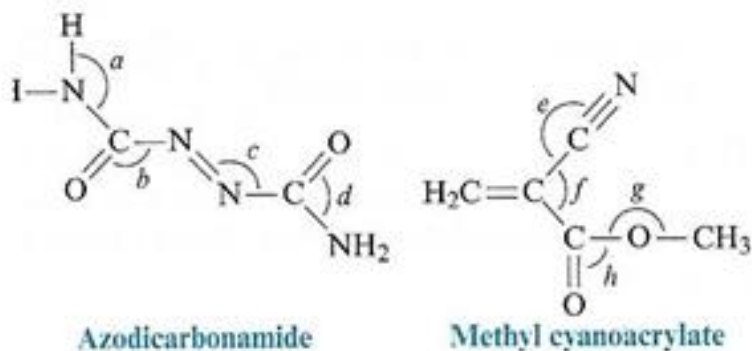


MOLECULAR SHAPE & POLARITY**Exit Ticket**

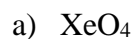
1. The structural formulas for two molecules widely used in the polymer industry are shown below:



- a) Complete the Lewis structures, showing all lone pairs of electrons.
- b) Determine the geometry and approximate bond angles marked a–h in the above structures:

	<i>Molecular geometry</i>	<i>Bond angle</i>		<i>Molecular geometry</i>	<i>Bond angle</i>
<i>a</i>			<i>e</i>		
<i>b</i>			<i>f</i>		
<i>c</i>			<i>g</i>		
<i>d</i>			<i>h</i>		

2. Draw Lewis structures and predict molecular shapes for each of the following molecules. Identify the molecules that are polar.

Molecular
geometry

Polarity

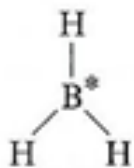
Y/N

Y/N

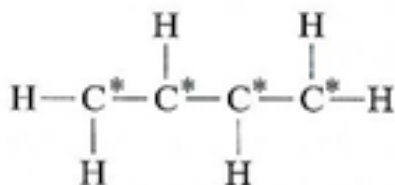
Y/N

3. Complete the Lewis structures of the following molecules. Predict the molecular geometry, polarity, bond angles and hybridization of the atoms marked by asterisks for each molecule.

a)



b)



4. The molecule N₂F₂ has two possible structures: one polar and one non-polar. Draw the Lewis structure for this molecule, predict the geometry about each N atom and explain how this is possible.