



Forensic Science: Gel Electrophoresis Online Activity

<http://learn.genetics.utah.edu/content/labs/gel/>

Please allow the activity to load

In this activity, you will learn how Gel Electrophoresis is used in Forensics. Go to the website above to start.

As you watch what happens on each slide, be sure to read all of the explanations in yellow in order to answer the questions below. When you have answered all of the questions pertaining to the slide you are on, you may click on the "forward" button to move to the next slide. Some slides ask you to complete lab steps by clicking and dragging various items on the screen. Be sure to complete these before moving to the next slide. You do not need to answer in complete sentences.

1. DNA is sorted according to _____.	Length
2. What other molecules can this technique be used for?	
3. What does the gel look like under the microscope?	Jell-O
4. What goes into the holes at the end of the gel?	DNA
5. How is DNA made to move through the gel?	
6. Does DNA have a positive or negative charge? How can you tell??	Positive, a negative charge repels it.
7. What is the purpose of staining?	
8. What is the agarose made from?	
9. Why is buffer added to the electrophoresis box? What is the purpose of this buffer?	
10. Why is the loading buffer necessary?	
11. What is the DNA size standard, and why is it used?	
12. What type of charge does DNA have? Because of this, which way will it move (toward red or black)?	
13. What sized fragments migrate the furthest? Why is that so?	
14. What is the function of the ethidium bromide?	