

6 Lithium is in Group I of the Periodic Table. Nitrogen is in Group V of the Periodic Table.

Lithium reacts with nitrogen to form the ionic compound lithium nitride,  $\text{Li}_3\text{N}$ .

What happens to the electrons when lithium atoms and nitrogen atoms form ions?

	lithium	nitrogen
<b>A</b>	each lithium atom loses one electron to form an $\text{Li}^+$ ion	each nitrogen atom gains three electrons to form an $\text{N}^{3-}$ ion
<b>B</b>	each lithium atom loses one electron to form an $\text{Li}^+$ ion	each nitrogen atom gains five electrons to form an $\text{N}^{5-}$ ion
<b>C</b>	each lithium atom gains one electron to form an $\text{Li}^-$ ion	each nitrogen atom loses three electrons to form an $\text{N}^{3+}$ ion
<b>D</b>	each lithium atom gains one electron to form an $\text{Li}^-$ ion	each nitrogen atom loses five electrons to form an $\text{N}^{5+}$ ion