

Word Equations

Standards:

- 3.1.10 C Apply patterns as repeated processes or recurring elements in science and technology.
- 3.4.10 A Explain concepts about the structure and properties of matter.

Write the unbalanced equation for each of the following reactions.

1. Solid zinc is added to an aqueous solution containing dissolved hydrogen chloride to produce gaseous hydrogen that bubbles out of the solution and zinc chloride that remains dissolved in the water.
2. Solid magnesium metal reacts with liquid water to form solid magnesium hydroxide and hydrogen gas.
3. Gaseous ammonia reacts with gaseous oxygen to form gaseous nitrogen monoxide and gaseous water.
4. Propane (C_3H_8) burns in oxygen gas, producing carbon dioxide gas, water vapor, and heat.
5. If pieces of calcium are added to water, the metal begins to bubble as hydrogen gas is produced. The water turns cloudy as solid calcium hydroxide also forms.

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