



PHONES & EAR BUDS away Please!

Fri, Jan 13, 2017

Pick up: none

Today you will:

- Review Co-dominance Practice Problems
- Practice Sex-linked Trait Punnett Squares

Homework/Planner:

Complete ISN pg 128 & Qs 1-8 and 10-13 on white practice sheet

Study what we've covered so far.

Notes 95N page 129

CoDominance

two traits show up **equally**:

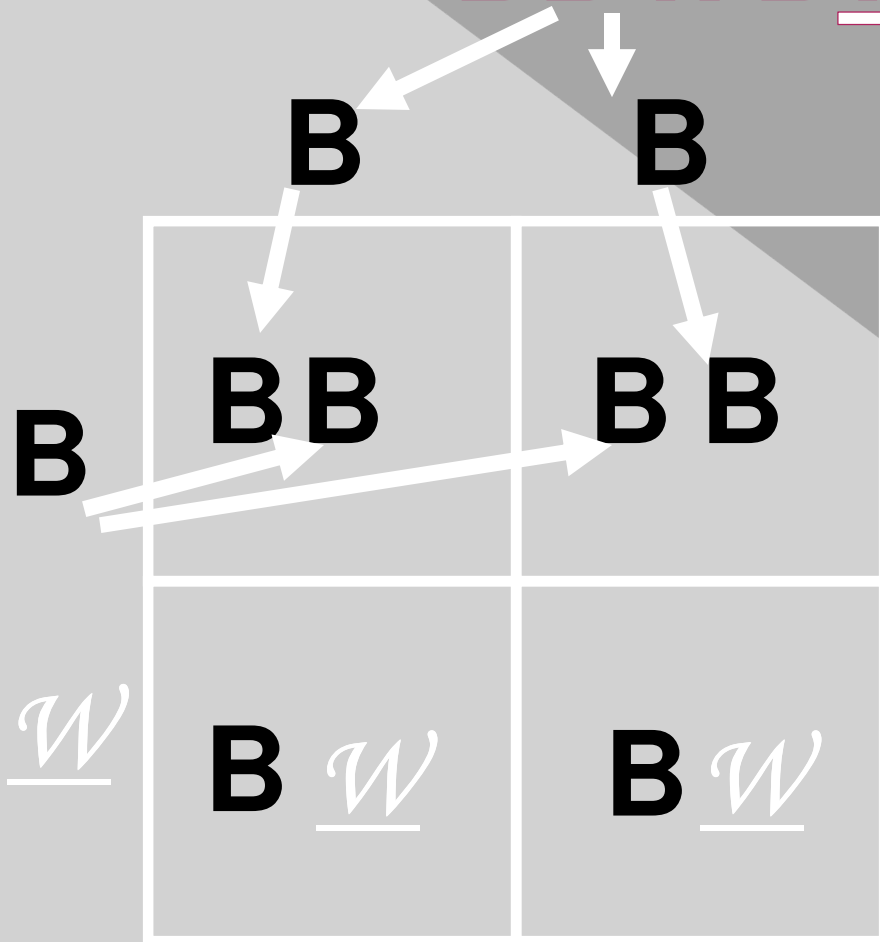
- > Ex. R + W = red AND white petals
- > Ex. B + W = black AND white chicken



Page 129 → Cross a black chicken with a black & white one:

BB x BW

Both traits show up EQUALLY.



Genotype

Phenotype

BB = 2

Black = 50%

BW = 2

**Black &
White = 50%**

Co-Dominance

ISN p.129 BLOOD TYPE KEY

◎ GENOTYPES:

● Detailed PHENOTYPES:

$I^A I^A =$

● Homozygous Type A

$I^A i =$

● Heterozygous Type A

$I^B I^B =$

Homozygous Type B

$I^B i =$

Heterozygous Type B

$I^A I^B =$

Type AB

$i i =$

Type O

ISN pg 128

Use the same format as we did for Monohybrid crosses.
Except is blood type is Co-dominant

Read about Codominance on TB pg 205

○ Complete practice problems:

1. A male with AB blood type marries a woman with O blood type. What is the probability of the offspring?
2. Heterozygous Type A blood X Heterozygous Type B blood
3. AB x AB

Blood Type Questions...

1. A woman with Type O blood and a man who is Type AB have are expecting a child. What are the possible blood types of the kid?

