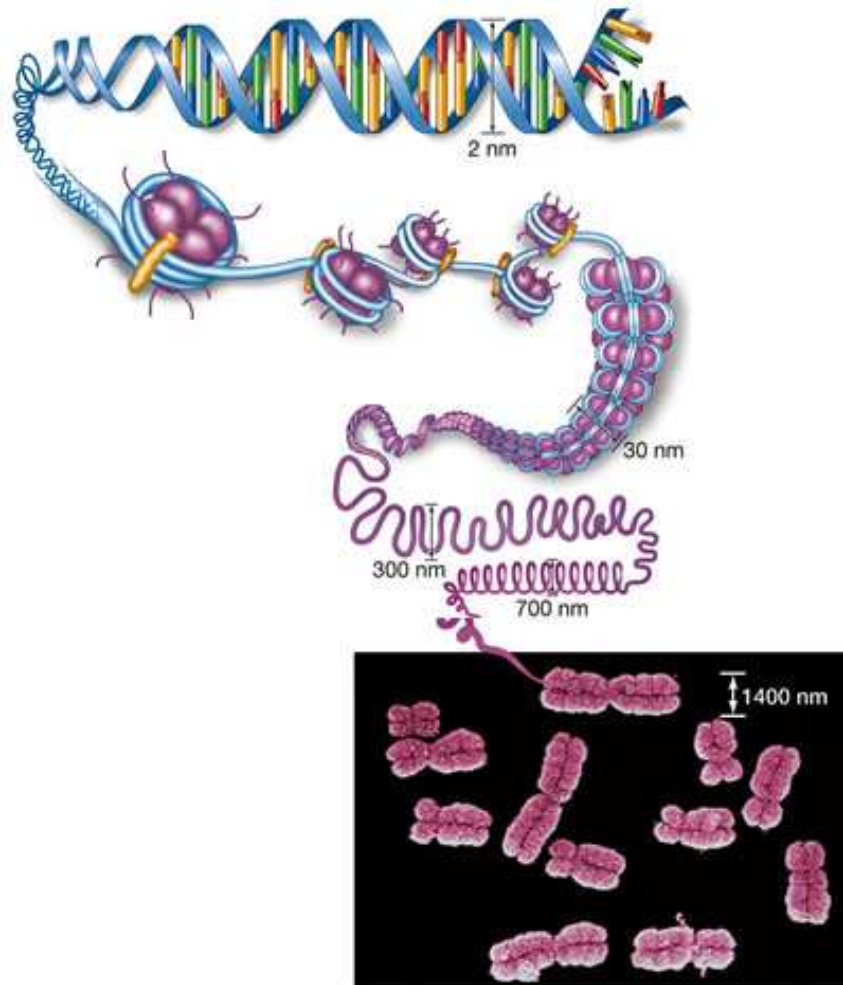


## CHAPTER 9.3: Cell Division

1. Label and make notes on the diagram below to describe the organization of the eukaryotic chromosome, based off of **Figure 9.8**.



2. Define the following terms.

a. karyotype \_\_\_\_\_

b. haploid \_\_\_\_\_

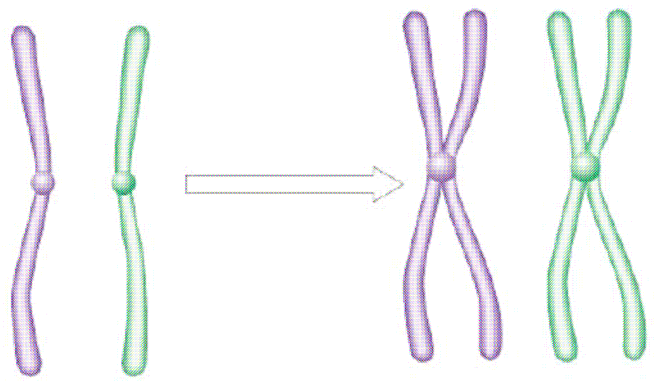
c. diploid \_\_\_\_\_

d. homologous \_\_\_\_\_

e. centromere \_\_\_\_\_

f. chromatid \_\_\_\_\_

3. Make notes on the following diagram to distinguish between homologous chromosomes and sister chromatids.



4. Why is DNA coiled into chromosomes in eukaryotes?

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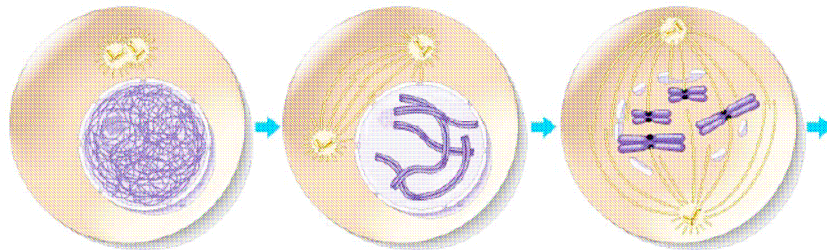
5. Explain the role of the centromere, kinetochores, and the microtubules in mitosis.

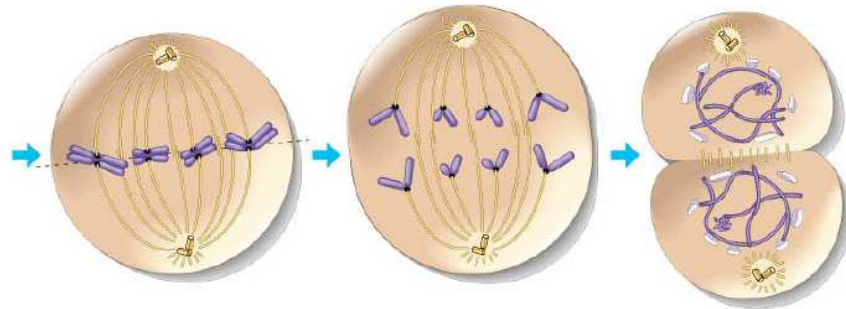
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6. Although these are not the diagrams from your text, I think they illustrate the stages of mitosis quite well. Label the stages and list the key features of each stage.



		Telophase & Cytokinesis

7. How does cytokinesis differ in animal and plant cells? Label the diagrams below.

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