

Punnett Squares with 2 or more genes

- we can use a Punnett square to predict multiple traits of offspring

Ex. Pea plants

R = round

Y = yellow

r = wrinkled

y = green

Parents: RrYy x RrYy

both parents are round and yellow

	R Y	R y	r Y	r y
R Y	RRYY	RRYy	RrYY	RrYy
R y	RRYy	RRyy	RrYy	Rryy
r Y	RrYY	RrYy	rrYY	rrYy
r y	RrYy	Rryy	rrYy	rryy

Phenotype probability:	$\frac{1}{16}$ RRYY	$\frac{4}{16}$ RrYy	} Phenotype Probability	$\frac{9}{16}$ Round
	$\frac{2}{16}$ RRYy	$\frac{2}{16}$ Rryy		$\frac{3}{16}$ Round
	$\frac{2}{16}$ RrYY	$\frac{1}{16}$ rrYY		$\frac{3}{16}$ Wrinkled
	$\frac{1}{16}$ RRyy	$\frac{2}{16}$ rrYy		$\frac{1}{16}$ Wrinkled