

Name: _____ Date: _____ Period: _____

~* Superhero Genetics *~

You will be discovering the genetic makeup and powers of a baby with Superhero parents!

1. From the stack of superhero cards, draw a male and female superhero and write their names below next to Mother and Father.
2. As you move through the stations, use the cards provided to find your parent genotypes. Work the Punnett squares below to find the possible genes for the offspring.
3. Roll the die. If you roll a 5 or a 6, roll again. Whichever number you roll first from 1 – 4 is the box you pick for your offspring's trait. Use the key for the genotypes to find the phenotype.
4. Add the genotypes and phenotypes to your trait list on page 3.

1	2
3	4

Superhero Mom: _____

Superhero Dad: _____

Station One: Dominant Traits

Invisibility: (mom) _____ X _____ (dad)

Intelligence: (mom) _____ X _____ (dad)

Number on the die: _____
Trait of offspring: _____

Number on the die: _____
Trait of offspring: _____

Station Two: Co-Dominant Traits

Shape Shifting: (mom) _____ X _____ (dad)

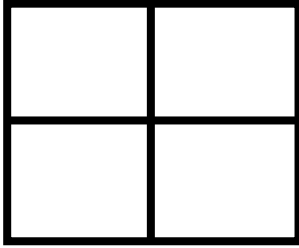
Strength: (mom) _____ X _____ (dad)

Number on the die: _____
Trait of offspring: _____

Number on the die: _____
Trait of offspring: _____

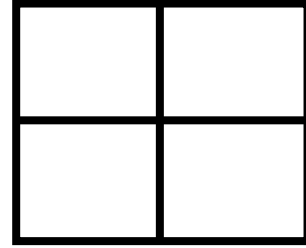
Station Three: Incomplete Dominant Traits

Extreme Fighting: (mom) _____ X _____ (dad)



Number on the die: _____
Trait of offspring: _____

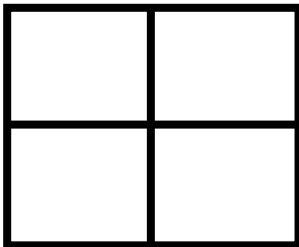
Flight: (mom) _____ X _____ (dad)



Number on the die: _____
Trait of offspring: _____

Station Four: Gender

Sex chromosomes: (mom) _____ X _____ (dad)



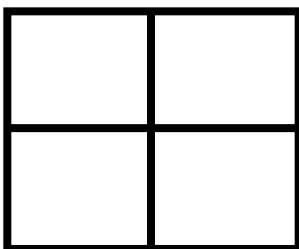
Number of the die: _____

Baby's gender: _____

Take the silhouette that is for your baby's gender. 😊

Station Five: Multiple Alleles

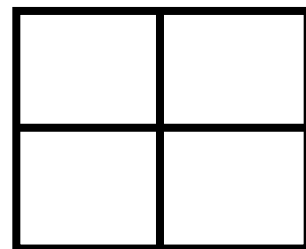
Telekinetic/Telepathic: (mom) _____ X _____ (dad)



Number on the die: _____
Trait of offspring: _____

Station Six: Sex Linked

Regeneration: (mom) _____ X _____ (dad)



Number on the die: _____
Trait of offspring: _____

Fill in the table below:

Trait	Genotype	Phenotype
Invisibility		
Intelligence		
Shape shifting		
Strength		
Extreme Fighting		
Flight		
Telekinetic/Telepathic		
Regeneration		
Gender		

When you have finished all six stations, answer the questions below.

Genetics and Punnett Square Questions:

1. What is the difference between phenotype & genotype?

2. Explain the difference between dominant & recessive genes.

3. Which of your baby's traits are heterozygous? _____

4. Which of your baby's traits are homozygous? _____

5. How is it possible for an offspring to show a trait that neither parent showed? _____

6. Explain why having a boy or a girl is always a 50/50 chance. _____

7. Explain the difference between codominance and incomplete dominance. _____

Use the superhero silhouette you picked up at Station 4 and draw your new superhero as an adult! Be sure to give your superhero a name!