

Science 1206 Chemistry – Worksheet 4

1. Draw energy level diagrams for each of the following.

Sodium Atom	Nitrogen Atom	Al
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2. Name the element found in each of the following.

Period five and group IIIA	
Period four with seven electrons in the outer orbital	
Period five and an alkali metal	

3. Draw Energy Level diagrams for each of the following.

Oxygen atom	Neon	Phosphorous Atom
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4. Draw energy level diagrams for each of the following.

Sodium Ion	Nitride	Al <sup>3+</sup>
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5. Draw energy level diagrams for each of the following.

O <sup>2-</sup>	chloride	phosphide
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## 6. Fill-in the Blanks

<b>Ion Name</b>	<b>Ion Symbol</b>	<b>Group number</b>	<b># of protons</b>	<b># of electrons</b>	<b>Same # e<sup>-</sup> as which noble gas?</b>
sodium					
	S <sup>2-</sup>				
			35		
Fluoride					
			53		
			35		
aluminum					
			17		
			34		
	H <sup>+</sup>				