“Decoding Genes with Max Axiom” – Part One

The process of \_\_\_\_\_\_\_\_\_\_\_\_\_means parents pass on their traits to their kids. The traits you can see, count, or measure make up the \_\_\_\_\_\_\_\_\_\_\_\_ of a plant or animal.

These features are things like coat color and wing shape.

Kids use directions to build a model plane. Likewise, the body uses a special set of directions called\_\_\_\_\_\_\_\_\_\_\_\_ to build traits in the phenotype. These dogs have different phenotypes because their genes are different. The genes that produce the phenotype are called the \_\_\_\_\_\_\_\_\_\_\_ . The study of heredity is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Back in 1860, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ became the father of genetics. