

Bio 111 Pre-Lab for Lab #08: Name \_\_\_\_\_  
PTC I: DNA & PCR TA & Sect. \_\_\_\_\_

1) As the lab manual says, the ability to taste PTC is an autosomal dominant trait in humans.

a) Define appropriate genotype symbols for this trait and write them in the table below: (3 pts)

<u>allele</u>	<u>contribution to phenotype</u>
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b) Using these symbols give the genotypes of (indicate any ambiguities): (1 pt each)

- an individual who can taste PTC \_\_\_\_\_
- an individual who cannot taste PTC \_\_\_\_\_

2) Although we have not yet covered the Polymerase Chain Reaction (PCR), it is based on the familiar process of DNA replication. In the SPOC, go to the third "Recombinant DNA" lecture and watch the video section entitled "PCR Animation" and answer the following questions (you can also google PCR and find similar information):

a) What is the name of the enzyme that is used to amplify the DNA in a PCR reaction? (1 pt)

b) What is added to the PCR reaction so that it amplifies one specific part of the DNA in the reaction? (1 pt)

3) What is the quickest way to wreck a pipetman? (2 pts)

4) On the back of this sheet, give 3 to 5 short (~1 sentence each) bullet points describing, *in your own words*, what you will be doing in the lab today. There are a wide range of full-credit answers here; we will grade this as a 1-point check off.

