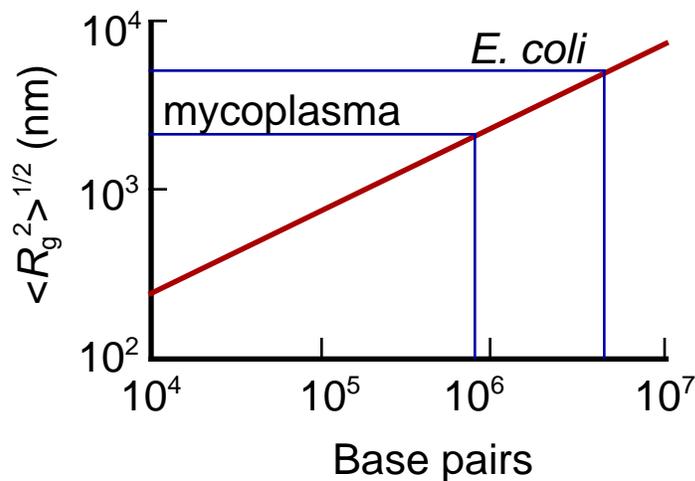# HOW TO STORE THE BLUEPRINT

CONTOUR LENGTH L_C

RANDOM WALK

SIZE OF RANDOM WALK SCALES LIKE $(\xi_p L_c)^{1/2}$

ξ_p = PERSISTENCE LENGTH = 53 nm

L_C = [# GENES] x [1000 bp] x 0.34 nm

(CODING REGION)

ESTIMATED SMALLEST VIABLE CELL HAS
250 GENES = 2.5×10^5 bp

EARLY CELLS MAY HAVE USED A MORE FLEXIBLE
BLUEPRINT THAN DNA