**CELL BIOLOGY AND PHYSIOLOGY LAB**

**LABSTER SIMULATIONS Name:**

**Students must PRINT these worksheets and HANDWRITE your answers. Please keep all worksheets together in a binder.**

**CELL CULTURE LAB – Use the PowerPoint to also help with these questions.**

1. Define *in vitro*.
2. Our lab is a Biosafety Level \_\_\_\_\_ Lab.
3. Why is cell adhesion important?
4. Why is an incubator with 5% CO2 needed?
5. What is DMEM?
6. Why is L-glutamine used in media?
7. What is phenol red used for?
8. Where should cell culture media be stored?
9. Why is fetal bovine serum added to the media?
10. Why do you have to warm the reagents first?
11. What is a HEPA filter?
12. Why do you want to thaw cells quickly?
13. What is confluency?
14. What is trypsin?
15. Does trypan blue stain live or dead cells?
16. Why is it important to cryopreserve cells?
17. What is DMSO?
18. What is the proper way/rate to freeze cells?
19. How are mammalian cell lines used to create vaccines against viruses?
20. Who is Henrietta Lacks?
21. Why are transformed cells and stem cells used a lot in cell culture?
22. What are the misunderstandings when dealing with vaccine development in human cell lines that were originally taken from fetal tissue?