

Group Name:

Chemical Reactions Worksheet

LibreTexts page: 4: Chemical Reactions

(<https://chem.libretexts.org/link?214153>)

Please don't edit, rearrange or delete anything that is already in this document. Just fill in the answers.

Shortcuts for superscripts and subscripts:

X^2 Superscript $Ctrl + .$

X_2 Subscript $Ctrl + ,$

Part I

Watch the videos posted in the Procedure section. Write your observations and equations below. **Use subscripts and superscripts.**

1. Magnesium + hydrochloric acid

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

2. Copper(II) sulfate + sodium phosphate

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

3. Cadmium (II) chloride + sodium sulfide

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

4. Nickel (II) chloride and sodium carbonate

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

5. Lead (II) nitrate and sodium sulfide

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

6. Nickel (II) chloride and sodium phosphate

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

7. Silver nitrate and sodium carbonate

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

Part II

Write your observations (what outcome would you expect) and equations below. Use subscripts and superscripts. There are no videos for these reactions. Use the solubility rules to predict the outcome.

1. Hydrochloric acid + sodium hydroxide

Observations:

Heat is released

Molecular equation:

Ionic equation:

Net ionic equation:

2. Ammonium chloride + sodium hydroxide

Observations:

Molecular equation:

Ionic equation:

Net ionic equation:

3. Copper(II) sulfate + sodium carbonate

Observations:

Molecular equation:

Ionic equation:

Net ionic equation: