

Woman's Name _____ Identification # _____ Date _____

- | | | |
|--|--|--|
| 1. Will you be 35 years or older when the baby is due? | Yes _____ | No _____ |
| 2. Have you, the baby's father, or anyone in either of your families ever had any of the following disorders?
Down syndrome
Other chromosomal abnormality (state if yes _____)
Neural tube defect, eg, spina bifida (meningomyelocele or open spine), anencephaly
Cystic fibrosis
If yes, indicate the relationship of the affected person to you or the baby's father: _____ | Yes _____
Yes _____
Yes _____
Yes _____ | No _____
No _____
No _____
No _____ |
| 3. Do you or the baby's father have a birth defect or genetic disorder?
If yes, who has the defect and what is it? _____ | Yes _____ | No _____ |
| 4. In any previous marriages, have you or the baby's father had a child born, dead or alive with a birth not listed in question 2 above? | Yes _____ | No _____ |
| 5. Do you or the baby's father have any close relatives with mental retardation?
If yes, indicate the relationship of the affected person to you or to the baby's father

Indicate the cause, if known: _____ | Yes _____ | No _____ |
| 6. Do you, the baby's father, or a close relative in either of your families have a birth defect, any familial disorder, or a chromosomal abnormality not listed above?
If yes, indicate the condition and the relationship of the affected person to you or to the baby's father: _____ | Yes _____ | No _____ |
| 7. In any previous marriages, have you or the baby's father had a stillborn child or three or more first-trimester spontaneous pregnancy losses?
Have either of you had a chromosomal study? | Yes _____ | No _____ |
| 8. If you or the baby's father are of Jewish ancestry, have either of you been screened for Tay-Sachs disease or Canavan disease?
If yes, indicate who and the results: _____ | Yes _____ | No _____ |
| 9. If you or the baby's father are African-American, have either of you been screened for sickle cell traits?
If yes, indicate who and the results: _____ | Yes _____ | No _____ |
| 10. If you or the baby's father are of Italian, Greek, or Mediterranean background, have either of you been tested for β -thalassemia?
If yes, indicate who and the results: _____ | Yes _____ | No _____ |
| 11. If you or the baby's father are of Philippine or Southeast Asian ancestry, have either of you been tested for α -thalassemia?
If yes, indicate who and the results: _____ | Yes _____ | No _____ |
| 12. If you or the baby's father are Jewish or Caucasians of Northern European ancestry, have you been screened for cystic fibrosis?
If yes, results: _____ | Yes _____ | No _____ |
| 13. Are you taking folic acid supplements? | Yes _____ | No _____ |
| 14. Excluding iron and vitamins, have you taken any medications or recreational drugs since becoming pregnant or since your last menstrual period? (include nonprescription drugs)
If yes, give name of medication and time taken during pregnancy: _____ | Yes _____ | No _____ |

Date

Name

Address

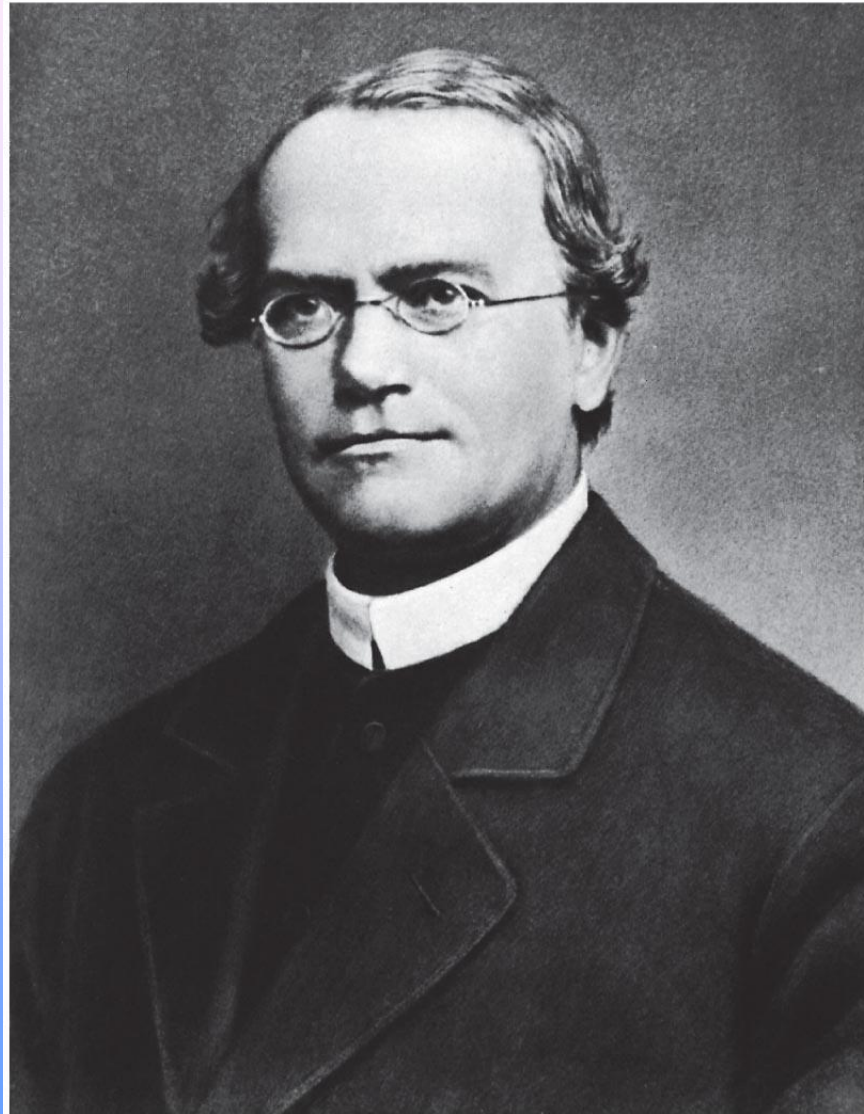
Dear _____ :

