

## Balancing Chemical Equations Worksheet

## Convert the following word equations into balanced chemical

1) Hydrogen gas reacts with oxygen gas to form water.  Balanced Equation:	
2) Sodium metal reacts with chlorine gas to form sodium chloride.  Balanced Equation:	1) Hydrogen gas reacts with oxygen gas to form water.
chloride.  Balanced Equation:  3) Iron reacts with copper(II) sulfate to produce iron(II) sulfate and copper metal.	Balanced Equation:
Balanced Equation:	2) Sodium metal reacts with chlorine gas to form sodium
3) Iron reacts with copper(II) sulfate to produce iron(II) sulfate and copper metal.	chloride.
and copper metal.	Balanced Equation:
	3) Iron reacts with copper(II) sulfate to produce iron(II) sulfate
Balanced Equation:	and copper metal.
	Balanced Equation:

## Balance the following equations while considering the spatial arrangement of molecules and stereochemical constraints

1) Balance the equation for the combustion of ethene (C<sub>2</sub>H<sub>4</sub>) while considering its planar structure.

## **Equation**:

2) Balance the equation for the hydrogenation of ethene into ethane, ensuring correct spatial orientation of hydrogen atoms.

Equation:  $C_2H_4 + H_2 \rightarrow C_2H_6$