

Name: _____

Date: _____

Modeling Biologics Manufacturing Quiz

Student Quiz – Answer Key

1. What process did you model in this lesson plan?
 - a. **Biologic manufacturing**
 - b. Drug development
 - c. Pharmaceutical company

2. What are the three steps of the biologic manufacturing process?
 - a. Cell presentation, cellular explosion, and antibody retrieval
 - b. **Cellular expansion, cellular lysis, and filtration for purification**
 - c. Complementary base pairing, protein translation

3. Where does biologic manufacturing take place in a research lab?
 - a. In a flammable safe container
 - b. In a cup or container
 - c. **In a bioreactor**

4. What happens in the cells during the cellular expansion process?

Proteins are produced by the cells

5. How can proteins be harvested from inside the cells?

Cell lysis or breaking open of the cell's plasma membrane

6. How can proteins be separated from cell debris?

Purification through filtration