



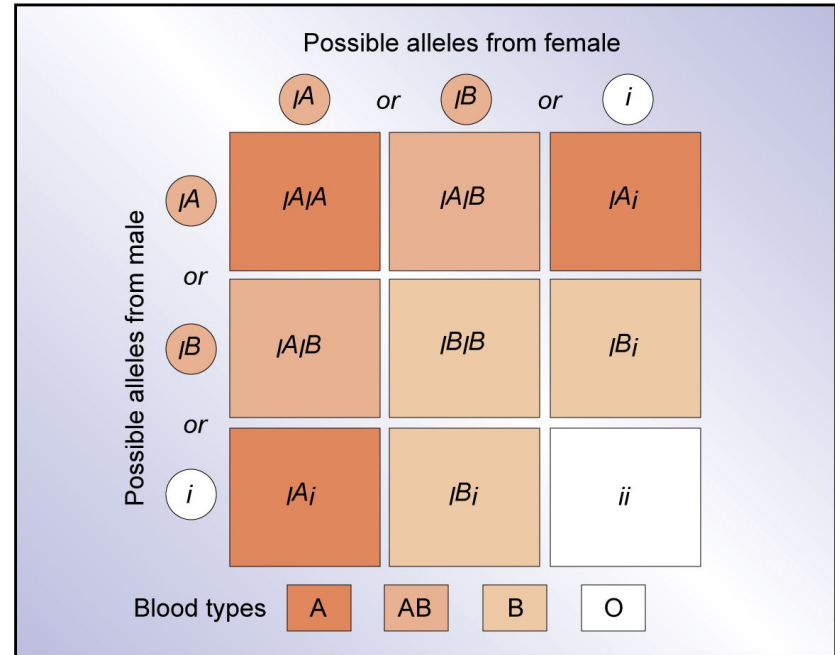


Many genes have more than 2 allele, even though only two might be required for a specific trait.

These genes are said to have multiple alleles.

[Amoeba sisters video](#)

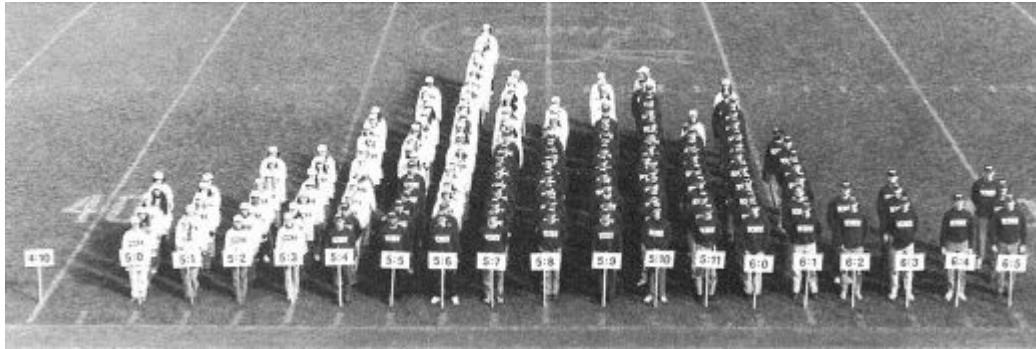
	<u>Genotype</u>	<u>Phenotype</u>
 Albino	cc	White hairs over the entire body
 Himalayan	$c^h c^h$	Black hairs on the extremities; white hairs everywhere else
 Chinchilla	$c^{ch} c^{ch}$	White hair with black tips on the body
 Wild-type	$c^+ c^+$	Colored hairs over the entire body



Many traits are produced by the interactions of several genes.

Polygenic traits: traits controlled by more than two genes.

poly= many genic= genes



- Height
- Skin color
- Eye color

Controlled by more than 4 alleles, but all have not been identified



Characteristics of organisms are not determined solely by genes.

Characteristics are determined by the **interaction** between genes and environment.



Nature versus Nurture