



1. (3 points) The following table shows a meiotic chromosome in the pachytene stage. Draw a model of this kind of chromosome.

stage	under the microscope	model
pachytene		

2. (3 points) Here a diagram of an illustration seen in the textbook. It is said to be in diplotene showing chiasmata. In the space to the far right draw a better diagram; one which shows your understanding of chromatid cohesion.

	
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3. (1 point) What is a karyotype?

4. (1 point) Define the term independent assortment as it applies to Mendelian genetics.

5. (1 point) What are the pseudoautosomal regions of the human X and Y chromosomes.

6 (1 point) Why is it important to have bivalents at metaphase-I?