

Name _____

Genetics WS

What is genetics? (p.179 in grey box)

Who was Gregor Mendel? (p.189)

What type of plants did Mendel work with?

Because of his work, Mendel is known as _____.

What does the law of segregation state? (p.190)

During gamete formation (meiosis,) what happens to genes?

As a result of meiosis, each gamete receives a single copy of each _____.

What does the principle of independent assortment say? (p.190)

The likelihood that a particular event will occur is called _____. (p.191)

Predictions based on probability are only accurate if a _____ are involved. (p.192)

A specific characteristic such as seed color or plant height is a _____. (p.193)

Characters come in different versions called _____.

What are genes?

Different forms of a gene are called _____.

What are the two alleles for the plant height gene? (Figure 5.2-6, p.193)

_____ alleles can mask the appearance of other alleles. They are always expressed.

Alleles that can be hidden by dominant alleles are called _____. These alleles are only expressed when the dominant allele is not present.

When Mendel crossed plants with yellow pods and plants with green pods, all of the offspring (F₁) had green pods. Therefore, _____ is the dominant allele, and _____ is the recessive allele.

Dominant alleles are represented by a _____ letter.

Recessives alleles are represented by a _____ letter.

What is the difference between a phenotype and a genotype? (p.194)

Genotype or Phenotype? Red hair=_____ Gg=_____

Organisms with two identical alleles for a particular trait are said to be _____. (purebred)

Organisms with two different alleles for a particular trait are said to be _____. (hybrid)

Homozygous or Heterozygous? TT=_____ Tt=_____ tt=_____

What is the name of the diagram that is used to determine gene combinations that might result from a genetic cross? (p.195)

Non-Mendelian Genetics (p.208-219)

Type of Inheritance	Definition	Example
Incomplete Dominance		
Codominance		
Multiple Alleles		
Polygenic Inheritance		