

Name: _____ Color: _____ Date: _____

Makin' Babies Activity

Determining your genotypes:

-You are homozygous dominant (ex. AA) if your parents and blood-related siblings have the same dominant trait as you (ex. Everyone has brown hair)

-You are heterozygous (ex. Aa) for a dominant trait if you have the dominant phenotype (ex. brown hair) but your parents or blood-related siblings have the recessive trait (ex. blonde hair)

-You are homozygous recessive (ex. aa) if you have the recessive phenotype (ex. blonde hair)

Your Genetic Profile:

1. Hair Color (B, b) → *INCOMPLETE DOMINANCE*

Options: Dark brown (BB) > Light brown (Bb) > Blonde (bb)

Phenotype: _____ Genotype: _____

2. Hair Texture (T, t) → *INCOMPLETE DOMINANCE*

Options: Curly (TT) > Wavy (Tt) > Straight (tt)

Phenotype: _____ Genotype: _____

3. Skin Color (D, d) → *INCOMPLETE DOMINANCE*

Options: Dark (DD) > Medium (Dd) > Light (dd)

Phenotype: _____ Genotype: _____

4. Eye Color (E, e) → *INCOMPLETE DOMINANCE*

Options: Brown (EE) > Hazel (Ee) > Blue (ee)

Phenotype: _____ Genotype: _____

5. Eyesight (S, s)

Options: Poor eyesight- *needs glasses* (SS or Ss) > Good eyesight (ss)

Phenotype: _____ Genotype: _____

6. Freckles (F, f)

Options: Freckles (FF or Ff) > No Freckles (ff)

Phenotype: _____ Genotype: _____

7. Sex (XY or XX) → **FOR THIS ACTIVITY! Not in real life...**

Options: Male (XY), Female (XX)

Phenotype: _____ Genotype: _____

Create-A-Baby

Directions:

1. Complete your own genetic profile on page 1. (For #7 "Sex", see the 2nd direction.)
2. If using a classmate of the same sex as you, flip a coin to see who will be dad (heads) and who will be mom (tails). Fill in #7 based on the outcome you receive.
3. For each trait, complete a Punnett Square on the next page (pg. 3), using *your* genotype AND *your partner's* genotype.
4. Label each box inside the Punnett Square with #s 1-4 as the first example shows.
5. Roll a dice until you get a 1-4. Whichever number it lands on is the genotype of your child. If you get a 5 or 6, roll again. Record the genotype (AA, Aa, etc.) below.
6. Your partner will then roll a die to determine the genotype of your 2nd child together, to record on their own sheet. Each pair of students will produce two children (they will be siblings).
7. Based on your child's genotype, determine their phenotype (physical feature → ex. brown hair) and record below.
8. Draw a picture of your baby on the last page! You will EACH name & draw a picture of your baby.

Your Baby's Traits:

1. Hair Color

Genotype: _____ Phenotype: _____

2. Hair Texture

Genotype: _____ Phenotype: _____

3. Skin Color

Genotype: _____ Phenotype: _____

4. Eye Color

Genotype: _____ Phenotype: _____

5. Eyesight

Genotype: _____ Phenotype: _____

6. Freckles

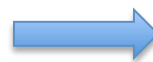
Genotype: _____ Phenotype: _____

7. Sex

Genotype: _____ Phenotype: _____

Roll the dice to determine the sex of your baby!

	X	X
X	1 XX	2 XX
Y	3 XY	4 XY



Number all your squares like this! →

Baby's Trait Determination:

Traits & Alleles:	Mother's Name: _____	Father's Name: _____
<u>Hair Color (B, b)</u> Options: Dark brown > Light brown* > Blonde <i>*Incomplete Dom</i>	Phenotype: _____ Genotype: _____	Phenotype: _____ Genotype: _____
<u>Hair Texture (T, t)</u> Options: Curly > Wavy* > Straight <i>*Incomplete Dom</i>	Phenotype: _____ Genotype: _____	Phenotype: _____ Genotype: _____
<u>Skin Color (D, d)</u> Options: Dark > Medium* > Light <i>*Incomplete Dom</i>	Phenotype: _____ Genotype: _____	Phenotype: _____ Genotype: _____
<u>Eye Color (E, e)</u> Options: Brown > Hazel* > Blue <i>*Incomplete Dom</i>	Phenotype: _____ Genotype: _____	Phenotype: _____ Genotype: _____
<u>Eyesight (S, s)</u> Options: Poor (glasses) > good	Phenotype: _____ Genotype: _____	Phenotype: _____ Genotype: _____
<u>Freckles (F, f)</u> Options: Freckles > No freckles	Phenotype: _____ Genotype: _____	Phenotype: _____ Genotype: _____

1	2
4	3

Our Beautiful Baby ☺

Created by: _____

Baby's Name: _____

Gender: _____ Birthday: _____

Mother: _____ Father: _____

Sibling's Name: _____

