Honors Chemistry Redox Practice

name:

hour:

For the following substances, list the oxidation number of the indicated element.

Write the oxidation number above each element in the following reaction: $PbO_2 + 4HI \rightarrow I_2 + PbI_2 + 2H_2O$

13. Which substance is oxidized? _____

14. Which substance is reduced?

Write the reaction for the process where

15. A neutral metal atom "M" becomes a 2+ ion

16. A 4+ metal ion becomes a 2+ metal ion

17. A neutral nonmetal atom "X" becomes a 2- ion

State whether the following represents an oxidation, a reduction, or neither for the element on both sides of the arrow

19.
$$N_2 \rightarrow NH_3$$

20.
$$K_2Cr_2O_7 \rightarrow CrCl_3$$

21.
$$CO_2 \rightarrow CH_4$$
