

Write out skeleton equations, put in state of matter symbols, then balance. Identify what reaction-type category it fits into.

1. Solid aluminum metal reacts with oxygen gas to produce solid aluminum oxide.
2. Electrical current through water. Electrolysis of water into its elements.
3. Solid iron rusts. Solid iron reacts with oxygen gas to produce iron(III) oxide.
4. Aqueous sodium dichromate is reacted with aqueous lead(II) nitrate to produce a solid precipitate of lead(II) dichromate and aqueous sodium nitrate.
5. Solid potassium metal is reacted with with water to produce aqueous potassium hydroxide and hydrogen gas.
6. Solid calcium reacted with liquid water to produce aqueous calcium hydroxide and hydrogen gas.
7. Solid zinc reacts with aqueous hydrochloric acid to produce aqueous zinc chloride and hydrogen gas.
8. Burning of methane gas, CH₄