**Gel electrophoresis questions**

Go through the website linked here: <http://learn.genetics.utah.edu/content/labs/gel/>

Please answer these questions electronically and email your responses to: [ndilugli@houstonisd.org](mailto:ndilugli@houstonisd.org)

1. What technique is used to sort pieces of DNA?
2. What other molecules can be sorted with this technique?
3. What is an important property of the gel used in this technique?
4. What type of charge is needed at the bottom of the gel in order to move the DNA from the top of the gel to the bottom?
5. Which size strands travel the farthest and end up towards the bottom of the gel?
6. Which size strands travel the least and end up towards the top of the gel?
7. How do the different sized pieces of DNA show up on the gel?

**Now it’s your turn to run a gel!**

1. Describe the form that the agarose is in before you prepare the gel.
2. What is the purpose of the comb that is placed in the gel?
3. After the gel cools, what do you need to do so that it is ready to use?
4. What is the purpose of the buffer?
5. What is the purpose of the loading dye?
6. What is the purpose of the DNA size standard?
7. What is the proof that a current is running through the electrophoresis set up?
8. What is used to stain the DNA?
9. Take a screen shot of the “Congratulations!” page of the gel and paste here.