

12. One limitation of the Brønsted-Lowry Theory of acids and bases is that it

- (a) does not explain reactions between acidic and basic oxides, such as  $\text{SO}_3(\text{g}) + \text{MgO}(\text{s}) \rightarrow \text{MgSO}_4(\text{s})$ , as they do not involve the transfer of protons.
- (b) does not explain the production of a neutral salt solution resulting from the reaction between a strong acid and strong base.
- (c) links acids and bases into conjugate acid-base pairs rather than accounting for the transfer of protons.
- (d) cannot explain the acidity and basicity of acidic and basic salts.