

**2010 AP<sup>®</sup> CHEMISTRY FREE-RESPONSE QUESTIONS**

(b) Propane is burned completely in excess oxygen gas.

(i) Balanced equation:

(ii) When the products of the reaction are bubbled through distilled water, is the resulting solution neutral, acidic, or basic? Explain.

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(c) A solution of hydrogen peroxide is heated, and a gas is produced.

(i) Balanced equation:

(ii) Identify the oxidation state of oxygen in hydrogen peroxide.

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**YOU MAY USE THE SPACE BELOW FOR SCRATCH WORK, BUT ONLY EQUATIONS THAT ARE WRITTEN IN THE ANSWER BOXES PROVIDED WILL BE SCORED.**