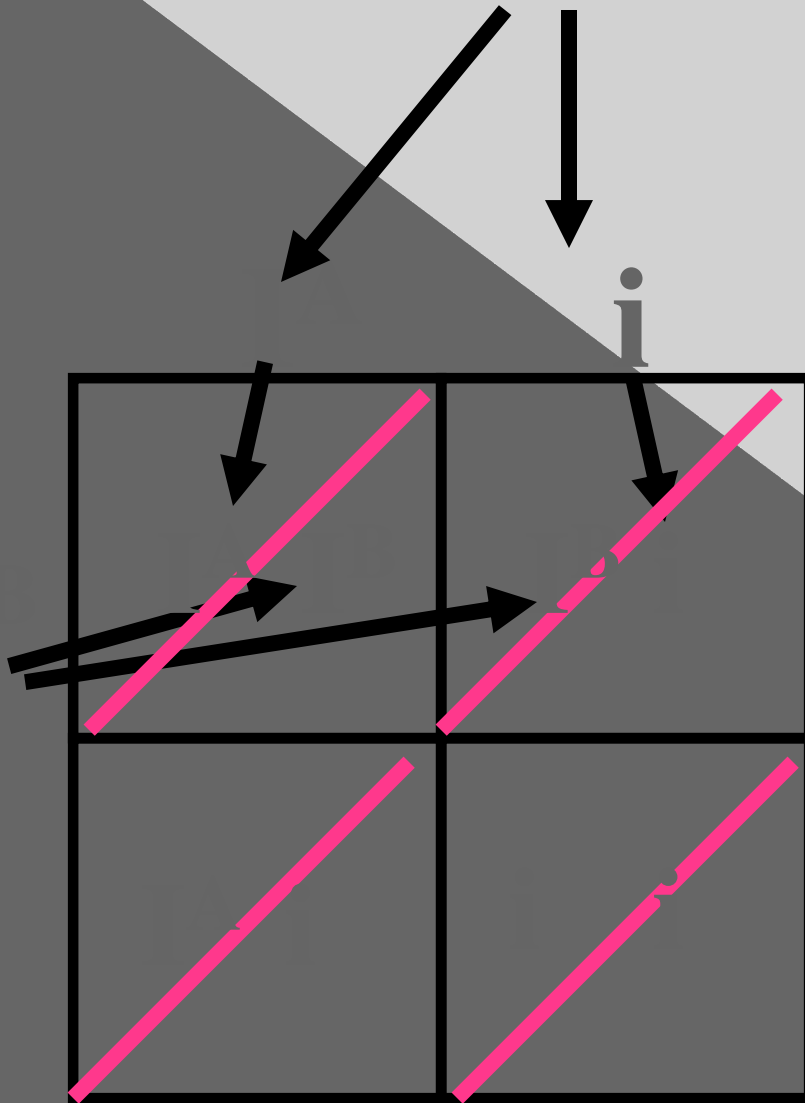
ii **x** **I^AI^B**

Blood Type Question

2. What are the possible blood types of a child whose parents are both heterozygous for "B" & heterozygous for "A" blood type?

$I^A i$ x $I^B i$

#2. $I^A i \times I^B i$



Genotype	Phenotype
$I^A I^B = 1$	Type AB = 25%
$I^B i = 1$	Heterozygous Type B = 25%
$I^A i = 1$	Heterozygous Type A = 25%
$i i = 1$	Type O = 25%

ratio of 1 : 1 : 1 : 1

10. It was suspected that two newborn babies had been exchanged in a hospital. Mr. and Ms. Jones received baby #1 and Mr. and Ms. Simms received baby #2. Blood typing on the parents and the babies are shown in the following table.

Blood Typing Results for Jones and Simms

Mr. Jones: Type A ($I^A i$) Ms. Jones: Type B ($I^B i$)	Mr. Simms: Type AB ($I^A I^B$) Ms. Simms: Type O (ii)
Baby #1: Type A	Baby #2: Type O

Blood Type Reference Table

Type A	$I^A I^A$ or $I^A i$
Type B	$I^B I^B$ or $I^B i$
Type AB	$I^A I^B$
Type O	ii

Based on these blood typing results, were baby #1 and baby#2 switched at birth?

- A. Yes; It is impossible for Mr. and Ms. Jones to have a baby with a Type A blood type.
- B. Yes; It is impossible for Mr. and Ms. Simms to have a baby with a Type O blood type.
- C. No; It is impossible for Mr. and Ms. Jones to have a baby with a Type O blood type.
- D. No; It is impossible for Mr. and Ms. Simms to have a baby with a Type A blood type.