Genetics with a Smile Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part A: Smiley Face Traits

1. Obtain two coins from your teacher. The person whose first name is first in the alphabet will be the male and the other individual with be the female. Female: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Male: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The parents are heterozygous for all the Smiley Face traits.

Flip the coins for parent for each trait. If the coin lands with heads up, it represents a dominant allele. A coin that lands tails up indicates a recessive allele.

Record the result for each person by circling the correct letter.

Use the results and the Smiley Face Traits page to determine the genotype and phenotype for each trait.



1. Part B: Is it a boy or girl? To determine the sex of your smiley face, flip the coin for the male parent. Heads would represent X, while tails would be Y.



1. Part C: Create Your Smiley Face on the back of this page! Use the Smiley Face Traits chart and your results from Part A and Part B to create a sketch of your smiley face. Don’t forget to give your smiley face a name!

T. Trimpe 2003 http://sciencespot.net/

Genetics with a Smile Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Part A: Smiley Face Traits

1. Obtain two coins from your teacher. The person whose first name is first in the alphabet will be the male and the other individual with be the female. Female: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Male: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The parents are heterozygous for all the Smiley Face traits.

Flip the coins for parent for each trait. If the coin lands with heads up, it represents a dominant allele. A coin that lands tails up indicates a recessive allele.

Record the result for each person by circling the correct letter.

Use the results and the Smiley Face Traits page to determine the genotype and phenotype for each trait.



1. Part B: Is it a boy or girl? To determine the sex of your smiley face, flip the coin for the male parent. Heads would represent X, while tails would be Y.



1. Part C: Create Your Smiley Face on the back of this page! Use the Smiley Face Traits chart and your results from Part A and Part B to create a sketch of your smiley face. Don’t forget to give your smiley face a name!

T. Trimpe 2003 http://sciencespot.net/