I hope this letter finds you well. I am writing to share some important health information that concerns our family. Members of our family were recently found through genetic testing at _____, to have an inherited risk of developing breast, ovarian and some other cancers.

Specifically, a mutation, or genetic change was found in the BRCA1 gene through a simple blood test. Because of our family relationship, there is a possibility that you also could have this mutation. I want to make sure you have this information so that you could talk with your own health care providers about the possibility of obtaining genetic testing to aid in your own healthcare planning needs, and the health of your family members.

Both men and women can inherit, and pass along a mutation in BRCA1. Inheriting a

Gregor Mendel



© 2011 Pearson Education, Inc.

Figure 11.1

St. Thomas's Abbey: Brno, Czech Republic



St. Thomas's Abbey: Brno, Czech Republic



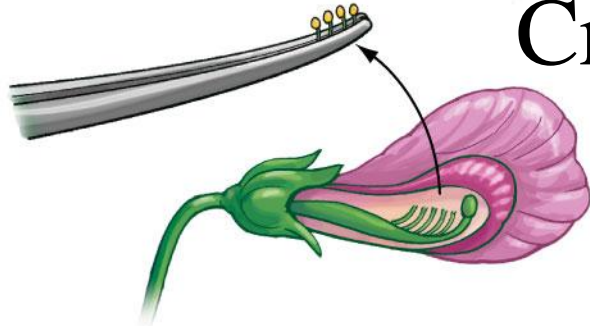
Foundation of greenhouse



Pea flowers



Cross Pollination



flower grown from
a yellow seed

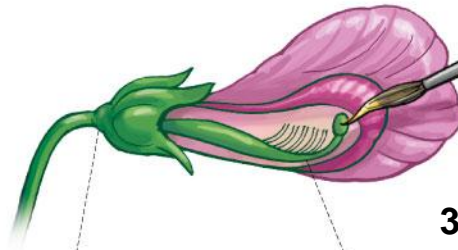
1. Before fertilization occurs, peel back the closed petals of a pea plant (in this case, one that came from a line that yielded yellow peas). Then pull out the pollen-bearing stamens with tweezers so that self-fertilization is no longer possible.



flower grown from
a green seed

2. Next, gather pollen from a green-seed plant by dabbing its anthers with a paintbrush.

cross-
pollination



offspring
(yellow seeds)

3. Finally, rub these pollen grains onto the stigma of the first plant. The results of the cross-pollination can be observed when the fertilized eggs mature into seeds in the ovary, meaning peas in a pod. The resulting seeds are yellow in this case because yellow is dominant over green.



















