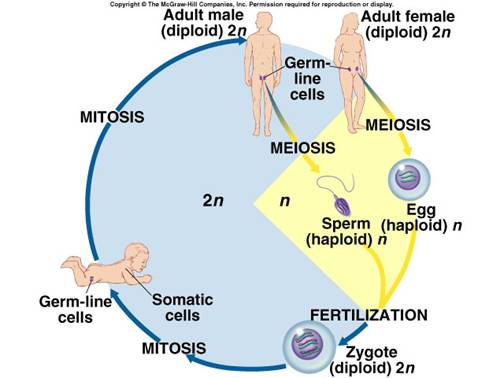
**Chapter 11.4 Meiosis, Genetic Variation, & Sexual Reproduction**

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| Objectives | Vocabulary | |
| * **Summarize** the events that occur during meiosis. * **Relate** crossing-over, independent assortment, and random fertilization to genetic variation. * **Differentiate** between homologous chromosomes, autosomes, and sex chromosomes. * **Compare** haploid and diploid cells. | * Haploid * Diploid * Somatic cell * Germ line cell * Gamete * Meiosis | * Crossing over * Independent assortment * Sex chromosomes * Autosome * Homologous chromosome |

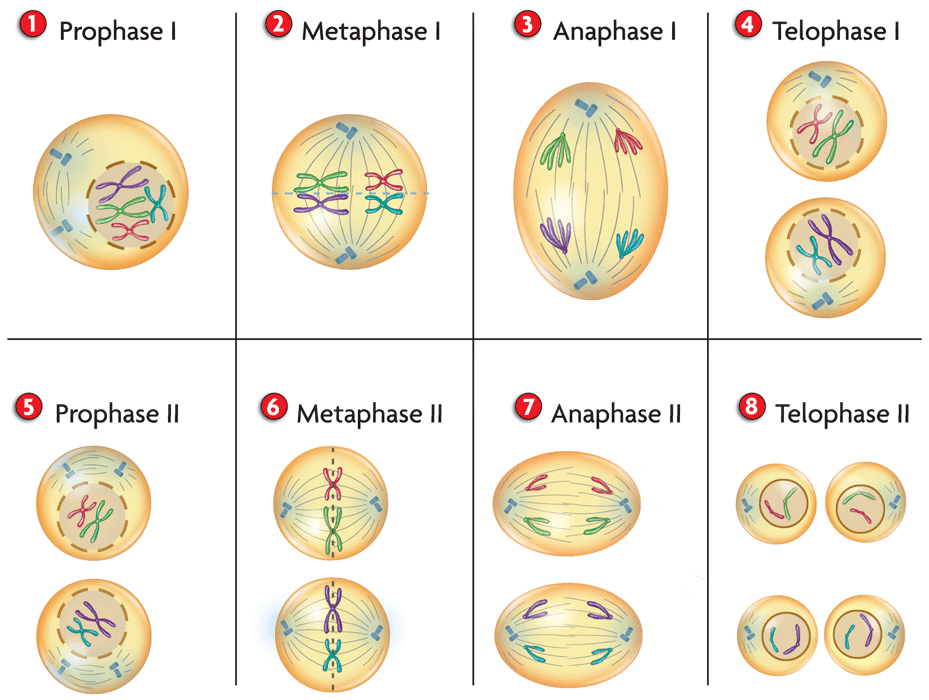
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| Vocabulary | Definition |
| Somatic Cell |  |
| Diploid |  |
| Germ line Cell |  |
| Gamete |  |
| Haploid |  |
| Autosome |  |
| Sex Chromosome |  |
| Homologous Chromosomes |  |

