

Names: _____

Date: _____

Teacher _____

Period: _____

MAKING BABIES

Procedure:

1. Determine your personal genotype and phenotype by following your teacher's instructions and this Master Chart:

Master Chart

- | | |
|---|--|
| A. Sex / XX=female XY=male | O. Spacing of Eyes/ WW=wide
Ww--normal ww=narrow |
| B. Hair Color / BB=black Bb=brown or red
bb=blonde | P. Baldness/ BB= normal Bb=normal
bb=bald |
| C. Eye Color / EE=brownish ee=bluish | Q. Face Shape/ RR=round Rr=round
rr=square |
| D. Height / TT=tall Tt--medium tt--short | R. Nostril Hair/ NN=lots Nn=some nn=few |
| E. Size of Feet FF=big Ff--medium
ff=small | S. Eyelashes/ LL=long Ll=long ll=short |
| F. Tongue Roll RR or Rr=tongue roller
rr=non roller | T. Eyebrows/ BB=bushy Bb=bushy
bb=fine |
| G. Color Blindness / CC or
Cc=color-sighted cc=color-blind | U. Eyebrow Position/ NN=unconnect
Nn=unconnect nn=connected |
| H. Blood Type / AA AO AB BB BO OO | V. Freckles/ FF=present Ff=present
ff=absent |
| I. Widow's Peak / WW or Ww=widow's
peak ww=no widow's peak | W. Dimples/ DD=present Dd=present
dd=absent |
| J. Size of Nose/ LL=large Ll=medium
ll=small | X. Eye Shape/ AA=almond Aa=almond
aa=round |
| K. Size of Ears/ LL=large Ll=medium
ll=small | Y. Eye Position/ SS=straight Ss=straight
ss=slanted up |
| L. Size of Eyes/ LL=large Ll=medium
ll=small | Z. Chin Cleft/ CC=absent Cc=absent
cc=present |
| M. Shape of Lips/ TT=thick Tt=medium
tt--thin | |
| N. Hair Texture/ HH=curly Hh=wavy
hh=straight | |

2. Write a secret code (8 letters and/or numbers) at the bottom of both of your egg/sperm charts.
3. Write your genotype and phenotype information in the attached data table.
4. Next, you will give **ONE** allele for each trait to your kid. (Remember that the other allele comes from the mystery parent). Now there are more rules to follow:
 - A. If you are homozygous dominant (two capital letters), you can **ONLY** pass along a big letter to your child.
 - B. If you are homozygous recessive (two lower case letters), you can **ONLY** pass along a small letter to your child.

- C. If you are heterozygous (one capital letter and one lowercase letter), then you **MUST** flip a coin to determine which allele your kid will get. If the coin lands on **Heads**, then write the dominant allele on the egg/sperm chart. If the coin lands on **Tails**, then write the recessive allele on the egg/sperm chart.
5. You will make two (2) copies of your egg/sperm — one is to keep for your kid; one is to give away to place in an egg or sperm bank. **Put identical information on both columns.**
 6. Cut out gamete 2 from your egg or sperm charts and bring it to the Egg Bank or the Sperm Bank.
 7. Get a sperm or egg from the other bank and go back to your seat.
 8. Paste the egg/sperm that you just picked up from the bank on the page called "My Baby".
 9. Figure out the phenotype (how your baby will look) from the now-complete genotype. Use the Master chart again for help.
 10. Draw a picture of the lil' nipper with the appropriate characteristics and then make out your birth announcement and share with all your friends and loved ones...
 11. Hand in the following charts:
 - Egg/Sperm Chart,
 - My Baby Chart, and
 - Birth Notice

EXTRA CREDIT: Using the same procedure as before, determine the gamete chromosome for your F1 generation and list this in the data table.