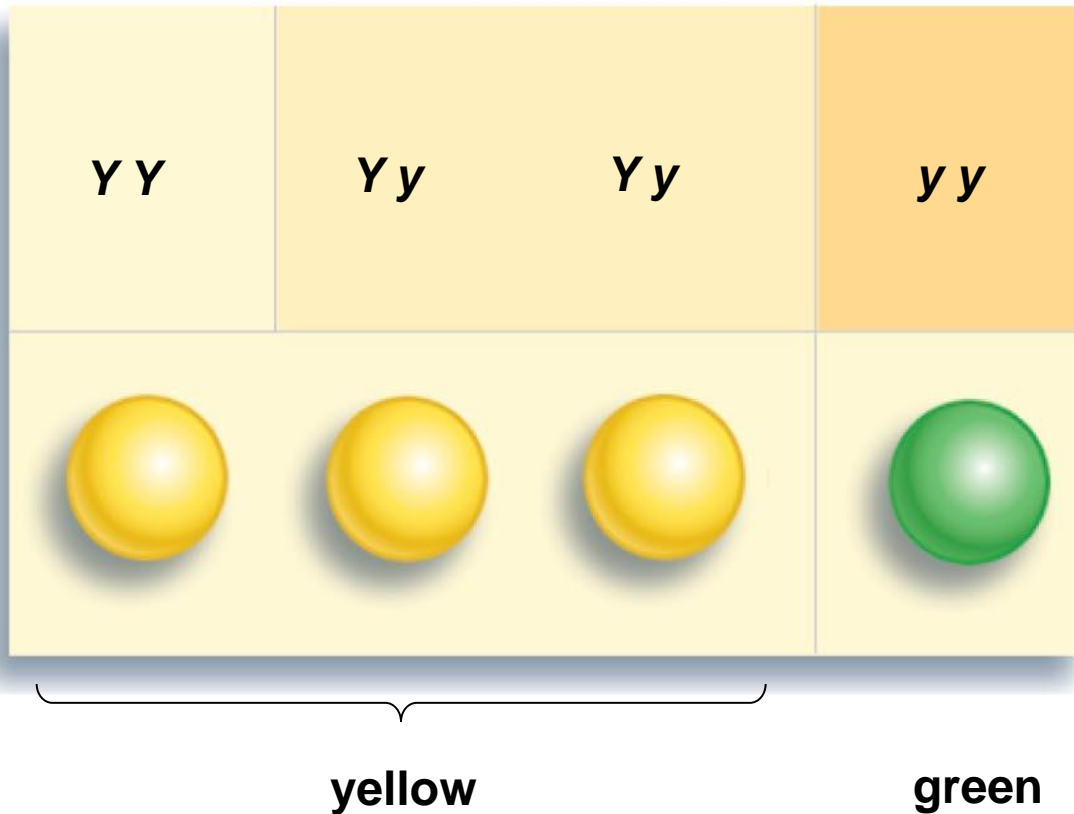


Table 11.1

Pea-Plant Characters Studied by Mendel

Character Studied	Dominant Trait	Recessive Trait
Seed shape	smooth 	wrinkled 
Seed color	yellow 	green 
Pod shape	inflated 	wrinkled 
Pod color	green 	yellow 
Flower color	purple 	white 
Flower position	on stem 	at tip 
Stem length	tall 	dwarf 

