Inheritance Patterns

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type** | **Which Chromosomes involved?** | **Geno type** **Possibilities** | **Genotype Examples** | **Phenotype Pattern** | **Phenotype Example** |
| **Dominant Recessive** | Autosomal | Homozygous DominantHeterozygous Homozygous Recessive | TTTttt | Express Dominant traitExpress Dominant traitExpress Recessive trait | Can roll tongue Can roll tongueCannot roll tongue |
| **Sex Determination** | Sex Chromosomes | XX or XY | XX or XY | Either Female or Male | Female or Male |
| **Sex-Linked** | Sex Chromosomes (X only) | Females:Homozygous Dominant HeterozygousHomozygous Recessive Males:Hemizygous | XHXHXHXhXhXhXHYXhY | Express Dominant traitExpress Dominant trait(Carrier)Express Recessive traitExpress Dominant traitExpress Recessive trait | Not HaemophiliacNot HaemophiliacHaemophiliacNot HaemophiliacHaemophiliac |
| **Incomplete** | Autosomal | HomozygousHeterozygous | HCHCHSHSHCHS | Features of both traits ‘blend’ to make a new trait | Curly HairStraight HairWavy Hair |
| **Co-dominant** | Autosomal | HomozygousHeterozygous | IAIAIAIB | Features of both traits expressed | A Blood GroupAB Blood Group |