**On matching series, the same answer may be used 0, 1, or more times.**

1.  You count 174 colonies on your 1:100 diluted milk plate. How many colonies does this represent in the original sample?          A. 174 x $10^{100}$/ ml          B. 174,000,000/ml          C. 17, 400/ml          D. 174/ml

2.  What is the name for the type of tube we used to detect the production of gas by a culture?

_____

*Regarding our pGLO transformation experiment:*

3.  _____ Our pGLO transformation included a resistance gene against this substance.

4.  _____ This prevented growth of untransformed bacteria.

5.  _____ This triggered the expression of GFP in transformed cells.

Key for # 3 – 5:
A. UV light
B. streptomycin
C. lactose
D. arabinose
E. ampicillin

_____

*Regarding our water tests:*

6.  What is the appearance of a positive lactose broth?

7.  What is the appearance of fecal coliform colonies on EMB agar?

_____

*Regarding our HIV and ELISA exercise:*

8.  _____ In our indirect ELISA, this substance was adhered to the bottom of the wells on the microtiter plate.

9.  _____ Our indirect ELISA was meant to detect this substance.

10. _____ This substance converted a substrate to a new, visible form.

11. _____ BONUS #1: In a direct ELISA, this substance would be adhered to the bottom of the wells.

Key for # 8 – 11:
A. substrate / chromogen
B. HIV antigen
C. HIV antibody
D. enzyme
E. antibody to HIV antibody

_____

12. BONUS #2: The gene we used for green fluorescent protein (GFP) was originally isolated from what organism?