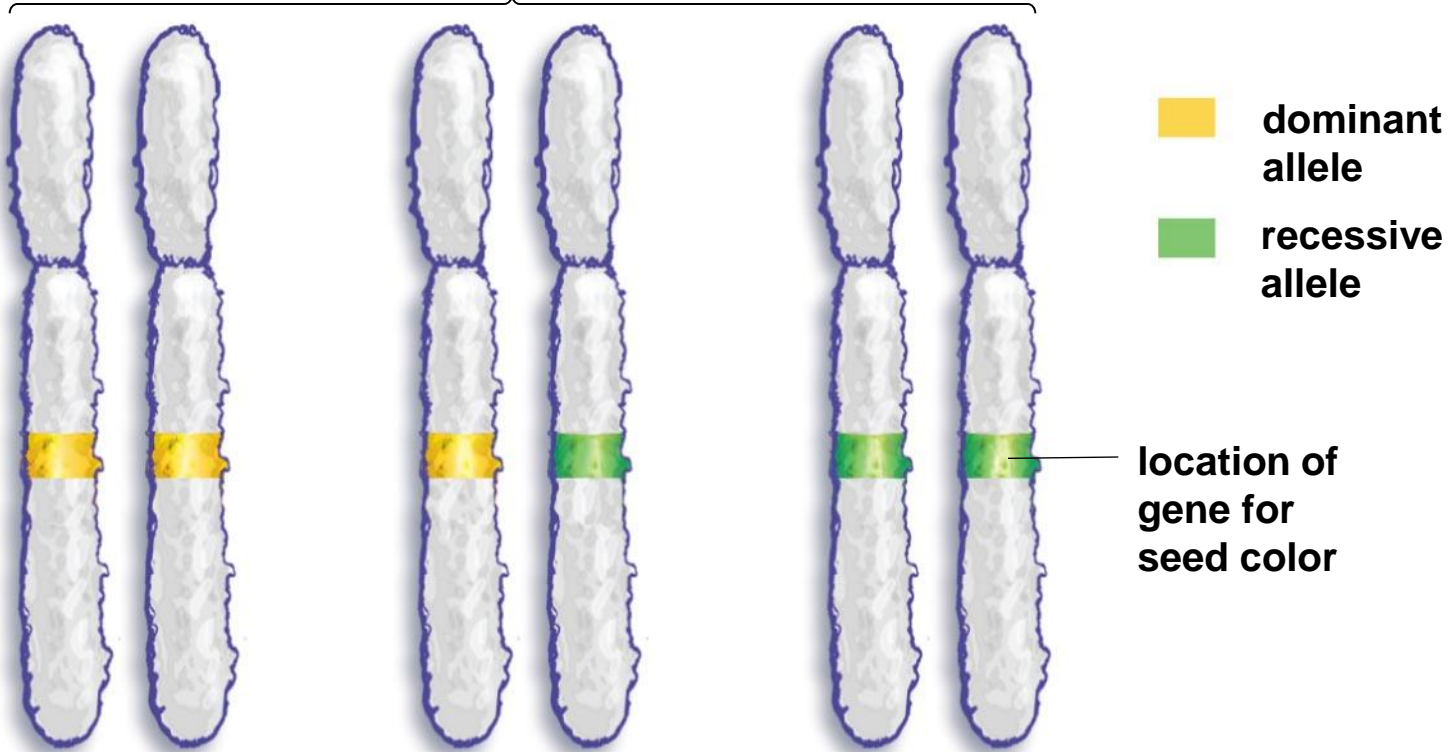
Three Genotypes Yield Two Phenotypes



Three genotypes yield . . .

two phenotypes.

possible pairing of
homologous chromosomes



maternal paternal

homozygous
dominant



yellow
seeds

maternal paternal

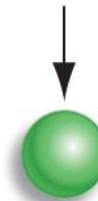
heterozygous



yellow
seeds

maternal paternal

homozygous
recessive



green
seeds

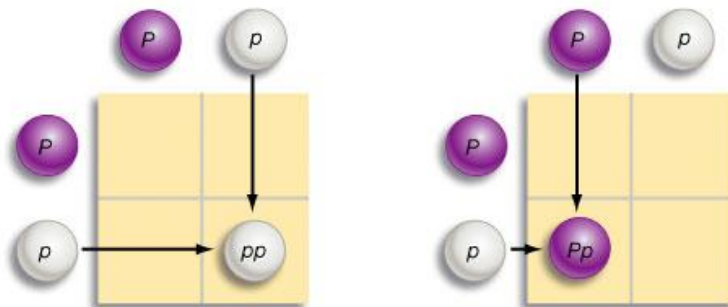
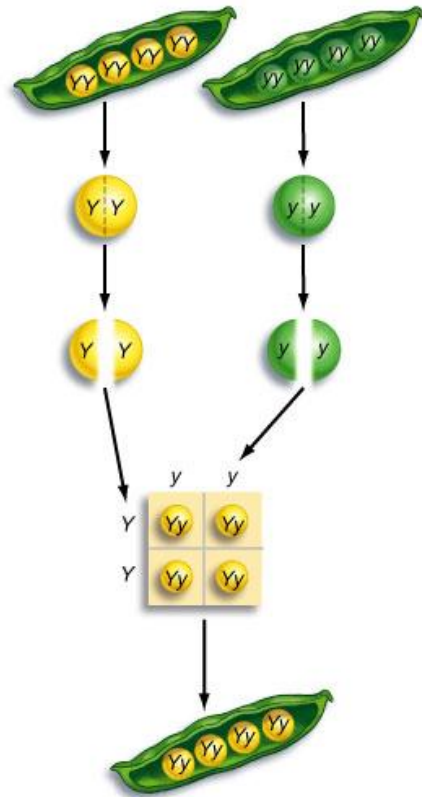


