

Biology - Genetics Quiz

Name: _____

1) - Widow's peak (W) is dominant over straight hairline (w)

- Short fingers (S) is dominant over long fingers (s)

which of the following properly describes a cross between an individual who is homozygous dominant for hairline but heterozygous for finger length and an individual who is recessive for both traits?

- A. $WwSs \times WwSs$
- B. $WWSs \times wwSs$
- C. $Ws \times ws$
- D. $WWSs \times wwss$

2) Cystic Fibrosis follows a ^(C) Dominant/^(c) Recessive pattern.

A son with cystic fibrosis (recessive) is born to a couple who appear to be normal. What are the chances that any child born to this couple will have cystic fibrosis. (show work)

3.) A dominant allele (W) confers black fur on guinea pigs. A guinea pig that is homozygous recessive (ww) has white fur. Fred would like to know whether his pet black-furred guinea pig is homozygous (WW) or heterozygous (Ww). How might he determine his pet's genotype? (Show work)

- 4.) A particular flower shows incomplete dominance as a pattern of inheritance for flower color.
RR = Red flower WW = white flower.

Cross a red flower with a white flower

_____ x _____

genotypic Ratio:

Phenotypic Ratio:

- 5.) Blood type has multiple alleles and a Codominant pattern of inheritance. Cross someone with bloodtype "O" with someone with bloodtype "AB."

_____ x _____

Genotypic Ratio:

Phenotypic Ratio:
