NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

AP BIO LAB DAY PRELAB PREP

CELLULAR RESPIRATION- Lab Bench #5 (New lab 6)

1. Why are beads added to the respirometer containing dry peas?

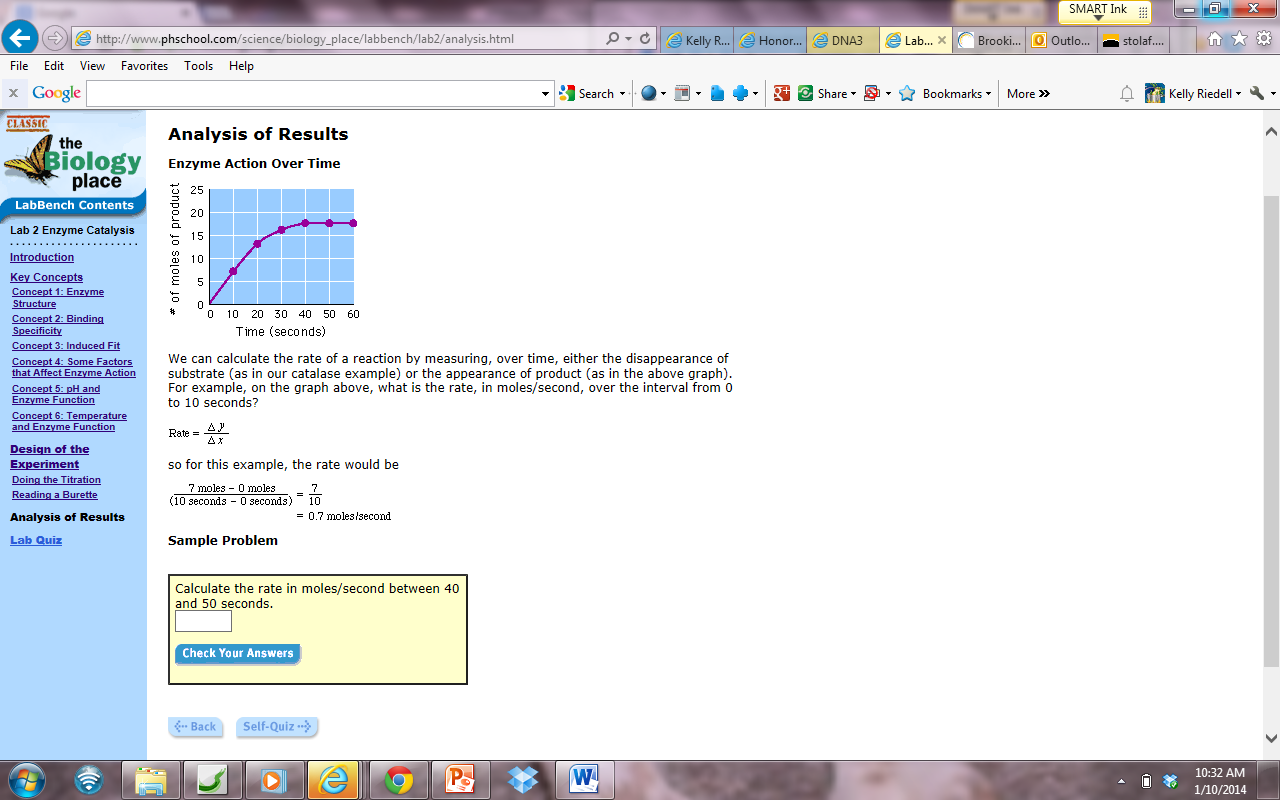
2. What is the purpose of having one respirometer with only beads?

3. What is the purpose of KOH in this experiment?

ENZYME CATALYSIS- Lab Bench # 2 (Additional lab in back of lab book)

1. What is the purpose of adding sulfuric acid (H2SO4) to the beakers during the experiment?

2. During titration you will add potassium permanganate (KMnO4) to the beaker and watch for a color change. Beaker A requires 5 mL and Beaker B requires 7 mL. Which beaker has the greatest amount of H2O2 remaining? Explain your answer.



