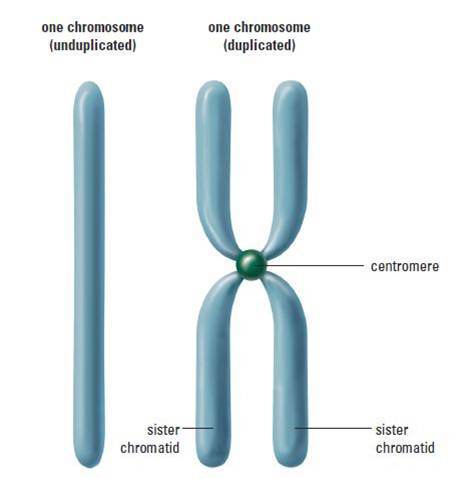
1. What are homologous chromosome? How many pairs of homologous chromosomes are found in humans?

**Activity: Meiosis and Variation**

1. Label the diagram below.



1. Use the four boxes below to create a storyboard of crossing over.

|  |  |  |  |
| --- | --- | --- | --- |
| Picture | Picture | Picture | Picture |
|  |  |  |  |
| Description | Description | Description | Description |
|  |  |  |  |

1. What is the function of mitosis? What is the function of meiosis? How are they different?
2. What are two ways that meiosis can create genetic variation?
3. Using the space below, draw a cell that undergoes meiosis. Use four separate colors to create two sets of paired chromosomes. Be sure to end with four gametes.
   1. Discuss how crossing over would have affected the picture above
4. Use the space below to describe the different types of reproduction.

|  |  |  |
| --- | --- | --- |
|  | Asexual Reproduction | Sexual Reproduction |
| Mitosis |  |  |
| Meiosis |  |  |
| # of Cells that start |  |  |
| # of Cells that are produced |  |  |