

Electrophoresis Tutorial

Go to this website:

<http://learn.genetics.utah.edu/units/biotech/gel/>

Follow the online tutorial instructions and answer the questions below. The questions follow the order of the tutorial.

1. When do scientists use gel electrophoresis?
2. What is the "gel?"
3. Where do the DNA samples go?
4. What makes the DNA move?
5. Which DNA strands will move more quickly?
6. Which DNA strands will move most slowly?
7. What happens to the DNA strands of the same length?
8. List 5 things you need to make a gel.
9. What can you use to cook the agar?
10. What is the purpose of the comb?
11. List 3 things you need to run a gel.
12. List 6 things you need to load the DNA samples into the gel.
13. What is the purpose of loading buffer?
14. Why do we use a DNA standard?
15. Which cord on the gel box is negative? Which cord is positive?
16. What can you see in the gel box that proves the electricity is running?
17. What is the name of the stain we use to see the DNA?
18. Can this stain hurt you? If so, how? How should you protect yourself?
19. What do we use for light when looking at the gel?
20. What are the 3 estimated sizes for the gel bands?

