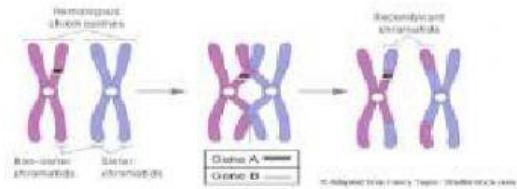


Learning Target: I can explain deviations from Mendel's model of the inheritance of traits.

### **AP Biology Topic 5.4 Non-Mendelian Genetics Video Notes**

- Patterns of inheritance of many traits do not follow the \_\_\_\_\_
  - o Genes that are \_\_\_\_\_ on the same \_\_\_\_\_ and that are inherited together are known as \_\_\_\_\_
  - o Traits that are determined by genes located on \_\_\_\_\_ are known as \_\_\_\_\_
  - o Linked genes and sex-linked traits do not follow \_\_\_\_\_ associated with \_\_\_\_\_ and can be identified by \_\_\_\_\_.
- Genes that are adjacent and close to one another on the same chromosome may appear \_\_\_\_\_
  - o Linked genes are typically \_\_\_\_\_
  - o Less likely to be \_\_\_\_\_
- The probability that genetically linked genes will \_\_\_\_\_ As a unit can be used to \_\_\_\_\_
- Map distance tells \_\_\_\_\_
- Determined by how frequently a pair of \_\_\_\_\_
- Linked genes have a \_\_\_\_\_



Example:

- If a pair of linked genes has a recombination frequency of 5%, they are close together on the \_\_\_\_\_
- These linked genes are considered \_\_\_\_\_
- If a pair of linked genes has a recombination frequency of 30%, they are \_\_\_\_\_
- These linked genes are considered \_\_\_\_\_
- Map units can be used to determine the distance between \_\_\_\_\_

Some traits are determined by genes on sex chromosomes and are known as \_\_\_\_\_

- Sex-linked traits are located on \_\_\_\_\_
  - o Sex chromosomes determine \_\_\_\_\_
  - o Sex chromosomes are \_\_\_\_\_
  - o Sex chromosomes can have different \_\_\_\_\_
- Sex-linked traits \_\_\_\_\_

The pattern of inheritance of sex-linked traits can often be \_\_\_\_\_

- Sex-linked traits can be \_\_\_\_\_
  - o Sex-linked trait pedigrees have a \_\_\_\_\_
- In humans biological females contain \_\_\_\_\_
- Biological males contain \_\_\_\_\_

Created By: Chivas & Jordan Spivey

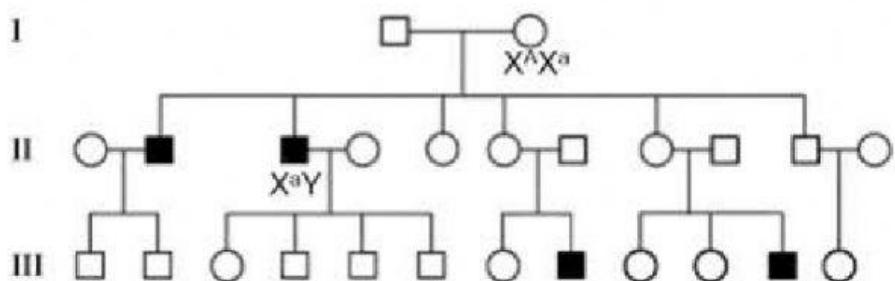
Learning Target: I can explain deviations from Mendel's model of the inheritance of traits.

- The Y chromosome carries very little \_\_\_\_\_; therefore, most sex-linked alleles are only carried on the \_\_\_\_\_
- Alleles are shown as a \_\_\_\_\_ on the \_\_\_\_\_
- Biological females can be considered \_\_\_\_\_ of a Recessive \_\_\_\_\_
- Biological males are more likely to have phenotypes associated With \_\_\_\_\_

Possible Genotypes	
$X^AX^A$	$X^AY$
$X^AX^a$	
$X^aX^a$	$X^aY$

The pattern of inheritance of sex-linked traits can often be predicted from

- Sex-linked recessive pedigree is a pattern of \_\_\_\_\_ with \_\_\_\_\_ parents.
- Biological males are more likely to be \_\_\_\_\_
- Sometimes biological female carriers are shown as \_\_\_\_\_
- Some \_\_\_\_\_ can be determined by looking at pedigrees



Created By: Chivas & Jordan Spivey