

Name: _____ Date: _____ Class: _____

Gel Electrophoresis Virtual Lab Worksheet

Instructions

Go to the following link and complete the gel electrophoresis virtual lab:

https://www.classzone.com/books/hs/ca/sc/bio_07/virtual_labs/virtualLabs.html

Select “Gel Electrophoresis” from the list and start the virtual lab.

The lab is based on using gel electrophoresis for DNA fingerprinting. In our lesson, we discussed using gel electrophoresis for nanotechnology, specifically determining if the PEG molecule has been attached to the quantum dot. Even though this lab presents a different application for gel electrophoresis, the lab helps you to understand how this method works!

Questions

1. Gel electrophoresis is a technique used for _____
2. What is the purpose of the power supply?
3. The TBE buffer solution is used to help _____.
4. Shorter strands of DNA travel _____ on the agarose gel than do larger strands.
5. Once an electric current is applied, notice that the _____ is closest to the wells, and the _____ is farthest from the wells.
6. Which suspect is the victim? _____
How do you know? _____
7. Do you think you would find the largest or the smallest fragment of DNA closest to the well? Explain.