Name _____

Punnett Square Practice

Fill in each Punnett square, writing the capital letter first in each box. Then write the answers.

1

	R	r
R		
r		

In pea plants, round seeds (**R**) are dominant over wrinkled seeds (**r**). Cross two plants that are both Rr: **Rr × Rr**.

Genotype ratio: _____

Phenotype ratio: _____

Chance of a wrinkled offspring: _____

2

	t	t
T		
t		

In pea plants, tall (**T**) is dominant over short (**t**). Cross a Tt plant with a tt plant: **Tt × tt**.

Genotype ratio: _____

Phenotype ratio: _____

Chance of a short offspring: _____

3

	g	g
G		
G		

In pea plants, green pods (**G**) are dominant over yellow pods (**g**). Cross a GG plant with a gg plant: **GG × gg**.

Genotype ratio: _____

Phenotype ratio: _____

Chance of a yellow offspring: _____

4

	B	B
B		
b		

In guinea pigs, black fur (**B**) is dominant over white fur (**b**). Cross a Bb guinea pig with a BB guinea pig: **Bb × BB**.

Genotype ratio: _____

Phenotype ratio: _____

Chance of a white offspring: _____

Punnett Square Practice Answer Key

Answers are in green. The grids are filled in for you.

1

	R	r
R	RR	Rr
r	Rr	rr

In pea plants, round seeds (**R**) are dominant over wrinkled seeds (**r**). Cross two plants that are both Rr: **Rr × Rr**.

Genotype ratio: **1 RR : 2 Rr : 1 rr**

Phenotype ratio: **3 round : 1 wrinkled**

Chance of a wrinkled offspring: **25%**

2

	t	t
T	Tt	Tt
t	tt	tt

In pea plants, tall (**T**) is dominant over short (**t**). Cross a Tt plant with a tt plant: **Tt × tt**.

Genotype ratio: **2 Tt : 2 tt (1 : 1)**

Phenotype ratio: **2 tall : 2 short (1 : 1)**

Chance of a short offspring: **50%**

3

	g	g
G	Gg	Gg
G	Gg	Gg

In pea plants, green pods (**G**) are dominant over yellow pods (**g**). Cross a GG plant with a gg plant: **GG × gg**.

Genotype ratio: **all Gg (4 of 4)**

Phenotype ratio: **all green (4 : 0)**

Chance of a yellow offspring: **0%**

4

	B	B
B	BB	BB
b	Bb	Bb

In guinea pigs, black fur (**B**) is dominant over white fur (**b**). Cross a Bb guinea pig with a BB guinea pig: **Bb × BB**.

Genotype ratio: **2 BB : 2 Bb (1 : 1)**

Phenotype ratio: **all black (4 : 0)**

Chance of a white offspring: **0%**