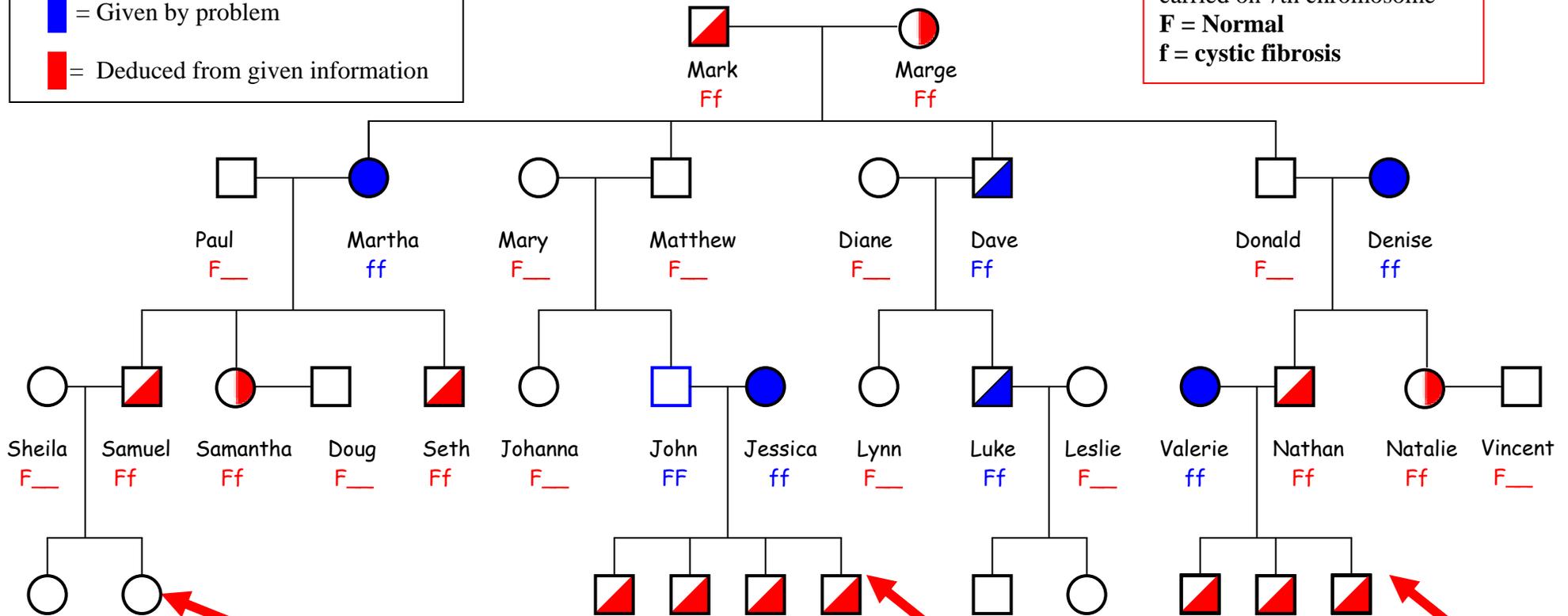


# KEY TO CF PEDIGREE ACTIVITY

■ = Given by problem  
■ = Deduced from given information

#1. Cystic Fibrosis:  
 Autosomal recessive Trait  
 carried on 7th chromosome  
**F = Normal**  
**f = cystic fibrosis**



#3. Samuel is a carrier, the girls have a 50% chance of getting either allele from Sam - so 50% probability.

#4. All Carriers - Ff. John must give F, Jessica must give f.

#6. Since the description does not mention that the boys have CF, only Ff is possible. 100% Ff

#2. Mark and Marge must both be Ff. Martha is the key here. Since she has cystic fibrosis she must be ff. If that is true, then both parents must be heterozygous for the trait. She inherited an f from each of them.

#5. Possibly. Since Natalie and Samantha are carriers (Ff), and Vincent and Doug appear phenotypically normal (F\_), then we can't really be sure. However, if we assume Vincent and Doug are also carriers, then the odds are 25% that they will have a child with cystic fibrosis.