

REDOX IN EQUATIONS

Determine what is oxidized and what is reduced in the following equations, using oxidation states. Complete the statements that follow each equation.

An example is provided for you below:

Example: $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$

Mg is *oxidized* because its oxidation state *increased* from 0 in Mg to +2 in MgO.

O₂ is *reduced* because its oxidation state *decreased* from 0 in O₂ to -2 in MgO.

1. $3 \text{Ca} + \text{N}_2 \rightarrow \text{Ca}_3\text{N}_2$

_____ is *oxidized* because its oxidation state *increased* from _____ in _____

to _____ in _____.

_____ is *reduced* because its oxidation state *decreased* from _____ in _____

to _____ in _____.

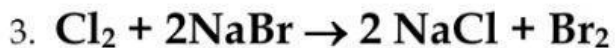
2. $4 \text{Fe} + 3 \text{O}_2 \rightarrow 2 \text{Fe}_2\text{O}_3$

_____ is *oxidized* because its oxidation state *increased* from _____ in _____

to _____ in _____.

_____ is *reduced* because its oxidation state *decreased* from _____ in _____

to _____ in _____.



_____ is *oxidized* because its oxidation state *increased* from _____ in _____
to _____ in _____.

_____ is *reduced* because its oxidation state *decreased* from _____ in _____
to _____ in _____.



_____ is *oxidized* because its oxidation state *increased* from _____ in _____
to _____ in _____.

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to _____ in _____.



_____ is *oxidized* because its oxidation state *increased* from _____ in _____
to _____ in _____.

_____ is *reduced* because its oxidation state *decreased* from _____ in _____
to _____ in _____.