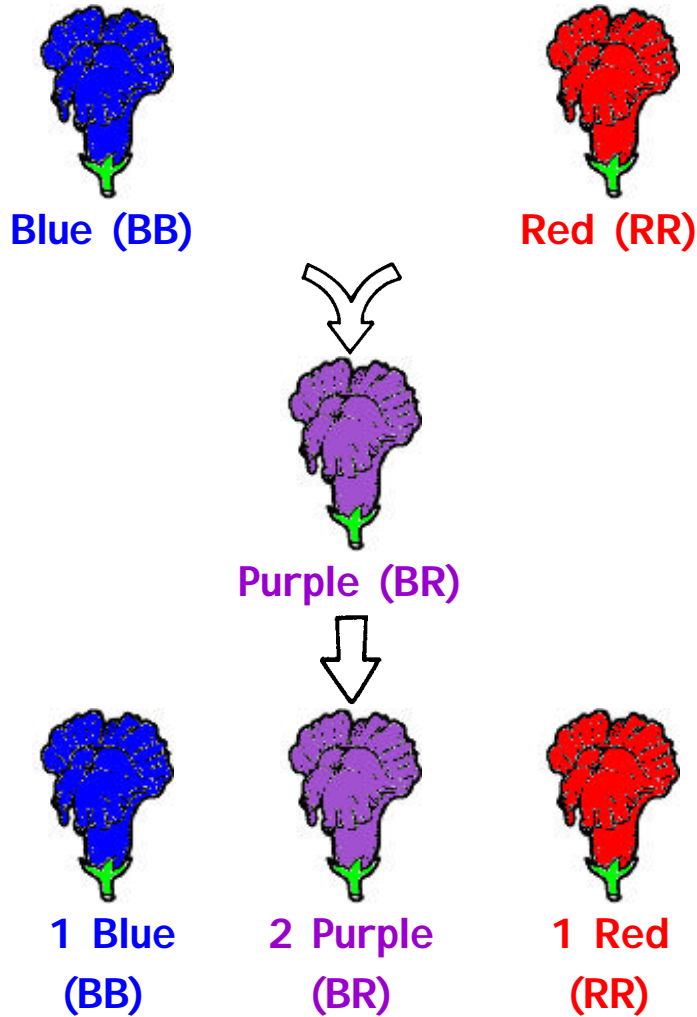


BEYOND MENDEL

INCOMPLETE DOMINANCE

Incomplete
Dominance:
F₁ hybrids
have
appearance in
between 2
parents



CODOMINANCE:

Both alleles expressed

Example: Roan cattle
(spotted, red & white)

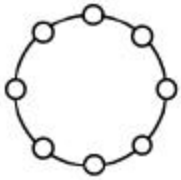
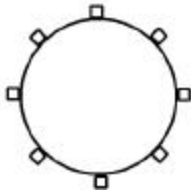
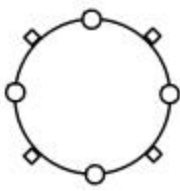
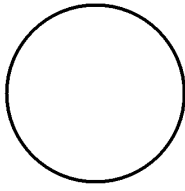
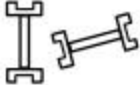


Key:

I^A = type A antigen

i = no antigen

I^B = type B Antigen

ABO BLOOD GROUPS

| Blood Type | A | B | AB | O |
|-------------------|---|---|--|--|
| Genotype | $I^A I^A$ or $I^A i$ | $I^B I^B$ or $I^B i$ | $I^A I^B$ | ii |
| RBC Antigen | Type A  | Type B  | Types A & B  | none  |
| Plasma Antibodies | Type B  | Type A  | None | Types A & B  |
| In Anti-A Serum | Clumping | No clumping | Clumping | No clumping |
| In Anti-B Serum | No clumping | Clumping | Clumping | No clumping |

BLOOD TRANSFUSIONS

Rule: Match the antigen of the donor with the antibodies of the recipient.

| Blood Type | Can Donate To | Can Receive From |
|------------|---------------|------------------|
| A | A, AB | A, O |
| B | B, AB | B, O |
| AB | AB | AB, A, B, O |
| O | O, A, B, AB | O |