

7.1 - Introduction to Redox Reactions - Worksheet

1. Determine the oxidation number of each element in the following compounds.

		Hint	Oxidation Numbers for each Element			
a.	SnCl ₄	<i>Rule 2</i>	Sn _____	Cl _____		
b.	Ca ₃ P ₂	<i>Rule 2</i>	Ca _____	P _____		
c.	SnO	<i>Rules 4, 5</i>	Sn _____	O _____		
d.	Ag ₂ S	<i>Rule 2</i>	Ag _____	S _____		
e.	HI	<i>Rule 3, 5</i>	H _____	I _____		
f.	N ₂ H ₄	<i>Rule 3, 5</i>	N _____	H _____		
g.	Al ₂ O ₃	<i>Rule 4, 5</i>	Al _____	O _____		
h.	S ₈	<i>Rule 1</i>	S _____			
i.	HNO ₂		H _____	N _____	O _____	
j.	O ₂		O _____			
k.	H ₃ O ⁺	<i>Rules 3, 4, 6</i>	H _____	O _____		
l.	ClO ₃ ⁻	<i>Rules 4, 6</i>	Cl _____	O _____		
m.	S ₂ O ₃ ²⁻		S _____	O _____		
n.	KMnO ₄		K _____	Mn _____	O _____	
o.	(NH ₄) ₂ SO ₄		N _____	H _____	S _____	O _____

2. Determine the oxidation number of carbon in each of the following compounds:

a. methane, CH₄

b. formaldehyde, CH₂O

c. carbon monoxide, CO

d. carbon dioxide, CO₂