

Reactions: Unit 7

Practice Free Response 2

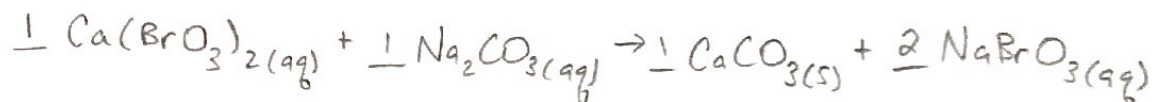
Directions: The suggested time is about 15 minutes for answering the constructed response section of the chemistry test. The parts within a question may not have equal weight. For calculations, show all your work in the spaces provided after each part. Pay particular attention to the proper use of units. Be sure your final answer is rounded to the correct number of significant figures. Make sure your work is legible. Illegible work will receive a grade of zero.

Question 1 [4 POINTS]

Aqueous calcium bromate reacts with aqueous sodium carbonate to form solid calcium carbonate and aqueous sodium bromate.



- A. Write the balanced chemical equation for the reaction of calcium bromate with sodium carbonate. [3 POINTS]



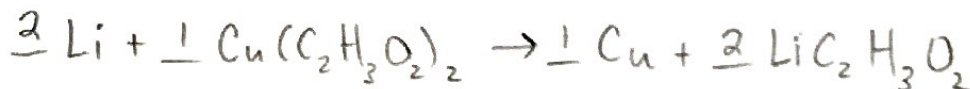
- B. What type of reaction is this? [1 POINT]

double replacement

Question 2 [6 POINTS]

Lithium metal reacts with copper (II) acetate.

- A. Write the complete balanced chemical equation for the reaction of Li with $\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$ by predicting the products. [3 POINTS]



- B. What type of reaction is this? [1 POINT]

Single replacement

- C. Could this reaction actually happen? Explain how you know. [2 POINTS]

Yes! On the activity series, Li is higher than Cu, so lithium is more active + able to replace Cu^{2+} in the compound $\text{Cu}(\text{C}_2\text{H}_3\text{O}_2)_2$.