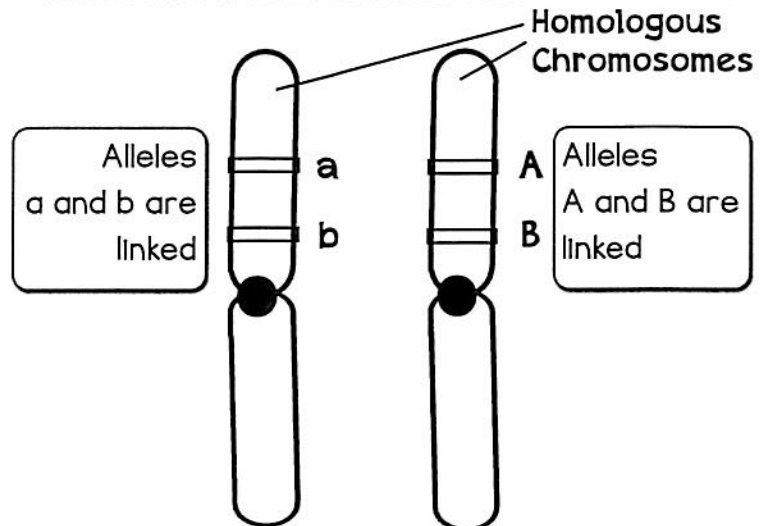


## Linked Genes

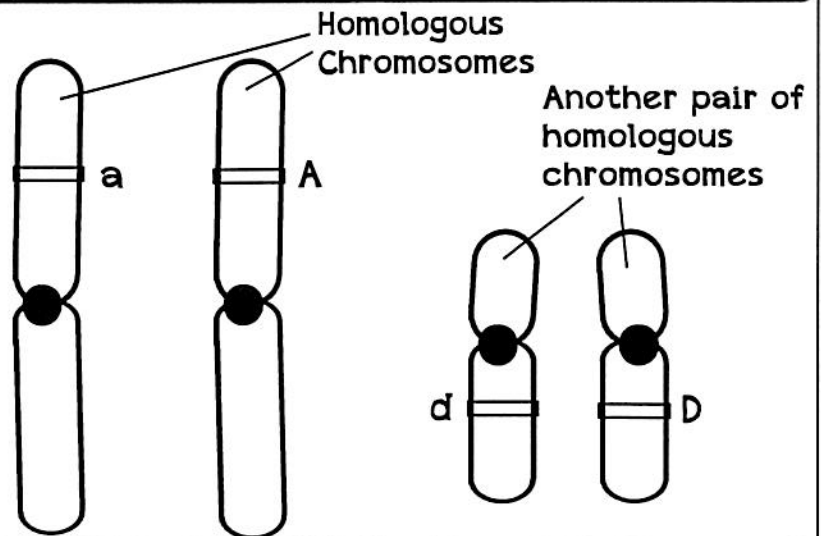
- Genes that are located close to each other on a chromosome are called \_\_\_\_\_.
- Alleles in linked genes often move together during \_\_\_\_\_ when gametes are produced.
- The \_\_\_\_\_ they are, the more likely they will move together during meiosis.
- If two alleles are closely linked, they can be treated as one allele-set in a Punnett square type problem.



- When this organism performs meiosis, there will be many \_\_\_\_\_ that have a \_\_\_\_\_ with "a" and "b". There will also be many gametes that have "A" and "B".
- There will be very few \_\_\_\_\_ with a chromosome with "a" and "B". And very few gametes with a \_\_\_\_\_ with "A" and "b".

## Unlinked Genes

- Genes that are located far from each other on the same chromosome or on separate chromosomes are called \_\_\_\_\_.
- Alleles in unlinked genes move independently during meiosis when \_\_\_\_\_ are produced.
- If they are on the same chromosome, the farther apart they are, the more likely they will be \_\_\_\_\_ by a crossing over event.



- When this organism performs \_\_\_\_\_, there will be just as many gametes that have chromosomes with alleles "a" and "d" as gametes with chromosomes with alleles "a" and "D", because these genes are \_\_\_\_\_.
- The alleles move independently from each other, because the chromosomes they are on move \_\_\_\_\_.

Name: \_\_\_\_\_

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# Gene Linkage