Figure 11.5

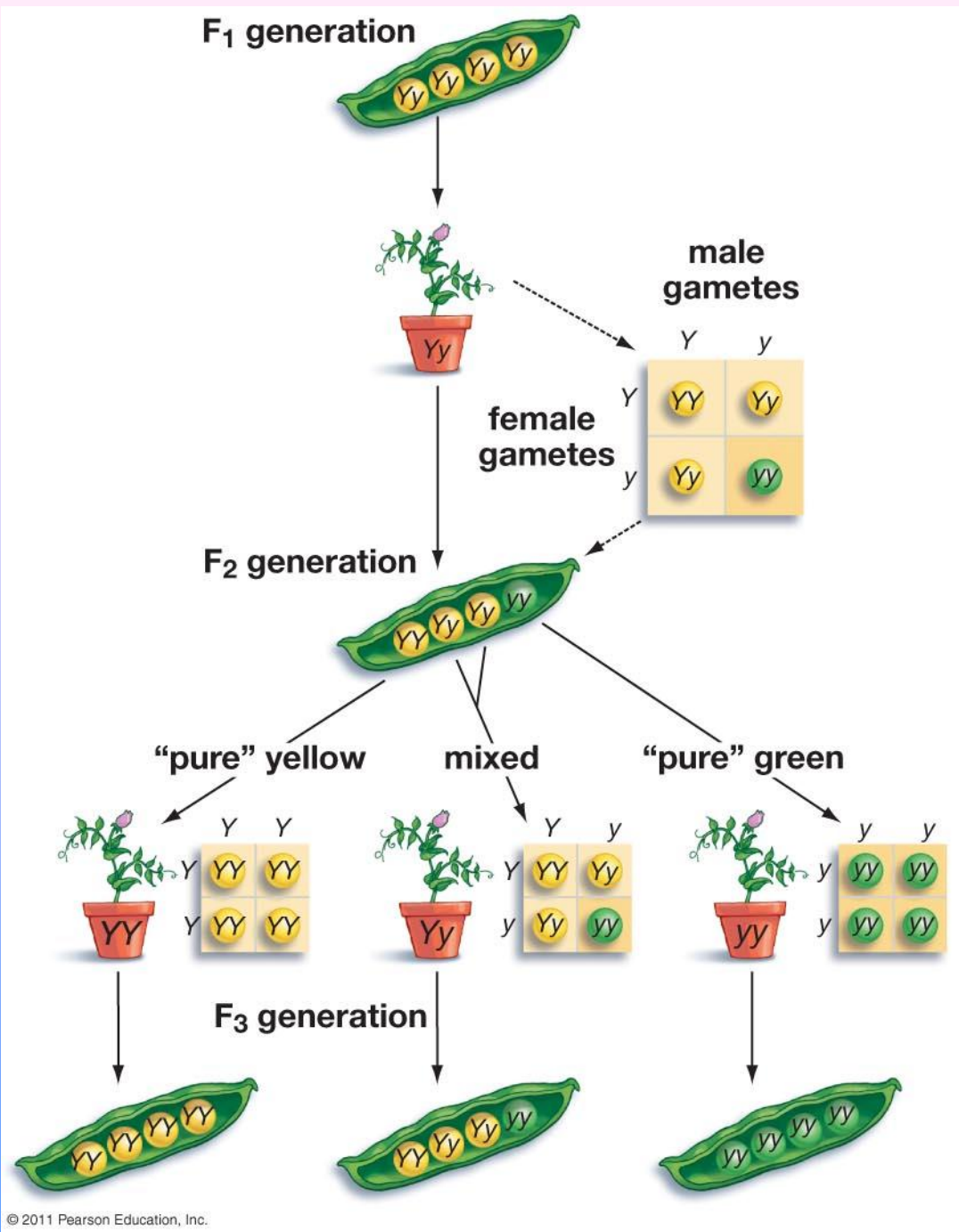
