

Name _____

Genetics Study Guide

The quiz will be held tomorrow, Tuesday.

It will contain some vocabulary words, questions about DNA, and require you to use Punnett squares and pedigrees.

Define the terms below:

DNA

RNA

Nucleic Acid

Gene

Genetics

Inheritance

Trait

Phenotype

Genotype

Allele

Heterozygous

Homozygous

Hybrid

Dominant

Recessive

Incomplete Dominance

Polygenic Inheritance

Sex-Linked Gene

Mutation

What makes up the backbone of DNA?

What are the four base pairs of DNA, and which ones pair up?

Make up and answer your own question with a Punnett Square below:

| | | | |
|--------|--|--------|--|
| | | Father | |
| Mother | | | |
| | | | |

Draw a pedigree for the recessive trait of blonde hair for the following situation, and then write down as many genotypes as you can:

Tristan and Shelley have 3 kids: Bob, Norman, and Barbara. Barbara was married to a circus clown named Duke the Clown, and had twin daughters, Jenny and Sheila. Norman married a gal named Sue and had only one child, and even though it was a girl, he named her Norman Jr. Bob married a woman named Patricia, and they had 2 kids: Jack and Zack. The people with blonde hair are Shelley, Bob, Norman Jr., Patricia, Jack, and Zack.