

Biology Period 7

#	Name of Trait (Gene)	Homozygous Dominant Genotype & Phenotype	Heterozygous Genotype & Phenotype	Homozygous recessive Genotype & Phenotype
1	Presence of chubby toes	RR Have chubby toes	Rr Have chubby toes	rr No chubby toes
2	Skin color	BB Pink skin	Bb Pink skin	bb Green skin
3	Eye color	GG Green eyes	Gg Green eyes	gg blue eyes
4	presence of webbed appendages	HH Have webbing	Hh Have webbing	hh no webbing
5	Eyebrow presence	EE extremely fluffy unibrow	Ee extremely fluffy unibrow	ee no eyebrows
6	number of ears	GG 2 ears	Gg 2 ears	gg 1 ear
7	Type of eyes	NN normal eyes	Nn normal eyes	nn bug eyes
8	Nose size	DD big nose	Dd big nose	dd little nose
9	presence of wings	TT have wings	Tt have wings	tt no wings
10	presence of sparkly hair	Ii sparkly hair	Ii sparkly hair	ii normal hair

Table 2: Alien Adult Trait Table.

1. Flip pennies and record your results on your data sheet (**Heads- dominant allele, tails-recessive allele**). Flip twice for each trait (each flip represents each allele in the diploid organism).
2. Describe the resulting phenotype for each trait on Table 2. This is what your alien adult looks like!

#	Name of Trait	First allele	Second allele	Phenotype
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Alien Matings!

1. Find one other person to work with in the class
2. Create Punnett Squares for each trait of your aliens by determining the possible gametes from your alien (you should do 10 Punnett Squares)
3. For each Punnett Square, flip a coin twice to randomly choose a box (two heads = upper left, two tails = lower right, one head followed by one tail = upper right, one tail followed by one head = lower left) **EXAMPLE**
4. Draw the resulting alien offspring!
5. Turn in your drawings with your names on the back, stapled to your Punnett Squares (**make sure your names are on the papers**)

