

## Pre Lab 8: Unknown Molecular Part II: Agarose Gel and PCR Purification

Review the PCR purification principle on pg 12 – 16. Complete the table below.

**Table 1:** Purpose of buffers used in PCR purification

Buffer	Reason for using
PB	
PE	
EB	

**10 marks**

## **Lab Worksheet 8: Unknown Molecular II**

1. Include a figure of your gel. **Use clear labelling or a figure legend** to indicate the lane that contains your sample. **2 marks**
2. Using the DNA molecular weight ladder, what is the size of your PCR product? If you didn't have a product, use another lane in the gel image. **1 mark**
3. **What was the purpose of the PCR in our semester-long experiment on your environmental isolate? 1 mark**
4. Was your PCR successful? Explain why or why not. **2 marks**
5. Explain the result of the PCR negative control on the gel. **1 mark**
6. Explain the result of the PCR positive control on the gel. **1 mark**
7. Show your calculation for adjusting the concentration of your DNA sample. **Report your answer as the volume of DNA sample you'd pipette (e.g. round to a number that you are able to accurately pipette). If you didn't have a sample, show the calculation if your sample was 47 ug/ul and you were adjusting it to 10 ug/ul. 2 marks**