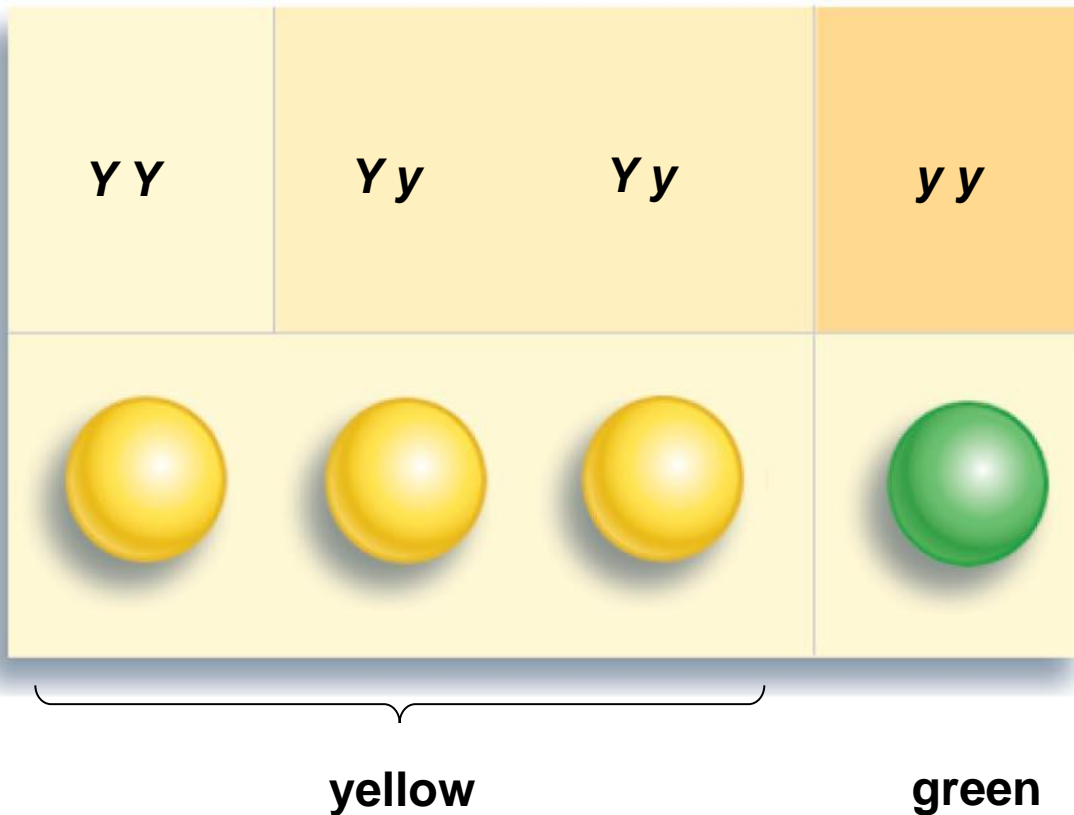


