**Pedigree Rules**

**Is it a dominant pedigree or a recessive pedigree?**

1. If two affected people have an unaffected child, it must be a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pedigree: \_\_\_ is the dominant mutant allele and \_\_\_ is the recessive allele. Both parents are \_\_\_\_ and the normal child is \_\_\_\_.
2. If two unaffected people have an affected child, it is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pedigree: \_\_\_ is the dominant allele and \_\_\_ is the recessive mutant allele. Both parents are \_\_\_ and the affected child is \_\_\_\_.
3. If every affected \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has an affected \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, it is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pedigree.

**Assigning genotypes in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pedigree**

1. All unaffected are recessive (two lower case letters).
2. Affected children of an affected parent and an unaffected parent must be heterozygous, because they inherited a recessive allele from the unaffected parent.
3. The affected parents of an unaffected child must be heterozygotes, since they both passed a recessive allele to their child.

**Assigning genotypes in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pedigree**

1. All affected individuals are recessive.
2. If an affected person mates with an unaffected person, any unaffected offspring must be heterozygotes, because they got a recessive allele from their affected parent.
3. If two unaffected individuals mate and have an affected child, both parents must be heterozygotes.