

Answer on Question #44636 - Chemistry - Other

Question

Which of these is the correct word equation for the reaction, $2\text{Na (s)} + 2\text{H}_2\text{O (l)} \rightarrow 2\text{NaOH (aq)} + \text{H}_2 \text{(g)}$?

a.... Solid sodium reacts with liquid water to produce aqueous sodium hydroxide and hydrogen gas.

b.... Solid sodium reacts with liquid water to produce aqueous sodium hydroxide and liquid hydrogen.

c.... Solid sodium reacts with liquid water to produce aqueous sodium hydroxide and aqueous hydrogen.

d.... Aqueous sodium hydroxide and gaseous hydrogen gas react to form solid sodium and liquid water.

Answer:

Sodium is solid, water is liquid, sodium hydroxide is aqueous and hydrogen is gas.

So, the correct answer is "a.... Solid sodium reacts with liquid water to produce aqueous sodium hydroxide and hydrogen gas".

Answer: a...