Figure 11.6

Law of Segregation



Three genotypes yield . . .

two phenotypes.

What does this show?





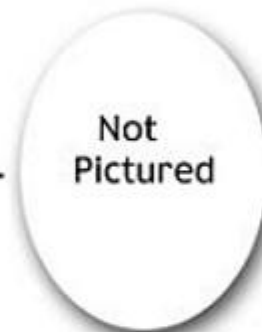
John Tyler
B. March 29, 1790



Julia Gardiner
B. July 29, 1820



Lyon Gardiner Tyler
B. August 24, 1853



Sue Ruffin
B. May 5, 1889

Lyon Gardiner Tyler Jr.
B. January 3, 1925

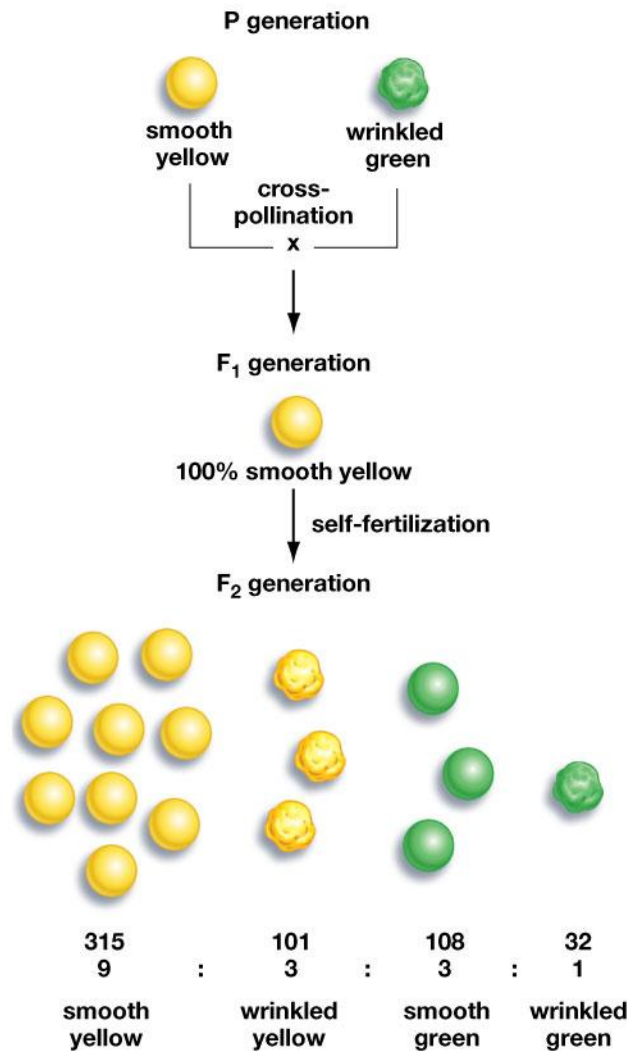


Harrison Ruffin Tyler
B. November 9, 1928

Papers on wings in stick insects

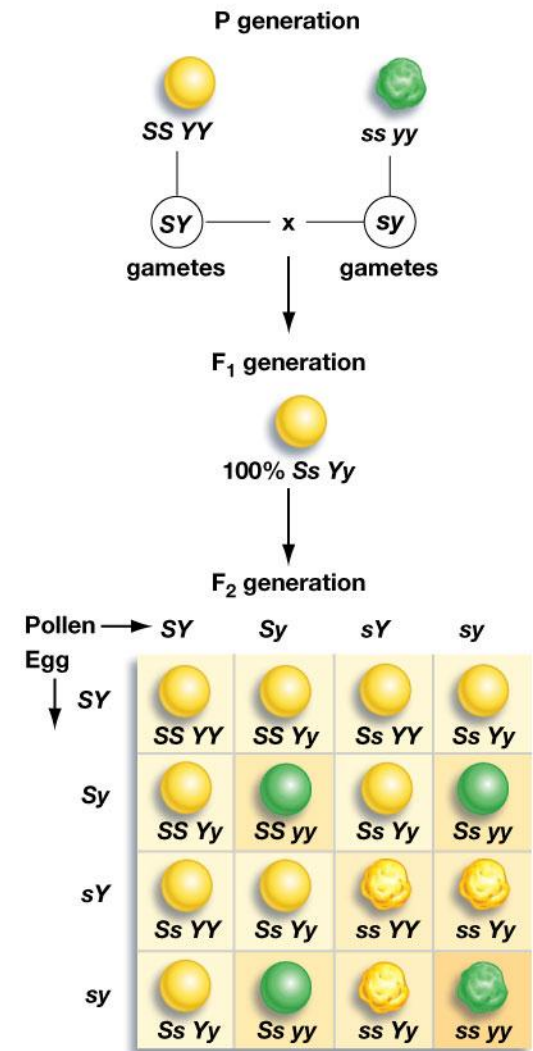
Dihybrid cross

(a) Results of Mendel's dihybrid cross



In one of his dihybrid crosses, Mendel cross-bred plants that had smooth yellow seeds with those that had green wrinkled seeds. The result was a generation of plants that all had smooth yellow seeds. When these plants self-fertilized, the result was an F₂ generation that had the phenotypes shown in a 9:3:3:1 ratio.

(b) Why Mendel got these results



The Punnett square demonstrates why Mendel got the 9:3:3:1 phenotypic ratio in his dihybrid cross. Nine combinations yield smooth yellow seeds, 3 yield smooth green seeds, 3 yield wrinkled yellow seeds, while only 1 results in a wrinkled green seed.