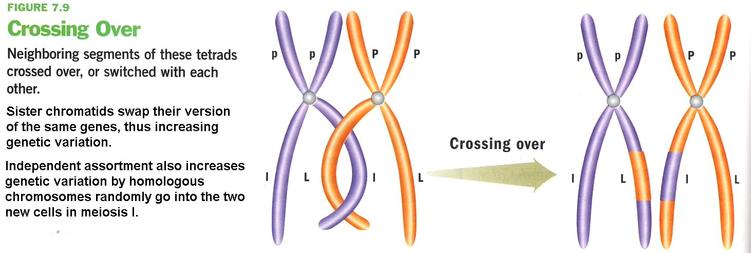


***If a zygote divides and grows through mitosis, how does our body contain so many different types of cells?***

**Formation of Haploid Cells**

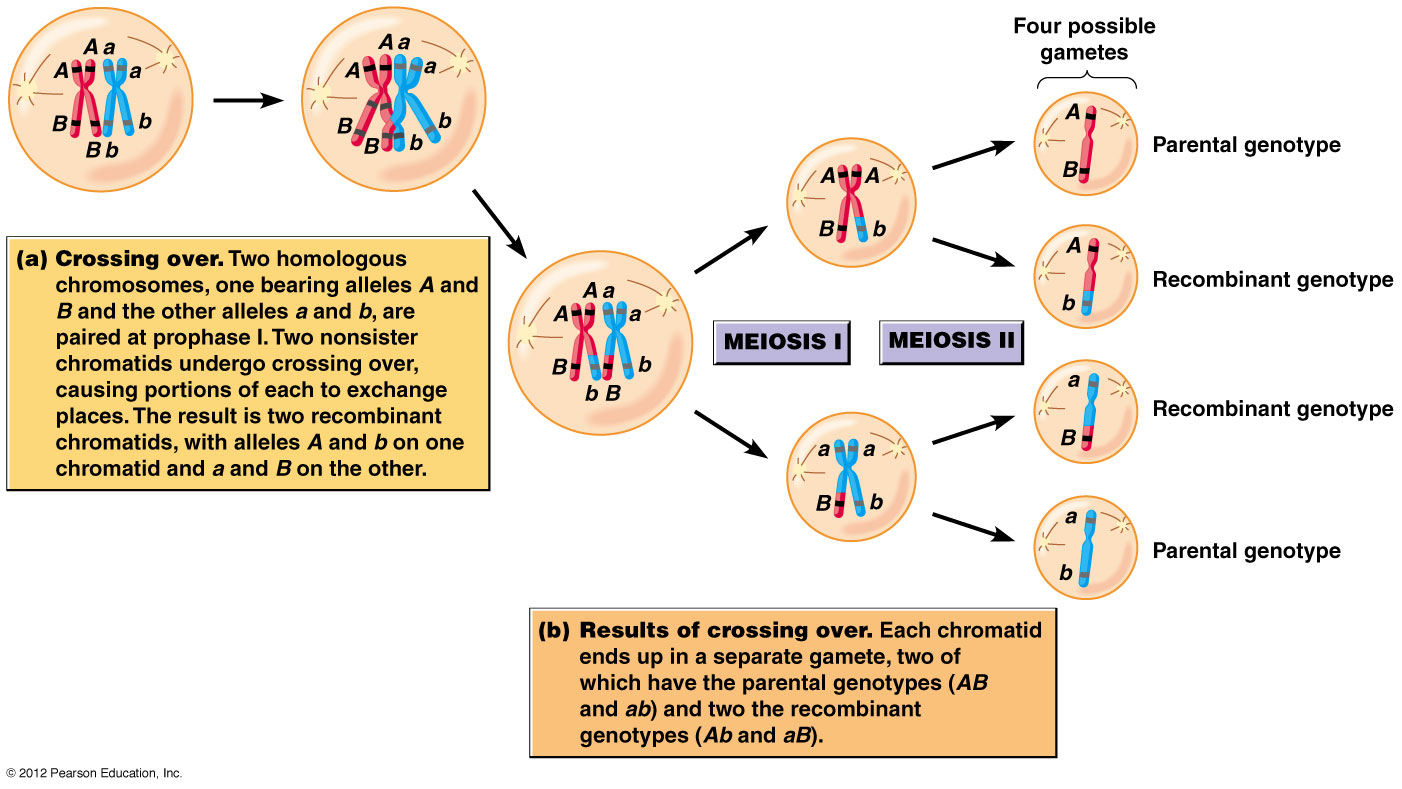
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| **Meiosis** |
|  |



