NAME			BLOCK	DATE					
Monohybrid Cross Worksheet									
#1)		Height Tall (T) Short (t) Homozygous recessive Heterozygous mplete the Punnet Square the dominant allele? Wh	_		t this				
	c. What is the	he phenotype of the moth	er? Her genotype	?					
	d. What is the	he genotypic ratio of their	offspring?						
	e. What is the	he phenotypic ratio of the	ir offspring?						

#2)	Gene:	?		
,	Alleles:	Blonde hair (B)		
		Brunette hair (b)		
	Mom:	Heterozygous		
	Dad:	Heterozygous		
	a. Please	complete the Punnet Square using the data		

f. If they gave birth to 20 children, how many would be short?

above.

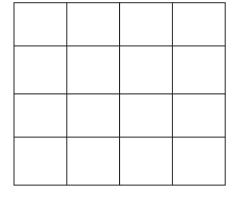
	b. Name the	e gene that would have Blonde and Bru	nette hair as two of	its alleles.			
	c. What is the phenotype of the father? His genotype?						
	d. What is the genotypic ratio of their offspring?						
	e. What is the phenotypic ratio of their offspring?						
	f. What fraction of their children would be homozygous dominant? g. If they had 50 children, how many of these children would have brunette hair?						
#2)	Gene: Alleles: Mom: Dad:	Foot size Small feet (F) Large feet (f)? Homozygous dominant	Ff Ff	Ff Ff			
	g. Using the completed Punnet square above, what is the genotype of the mother? What is her phenotype?						
	h. What is the phenotype of the father? His genotype?						
	i. What is the genotypic ratio of their offspring?						
	j. What is the phenotypic ratio of their offspring?						
	j. If these pa	rents had 5 kids, how many of them wo	ould have small feet	?			

Dihybrid Cross Worksheet

- 1. Set up a punnett square using the following information:
 - Dominate allele for tall plants = D
 - Recessive allele for dwarf plants = d
 - Dominate allele for purple flowers = W
 - Recessive allele for white flowers = w
 - · Cross a homozygous dominate parent

(DDWW) with a homozygous recessive parent (ddww)

- 3. Set up a punnett square using the following information:
 - Dominate allele for black fur in guinea pigs = B
 - Recessive allele for white fur in guinea pigs =b
 - Dominate allele for rough fur in guinea pigs = R
 - Recessive allele for smooth fur in guinea pigs
 r
 - Cross a heterozygous parent (BbRr) with a heterozygous parent (BbRr)



- 2. Using the punnett square in question #1:
 - a. What is the probability of producing tall plants with purple flowers?

Possible genotype(s)?

b. What is the probability of producing dwarf plants with white flowers?

Possible genotype(s)?

c. What is the probability of producing tall plants with white flowers?

Possible genotype(s)?

d. What is the probability of producing dwarf plants with purple flowers?

Possible genotype(s)?

- 4. Using the punnett square in question #3:
 - a. What is the probability of producing guinea pigs with black, rough fur?

Possible genotype(s)?

b. What is the probability of producing guinea pigs

with black, smooth fur?

Possible genotype(s)?

c. What is the probability of producing guinea pigs

with white, rough fur?

Possible genotype(s)?

d. What is the probability of producing guinea pigs

with white, smooth fur?

Possible genotype(s)?

5.	Set up	а	punnett	square	using	the	following
info	rmation						

- Dominate allele for purple corn kernels = R
- Recessive allele for yellow corn kernels = r
- Dominate allele for starchy kernels = T
- Recessive allele for sweet kernals = t
- Cross a homozygous dominate parent with a homozygous recessive parent

- 7. Set up a punnett square using the following information:
 - Dominate allele for normal coat color in wolves = N
 - Recessive allele for black coat color in wolves = n
 - Dominant allele for brown eyes = B
 - Recessive allele for blue eyes = b
 - Cross a heterozygous parent with a heterozygous parent

- 6. Using the punnett square in question #5:
 - a. What is the probability of producing purple, starchy

corn kernels?

Possible genotype(s)?

b. What is the probability of producing yellow, starchy corn kernels?

Possible genotype(s)?

c. What is the probability of producing purple, sweet corn kernels?

Possible genotype(s)?

d. What is the probability of producing yellow, sweet corn kernels?

Possible genotype(s)?

- 8. Using the punnett square in question #7:
 - a. What is the probability of producing a wolf with a normal coat color with brown eyes?

Possible genotype(s)?

b. What is the probability of producing a wolf with a normal coat color with blue eyes?

Possible genotype(s)?

c. What is the probability of producing a wolf with a black coat with brown eyes?

Possible genotype(s)?

d. What is the probability of producing a wolf with a black coat with blue eyes?

Possible genotype(s)?