

Dihybrid Cross

- ▶ Mendel also looked at simultaneous inheritance of more than one trait
 - ▶ Round seed (R) were dominant to wrinkled seeds (r)
 - ▶ Yellow seeds (Y) were dominant to green seeds (g)
- ▶ Mendel decided to look at both traits at the same time
- ▶ Law of Independent Assortment
 - ▶ Random distribution of alleles occurs during gamete formation
 - ▶ This occurs during meiosis
 - ▶ Results in a 9:3:3:1 ratio in a dihybrid cross



Dihybrid Cross

- ▶ What is the genotype for heterozygous yellow?
 - ▶ Yy
- ▶ What is the genotype for heterozygous round?
 - ▶ Rr
- ▶ Write them together
 - ▶ YyRr
- ▶ Cross two heterozygous yellow round peas
 - ▶ “FOIL” the letters

	YR	Yr	yR	yr
YR	YYRR Yellow round	YYRr Yellow round	YyRR Yellow round	YyRr Yellow round
Yr	YYRr Yellow round	YYrr Yellow wrinkled	YyRr Yellow round	Yyrr Yellow wrinkled
yR	YyRR Yellow round	YyRr Yellow round	yyRR Green round	yyRr Green round
yr	YyRr Yellow round	Yyrr Yellow wrinkled	yyRr Green round	yyrr Green wrinkled

