Celebrity babies Lab

For today’s lab we will be practicing our ability to predict the genotypes and phenotypes of offspring.

We will be using well known celebrities in order to predict and model what their babies would look like.

|  |  |
| --- | --- |
| **Males** | **Females** |
| Tyga | Alessia Cara |
| Harry Styles | Beyonce |
| Tom Brady | Rhianna |
| Kendrick Lamar | Selena Gomez |
| Lonzo Ball | Kylie Jenner |
| Offset | Cardi B |
| Nick Jonas | Nicki Minaj |
| Drake | Jennifer Lawrence |

**Instructions:** Pick one male celebrity and one female celebrity to begin. Look to the genotypes and phenotypes chart to find the genotypes and the phenotypes for each celebrity; once you have the celebrities picked right their names on the lines below.

Female Celebrity (Mom):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Male Celebrity (Dad):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Write a prediction about what you think this baby will look like based on the features that mom and dad have:**

**Instructions:**

Make a Punnett square for each trait using the genotypes for your chosen celebrities (found on page one and two in the charts packet). You will have 13 Punnett squares in total.

Title each Punnett square and write the mom’s genotype at the top and the dad’s genotype across the left side. Then fill in the Punnett Square accordingly

EXAMPLE:

MOM

D D

D D

A

D

d

Then, roll two dice and add the numbers together to determine which phenotype in the punnett square to select for your celebrity baby:

* If your dice add up to 1-3 : circle top left window
* If your dice add up to 4-6 : circle top right window
* If your dice add up to 7-9 : circle bottom left window
* If your dice add up to 10-12 : circle bottom right window

Once you have identified the genotype you will use, look up the phenotype it represents using the charts packet. Write down the phenotype the baby will have on the next page.

Celebrity Baby Traits

TRAIT GENOTYPE PHENOTYPE % probability of inheritance

Trait 1:

Trait 2:

Trait 3:

Trait 4:

Trait 5:

Trait 6:

Trait 7:

Trait 8:

Trait 9:

Trait 10:

Trait 11:

Trait 12:

Trait 13:

Analysis:

You must create a portrait of the celebrity baby. You may use graphic design, collage, 3-d model or a 2-d drawing of what your baby will look like.

You must also write at least one paragraph that proves how you know your baby would turn out this way.

* Please discuss what you know about the relationship between genes and inherited traits, furthermore, please talk about how mathematically probable your baby is. For example, discuss how your baby’s unique traits would line up with either dominant or recessive traits we see in society) **Use plenty of academic vocab words in your written analysis.**

**DUE FRIDAY MARCH 24TH AT THE BEGINNING OF YOUR CLASS PERIOD**