

Monday February 13th

5.3 Part I Quiz on Thursday!

Conferences tomorrow & Thursday!

Starter:

For your fruit flies (you may need to check dominance & recessiveness!):

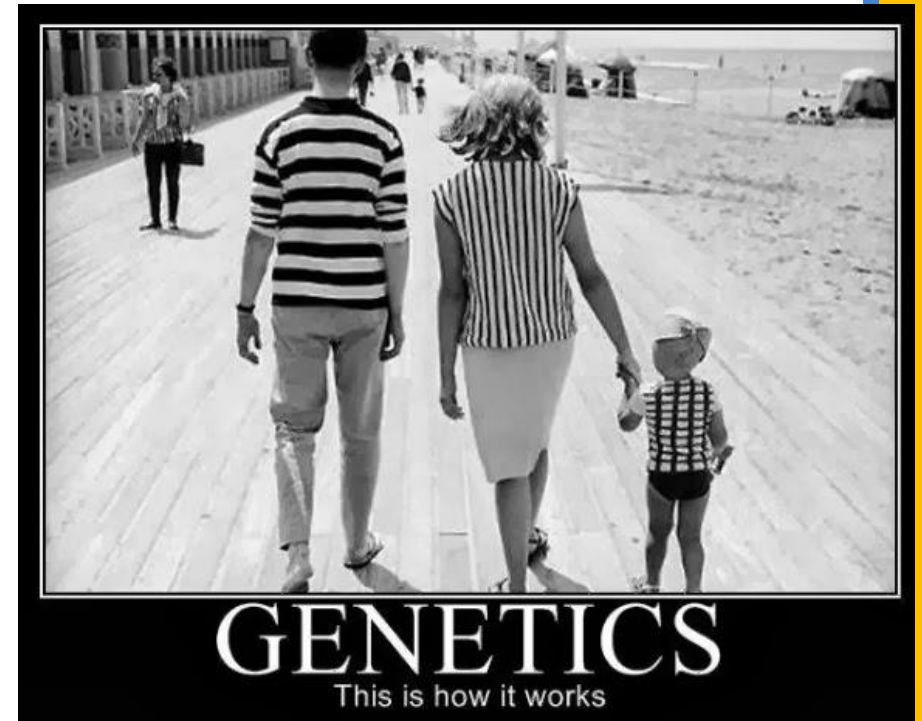
Cross a homozygous brown body with a heterozygous brown body.

Cross a heterozygous curly-winged with a straight-winged fruit fly.

Patterns of Inheritance

Today's Objective:

- Given a possible genotype or phenotype, I can demonstrate all possible offspring results using Punnett squares



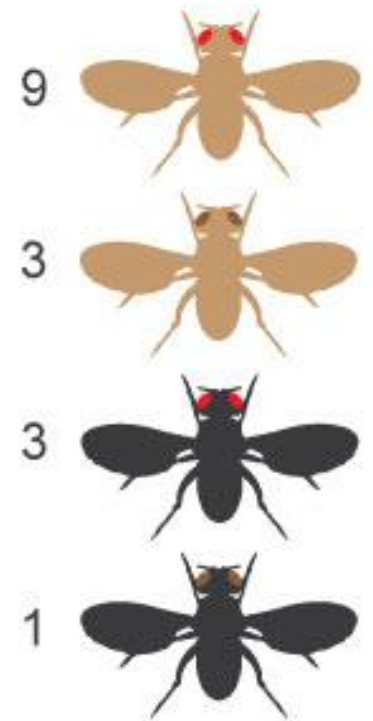
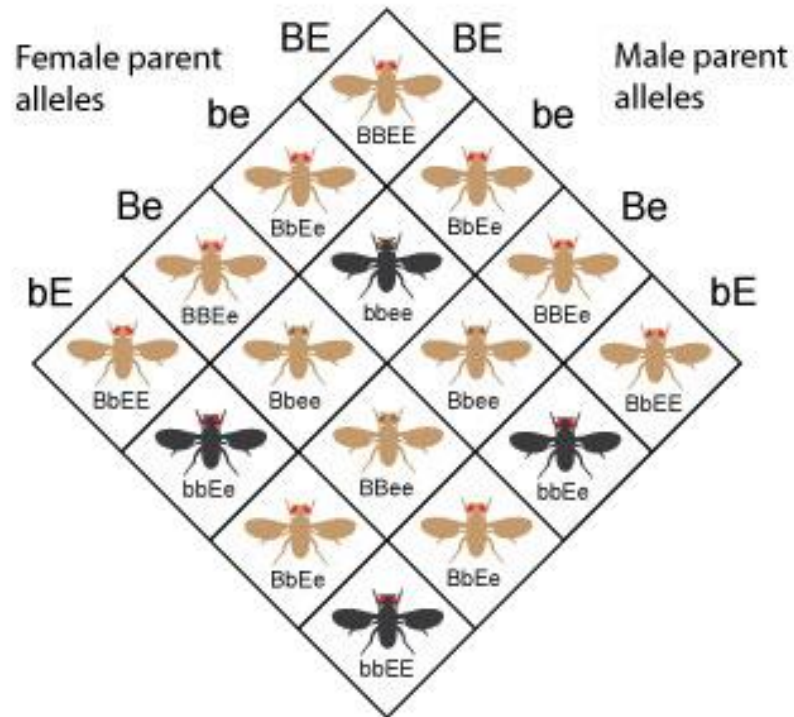
Patterns of Inheritance

Dihybrid Cross:

- “Cross” observing TWO genes

Example:

Fruit fly body color
Fruit fly eye color

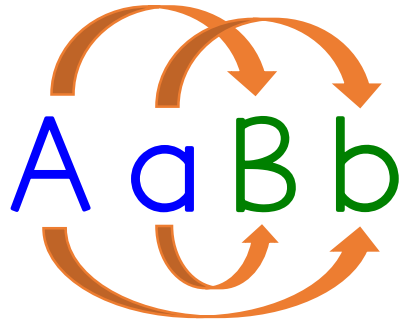


Patterns of Inheritance

Dihybrid Cross:

Must account for EVERY possible allele combination!