12. Repeat steps 2 - 10 for your baby's egg/sperm.

Your Egg/Sperm Chart

Sex _____, P1

Characteristic	Genotype	Phenotype	Gamete 1	Gamete 2
A. Sex				
B. Hair Color				
C. Eye Color				
D. Height				
E. Size of Feet				
F. Tongue Roller				
G. Color Blindness				
H. Blood Type				
I. Widow's Peak				
J. Size of Nose				
K. Size of Ears				
L. Size of Eyes				
M. Shape of Lips				
N. Hair Texture				
O. Spacing of Eyes				
P. Baldness				
Q. Face Shape				
R. Nostril Hair				
S. Eyelashes				
T. Eyebrows				
U. Eyebrow Position				
V. Freckles				
W. Dimples				
X. Eye Shape				
Y. Eye Position				
Z. Chin Cleft				
			Secret Code	Secret Code

My Baby Chart

Your Kid, F1 Generation

Characteristic	Genotype	Phenotype	Gamete 1	Gamete 2
A. Sex			Paste your own egg/sperm here.	Paste your egg/sperm from the Egg bank or the Sperm Bank here.
B. Hair Color				
C. Eye Color				
D. Height				
E. Size of Feet				
F. Tongue Roller				
G. Color Blindness				
H. Blood Type				
I. Widow's Peak				
J. Size of Nose				
K. Size of Ears				
L. Size of Eyes				
M. Shape of Lips				
N. Hair Texture				
O. Spacing of Eyes				
P. Baldness				
Q. Face Shape				
R. Nostril Hair				
S. Eyelashes				
T. Eyebrows				
U. Eyebrow Position				
V. Freckles				
W. Dimples				
X. Eye Shape				
Y. Eye Position				
Z. Chin Cleft				

Your Child's egg/sperm Chart

Sex _____, F1

Characteristic	Genotype	Phenotype	Gamete 1	Gamete 2
A. Sex				
B. Hair Color				
C. Eye Color				
D. Height				
E. Size of Feet				
F. Tongue Roller				
G. Color Blindness				
H. Blood Type				
I. Widow's Peak				
J. Size of Nose				
K. Size of Ears				
L. Size of Eyes				
M. Shape of Lips				
N. Hair Texture				
O. Spacing of Eyes				
P. Baldness				
Q. Face Shape				
R. Nostril Hair				
S. Eyelashes				
T. Eyebrows				
U. Eyebrow Position				
V. Freckles				
W. Dimples				
X. Eye Shape				
Y. Eye Position				
Z. Chin Cleft				
			Secret Code	Secret Code

Your Grandchild Chart

Your Kid, F2 Generation

Characteristic	Genotype	Phenotype	Gamete 1	Gamete 2
AA. Sex			Paste your child's egg/sperm here.	Paste your egg/sperm from the Egg bank or the Sperm Bank here.
BB. Hair Color				
CC. Eye Color				
DD. Height				
EE. Size of Feet				
FF. Tongue Roller				
GG. Color Blindness				
HH. Blood Type				
II. Widow's Peak				
JJ. Size of Nose				
KK. Size of Ears				
LL. Size of Eyes				
MM. Shape of Lips				
NN. Hair Texture				
OO. Spacing of Eyes				
PP. Baldness				
QQ. Face Shape				
RR. Nostril Hair				
SS. Eyelashes				
TT. Eyebrows				
UU. Eyebrow Position				
VV. Freckles				
WW. Dimples				
XX. Eye Shape				
YY. Eye Position				
ZZ. Chin Cleft				

"Birth Notice"

(Circle or fill in the appropriate *information for either F1 or F2 child)

This is to announce the birth of _____ a delightful little boy/girl.

The

proud parents are _____ and _____.

The baby has _____ hair and will grow to be quite short/average/tall. Naturally, he/she

can/cannot roll his/her tongue. This brown/green/blue eyed, color blind/color-sighted baby with

his/her type _____ blood will be a welcome addition to the family. With/without his/her

widow's peak, fine/bushy eyebrows and large/medium/small nose, there is no doubt that this

cute, dimpled/not dimpled little bundle O'Joy is bound for fame and fortune. To be sure, he/she

resembles _____ more than _____.

Draw a picture of your child at the age of 15 years in the space above