

Will the reaction 'go'?

Here are two possible chemical reactions:

1. Barium hydroxide + ammonium chloride → ammonia + water + barium chloride
2. Aluminium + iodine → aluminium iodide

Bond enthalpy data suggest that reaction 1 would be **endothermic** ($\Delta H +ve$) and reaction 2 would be **exothermic** ($\Delta H -ve$).

Which reaction(s) would 'go' without any help?

To help you answer this question, consider if each of these statements is true or false. Decide on your answer and write an explanation.

	True	False
Only exothermic reactions will 'go' without any help.		
To make an endothermic reaction happen, heat is needed.		
Endothermic reactions don't go because they don't store energy.		
Exothermic reactions store energy. This is released when they 'go'.		
It is impossible to predict if a reaction will 'go' or not until you try it.		
Both reactions will 'go' but the endothermic reaction will be much slower than the exothermic one.		

Answer

Explanation