Figure 11.9

Incomplete dominance

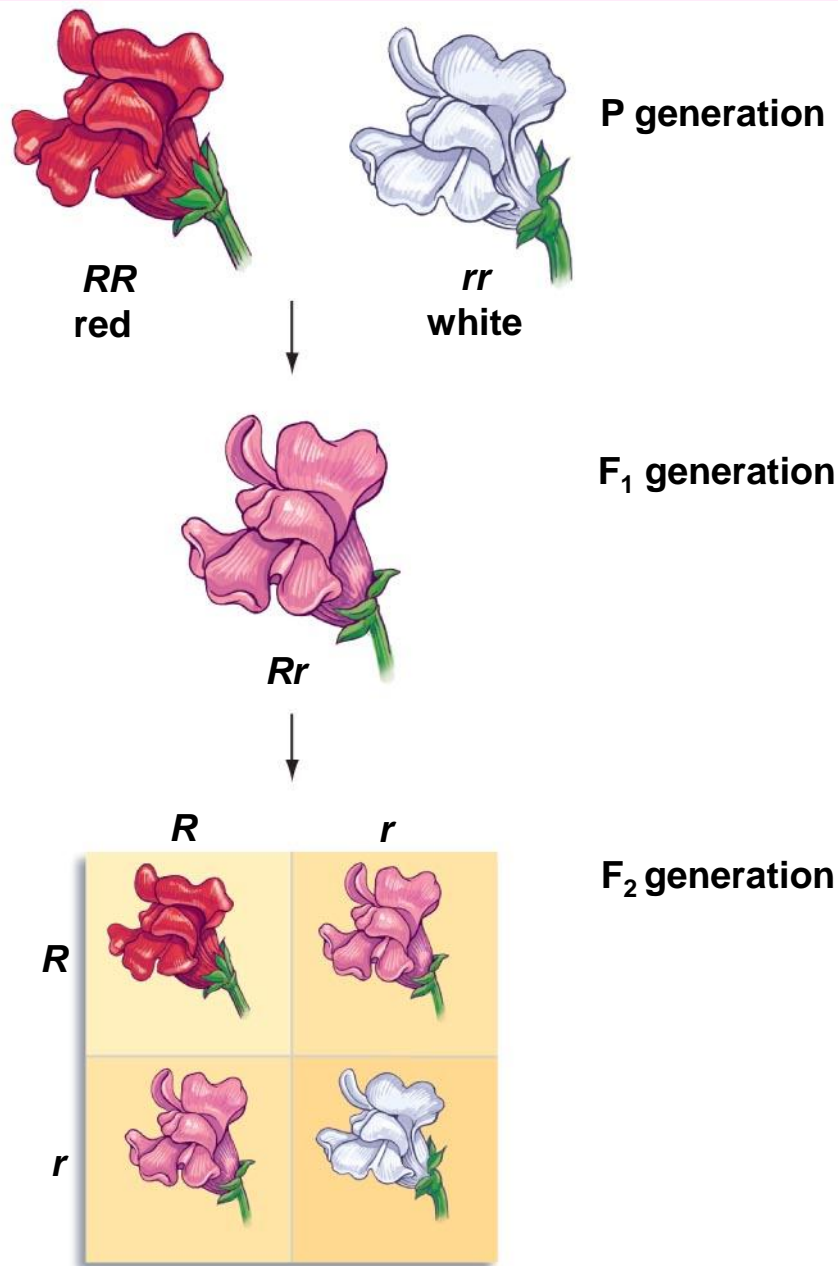


Table 11.3

Human Blood Types

This blood type (phenotype) ... has these surface glycolipids ... and is produced by these genotypes

A



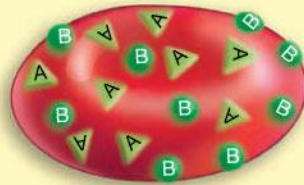
AA or AO

B



BB or BO

AB



AB

O



OO

(no surface glycolipids)

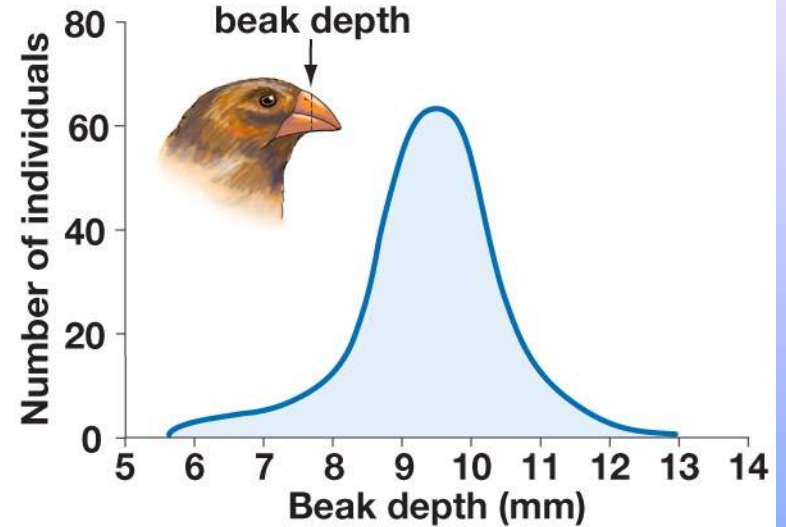
Continuous Variation and the Bell Curve

(a) Continuous variation in human height



© 2011 Pearson Education, Inc.

(b) The bell curve



Genes and Environment



© 2011 Pearson Education, Inc.

Figure 11.13

Skeptical?



threadforthought.net

Home > News > Life and Style > Celebrity News

July 8th, 2009, 10:55 GMT - By [Elena Gorgan](#)

Michael Jackson Was Cloned

SHARE: +1 0 Like 17 Send Tweet 0 Adjust text size:



Only hours after news of [the tragic death](#) of the King of Pop Michael Jackson was confirmed on June 25, conspiracy theories were already starting to circulate on the Internet and in the media. Stemming mostly from fans' refusal or inability to accept that their idol had gone, they had it that he was still alive and well – and perhaps just playing a hoax on them as he used to. A new report has it now that a clone of Michael Jackson exists, as [LiveScience](#) informs.

Speculation about Michael's fascination with the occult but also with medical advances into the field of cloning has often made headlines. The singer himself reportedly told [Uri Geller](#), self-proclaimed "mystifier," that he wanted to have a clone done no matter the cost, a "mini-version of himself to carry on his legacy."

Given that Jackson also expressed his desire to "live forever" in countless televised interviews, it's no wonder this theory is now taking over the Internet and gaining ground with conspiracy theorists, [LiveScience](#) explains. However, the chances of this actually happening are not looking that good, the same publication says, no