Male Parent Genotype:

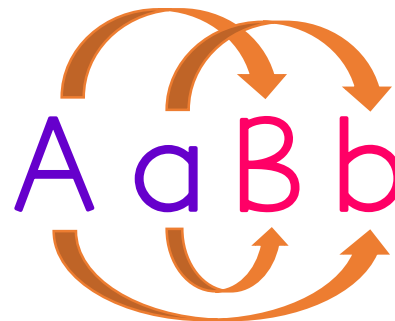


Male Allele Combos:

AB ab
aB Ab

X

Female Parent Genotype:



Female Allele Combos:

AB ab
aB Ab

FOIL!

First

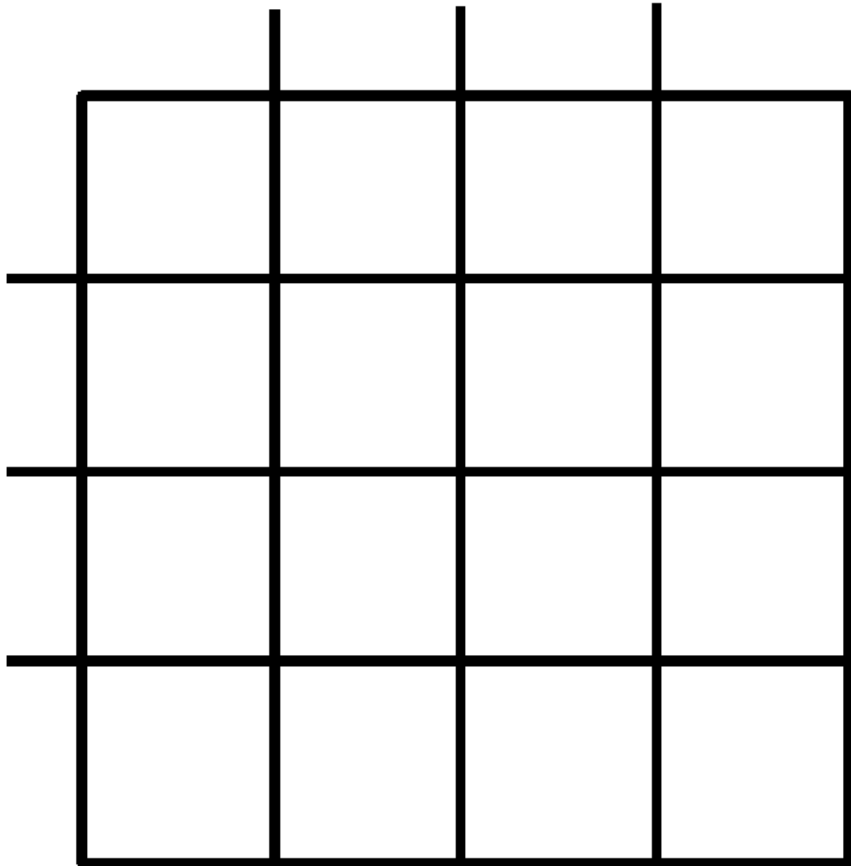
Outside

Inside

Last

*Make a
smiley face!*

Patterns of Inheritance



- A A B B
- A A B b
- A a B B
- A A b b
- A a B b
- A a b b
- a a B B
- a a B b
- a a b b

Patterns of Inheritance

A 4x4 grid of squares, used for a Punnett square. The grid is formed by four vertical lines and four horizontal lines, creating a 4x4 array of empty cells.

Example:

Parent Genotypes:

----- x -----

Patterns of Inheritance

RRCC: _____

Fraction: _____

Percent: _____

RRCc: _____

Fraction: _____

Percent: _____

RRcc: _____

Fraction: _____

Percent: _____

RrCC: _____

Fraction: _____

Percent: _____

RrCc: _____

Fraction: _____

Percent: _____

Rrcc: _____

Fraction: _____

Percent: _____

rrCC: _____

Fraction: _____

Percent: _____

rrCc: _____

Fraction: _____

Percent: _____

rrcc: _____

Fraction: _____

Percent: _____

Patterns of Inheritance

Red eyes/Curly Wings: _____

Fraction: _____

Percent: _____

Red eyes/Straight Wings: _____

Fraction: _____

Percent: _____

White eyes/Curly Wings: _____

Fraction: _____

Percent: _____

White eyes/Straight Wings: _____

Fraction: _____

Percent: _____

Patterns of Inheritance

Today's Objective:

- Given a possible genotype or phenotype, I can demonstrate all possible offspring results using Punnett squares

