

### Steps for Using a Punnett Square

1. Determine the alleles in the gametes of the parents.
2. Place the alleles of the gametes along the top of the grid as shown. Place the alleles of the second parent along the left side of the Punnett square.
3. Combine the alleles inside the boxes of the Punnett square as shown.
4. Determine the genotypes and phenotypes of the offspring inside the boxes.

### Monohybrid Cross (studies only one trait)

Alleles of parents: Rr and Rr

	R	r
R	RR	Rr
r	Rr	rr

Trait being studied is pea plant seed coat texture.

R = dominant round trait

r = recessive wrinkled trait

### Dihybrid Cross (studies two traits)

	YR	Yr	yR	yr
YR	YYRR	YYRr		YyRr
Yr	YYRr	YYrr		Yyrr
yR			yyRR	yyRr
yr	YyRr	Yyrr	yyRr	yyrr

Traits being studied are pea plant seed color and coat texture.

Y = dominant yellow trait

y = recessive green trait

R = dominant round trait

r = recessive wrinkled trait