3. What is the rate of reaction, in moles/second, over the interval   
from 0 to 10 seconds shown in the graph at the left?

MOLECULAR BIOLOGY – Lab bench # 6

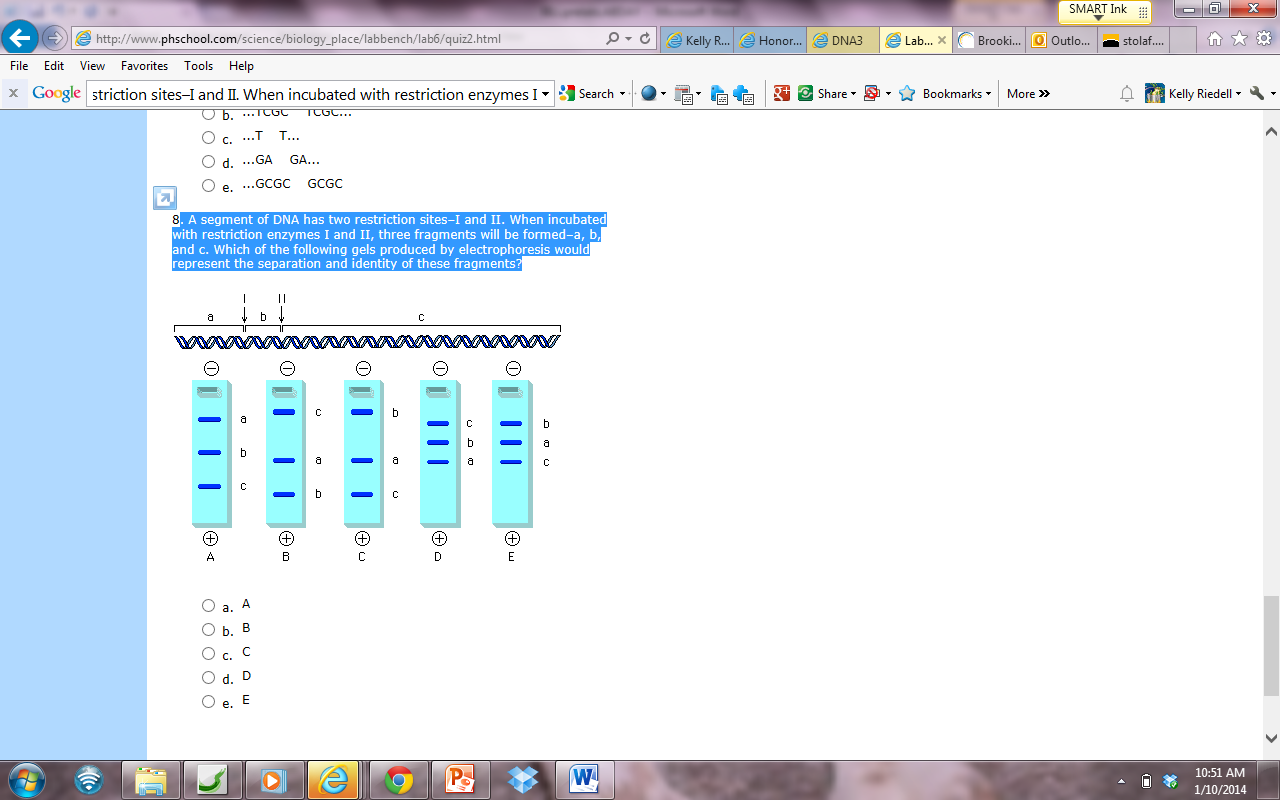
BACTERIAL TRANSFORMATION (New lab 8)  
1. What is the purpose of adding AMPICILLIN to the growth plates?

2. Name two procedures used in this experiment to make cells “competent”

RFLP ANALYSIS (DNA FINGERPRINTING (New Lab 9)

1. What is the purpose of the tracking dye when you run your gel?

2. Explain the relationship between fragment size and distance moved in RFLP analysis.



3. A segment of DNA has two restriction sites–I and II. When incubated with restriction enzymes I and II, three fragments will be formed–a, b, and c. Which of the following gels produced by electrophoresis would represent the separation and identity of these fragments?