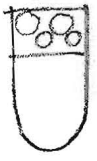
Sedimentation velocity centrifugation vs Equilibrium density centrifugation

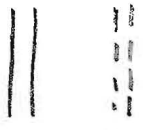
	sed. velocity	equil. density
a. How gradient forms	preformed (if any)	forms during experiment
b. where sample is placed	on top	in mixture
c. how long spin is	short	long
d. what separate by	size (M/shape)	density
e. what would separate	big & small balls	heavy and light balls
f. what you measure	velocity (S value)	equilibrium position

Test Tube at Start:



Test Tube after Centrifugation:

Possible Modes of DNA Replication**

Mode of Replication:	Semiconservative	Conservative	Dispersive
DNA After one doubling:			
Native:			
Denatured:			
Native DNA			
Density	all hybrid	1/2 H & 1/2 L	all hybrid
# Bands in 'fuge	1	2	1 (broad?)
Denatured DNA			
Density	1/2 H & 1/2 L	1/2 H & 1/2 L	all hybrid
# Bands in 'fuge	2	2	1 (broad?)

DNA After 2 doublings – What results are expected?
You draw the pictures and fill in the chart! To check your answers, see the figs. in the texts.

** For more details, consult your texts. Pages differ in each edition & text – look up 'Meselson' in the index. (This experiment was done by Meselson & Stahl.)