

Genetics Creature Creations Activity Instructions

1. Decide whether you would like to create a superhero, alien, monster, or insect.
2. Pick up a penny and a trait chart for whichever creature you selected from my lab desk.
3. Just as there is a 50% probability that a penny will land on heads or tails, there is a 50% probability of receiving the dominant or recessive allele for a trait from each parent! So...
4. You will flip your coin twice per trait: once to represent the female parent and once to represent the male parent.
5. HEADS IS THE DOMINANT TRAIT AND TAILS IS THE RECESSIVE TRAIT!! As you flip your coin, record the dominant or recessive allele in each of the two columns (female parent and male parent).
6. You will now have two alleles for each trait and you should record this in the offspring column.
7. You will need to fill in any blanks (like if you get to select your skin or eye color, for example) and you must also create 4 choice traits. It is up to you to choose whatever you want, so be creative! Use your imagination and think outside of the box! You must decide which allele for each will be dominant or recessive.
8. Now that you have your genetics creature data table complete, BRING IT TO ME TO CHECK!!
9. Once I have checked your genetics creature data table for accuracy, you may begin creating your creatures. Take a sheet of construction paper and draw all three of your creatures: the female parent, the male parent, and the offspring. Make sure your parents and offspring are labeled as to who they are, and tape your data table to the BACK of your completed creation. MAKE SURE YOUR NAME IS ON THE BACK AS WELL!!

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Superhero Genetics

Physical Trait	Female Parent	Male Parent	Offspring
Tall (T) or short (t)			
Arms- muscular (A) or skinny (a)			
Legs- muscular (L) or skinny (l)			
Hair color: _____ (H) or _____ (h)			
Eye color: _____ (E) or _____ (e)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Superhero Genetics

Physical Trait	Female Parent	Male Parent	Offspring
Tall (T) or short (t)			
Arms- muscular (A) or skinny (a)			
Legs- muscular (L) or skinny (l)			
Hair color: _____ (H) or _____ (h)			
Eye color: _____ (E) or _____ (e)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Superhero Genetics

Physical Trait	Female Parent	Male Parent	Offspring
Tall (T) or short (t)			
Arms- muscular (A) or skinny (a)			
Legs- muscular (L) or skinny (l)			
Hair color: _____ (H) or _____ (h)			
Eye color: _____ (E) or _____ (e)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Insect Genetics

<i>Physical Trait</i>	<i>Female Parent</i>	<i>Male Parent</i>	<i>Offspring</i>
# of body segments: 2 (B) or 3 (b)			
# of wings: 2 (W) or 4 (w)			
# of legs: 6 (L) or 8 (l)			
Eye color: _____ (E) or _____ (e)			
Wing color: _____ (W) or _____ (w)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Insect Genetics

<i>Physical Trait</i>	<i>Female Parent</i>	<i>Male Parent</i>	<i>Offspring</i>
# of body segments: 2 (B) or 3 (b)			
# of wings: 2 (W) or 4 (w)			
# of legs: 6 (L) or 8 (l)			
Eye color: _____ (E) or _____ (e)			
Wing color: _____ (W) or _____ (w)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Insect Genetics

<i>Physical Trait</i>	<i>Female Parent</i>	<i>Male Parent</i>	<i>Offspring</i>
# of body segments: 2 (B) or 3 (b)			
# of wings: 2 (W) or 4 (w)			
# of legs: 6 (L) or 8 (l)			
Eye color: _____ (E) or _____ (e)			
Wing color: _____ (W) or _____ (w)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Monster Genetics

Physical Trait	Female Parent	Male Parent	Offspring
Tall (T) or short (t)			
Skin color: _____ (S) or _____ (s)			
Teeth (K) or no teeth (k)			
Hair color: _____ (H) or _____ (h)			
Eye color: _____ (E) or _____ (e)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Monster Genetics

Physical Trait	Female Parent	Male Parent	Offspring
Tall (T) or short (t)			
Skin color: _____ (S) or _____ (s)			
Teeth (K) or no teeth (k)			
Hair color: _____ (H) or _____ (h)			
Eye color: _____ (E) or _____ (e)			
Choice trait #1: _____ or _____			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Monster Genetics

Physical Trait	Female Parent	Male Parent	Offspring
Tall (T) or short (t)			
Skin color: _____ (S) or _____ (s)			
Teeth (K) or no teeth (k)			
Hair color: _____ (H) or _____ (h)			
Eye color: _____ (E) or _____ (e)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Alien Genetics

<i>Physical Trait</i>	<i>Female Parent</i>	<i>Male Parent</i>	<i>Offspring</i>
Eyes: 1 eye (E) or 2 eyes (e)			
Antennae: 2 (A) or 4 (a)			
Arms: 2 arms (R) or 4 arms (r)			
Skin color: _____ (S) or _____ (s)			
Teeth (T) or no teeth (t)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Alien Genetics

<i>Physical Trait</i>	<i>Female Parent</i>	<i>Male Parent</i>	<i>Offspring</i>
Eyes: 1 eye (E) or 2 eyes (e)			
Antennae: 2 (A) or 4 (a)			
Arms: 2 arms (R) or 4 arms (r)			
Skin color: _____ (S) or _____ (s)			
Teeth (T) or no teeth (t)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			

Alien Genetics

<i>Physical Trait</i>	<i>Female Parent</i>	<i>Male Parent</i>	<i>Offspring</i>
Eyes: 1 eye (E) or 2 eyes (e)			
Antennae: 2 (A) or 4 (a)			
Arms: 2 arms (R) or 4 arms (r)			
Skin color: _____ (S) or _____ (s)			
Teeth (T) or no teeth (t)			
Choice trait #1:			
Choice trait #2:			
Choice trait #3:			
Choice trait #4:			