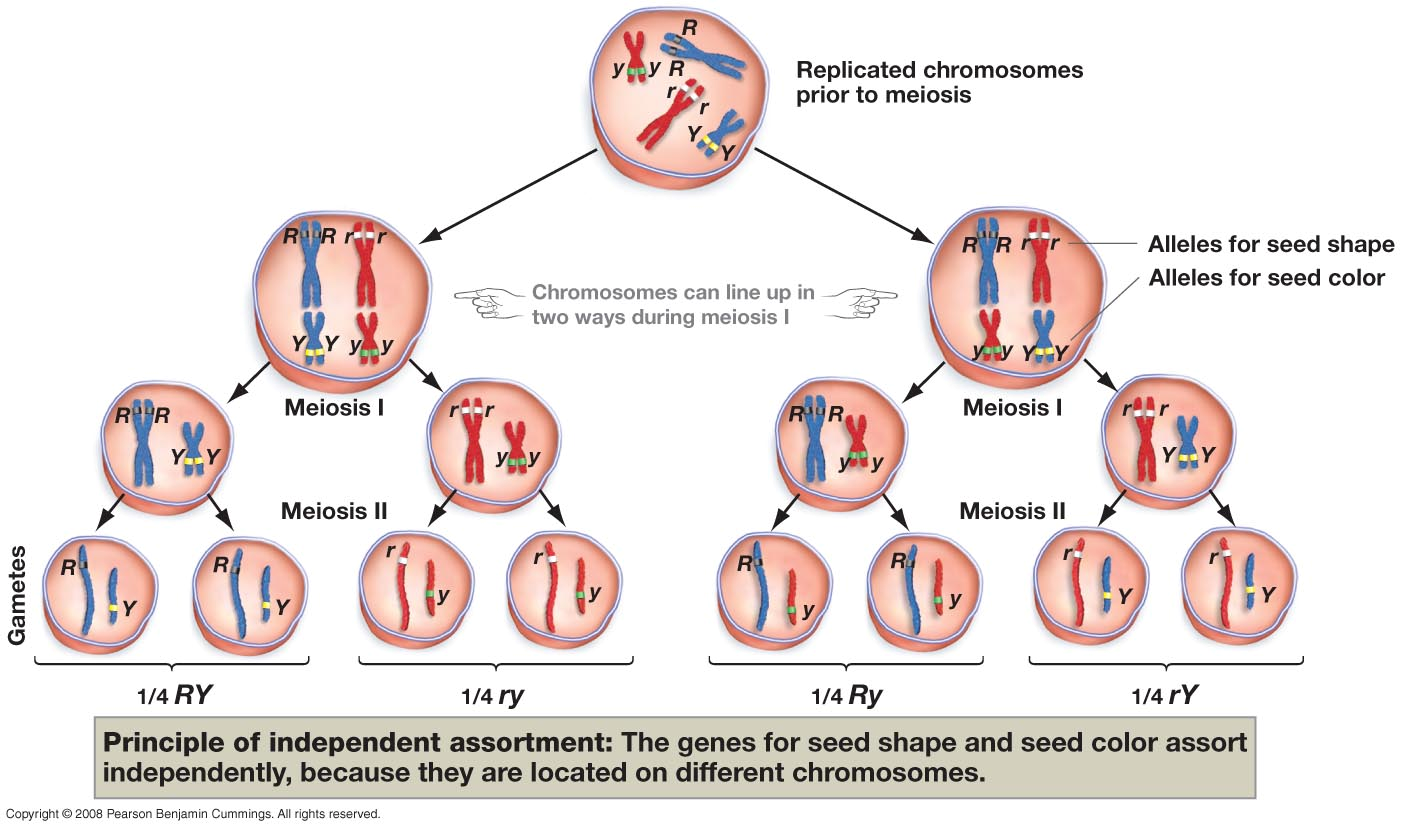


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**Results of Crossing Over**



**Independent Assortment**



Random Fertilization

Why is Genetic Variation So important?

**Relate** crossing-over, independent assortment, and random fertilization to genetic variation.

|  |  |
| --- | --- |
| Crossing Over |  |
| Independent Assortment |  |
| Random Fertilization |  |

