

1. (3 points) Each of the letters of the term CIB have a specific meaning and a specific reason for being in the technique. Complete the following table

<u>letter</u>	<u>letter stands for:</u>	<u>specific reason for having this feature</u>
C		
I		
B		

2. (6 points) Complete the following table

Appearance Under the Microscope (**Caution:** terms homozygote and heterozygote may not be appropriate for some mutations)

Chromosome mutation	Model	Mitotic chromosomes		Pachytene chromosomes		Anaphase-1 Heterozygote
		Heterozygote	Homozygote	Heterozygote	Homozygote	
paracentric inversion						

3. (1 point) In our studies dealing with chromosome mutations it is important to consider chromosomes which are tightly paired – like in polytene and pachytene chromosomes.

Exactly why is this important for the identification of chromosomal mutations?