

Exoplanet Names: _____

Drake Equation In-Class Lab

1. Compare your factor tables from the prelab between group members. Your answers to the first three factors should be the same. If they're not, please note any discrepancies below and describe how you arrived at a final value. Fill those values into the table on the next page.

2. The last four factors are much more subjective and there should be a range of estimates among members of your group. Describe the range of estimates among your group members and agree as a group on both a "pessimistic" and "optimistic" value for those factors. Describe the considerations that went into each estimate below, then fill in the estimates on the next page.

factor	Range of values among group members	Description of considerations leading to optimistic estimate	Description of considerations leading to pessimistic estimate
f_i			
f_i			
f_c			
L			

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3. Fill in your groups' values for the factors in the table below. Use them to compute the value in the final row.

Factor	Value (with units!)	
n_s		
T <i>remember to divide by this!</i>		
f_p		
	Optimistic Estimate (with units!)	Pessimistic Estimate (with units!)
f_l		
f_i		
f_c		
L		
Final Estimates		

Followup questions:

- 1) Which of the factors were the hardest to estimate and why?

- 2) What did you find most surprising or interesting about this calculation?

