**Hemacytometer Pre-Lab** 

(Use Counting Cells in the *Plating Cells Protocol* for reference)

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1. Watch “Counting Cells” Cell Block (Vidoe)

2. Box the four squares on the grid that you are going to count.



3. Count at least 3 out of the 4 boxes on one side of the hemacytometer and get the average cells/mL. (the average of your counts x104gives the cell concentration per mL.

a. Example: Hema count: 133, 145, 128, 154 Avg = 140, 140x104cells/mL b. When you are counting your cells, you will also count the boxes on the opposite side of the hemacytometer

Hema count: Avg = \_\_\_\_\_\_\_\_\_\_ Cells/mL = \_\_\_\_\_\_\_\_\_

4. Find the number of mL you need from your flask of cells to get the total number of cells needed.

a. Example:

total cells needed . 8x106 cells . = 5.7 mL of cells

average cells/mL 1.4x10~~6~~ cells/mL

Take this amount

from flask of cells and

add to a centrifuge

tube

∙ You are plating 12 wells with a concentration of 6x105cells/well. You will put 2 mL of cell suspension (cells from flask + media) in each well. (Don’t forget to make extra.)

Total number of cells needed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Total volume: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Volume needed from the flask of cells: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Volume of media needed to add to cells: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. opposite side of the hemacytometer.

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