Appendix 5

Drake Equation:

 $\mathbf{N} = \mathbf{R}_* \mathbf{f}_p \mathbf{n}_e \mathbf{f}_\ell \mathbf{f}_i \mathbf{f}_c \mathbf{L}$

Ν	=	number of communicable civilizations in our galaxy.
R _*	=	rate at which stars form.
$\mathbf{f}_{\mathbf{p}}$	=	fraction of stars that have planetary systems.
n _e	=	number of planets, per planetary system, that are suitable for life.
\mathbf{f}_ℓ	=	fraction of planets suitable for life on which life actually arises.
$\mathbf{f}_{\mathbf{i}}$	=	fraction of life-bearing planets where intelligence develops.
f_c	=	fraction of planets with intelligent life that develop a technological phase during which there is capability for and interest in interstellar communication.
L	=	average lifetime of communicable civilizations.
r	=	average distance to nearest civilization.

