

Name: _____

Period: _____

TRANSFORMATION EFFICIENCY

1. **Total amount of DNA** (ug) = (concentration of pGLO DNA plasmid) x (volume of pGLO DNA plasmid)

_____ = _____ x _____

2. *DNA Fraction* = (volume of cells spread on plate) / (volume of transformation buffer + volume of LB broth)

_____ = _____ / (_____ + _____)

3. *pGLO spread* = (**Total amount of DNA**) x (*DNA fraction*)

_____ = _____ x _____

4. *Transformation efficiency* = (number of colonies) / (*pGLO spread*)

_____ = _____ / _____

LAST STEP

Percentage = (*Transformation efficiency* / 7000) x 100% ***

***Divide by 7000 because that is the optimum transformation efficiency

_____ = (_____ / 7000) x 100%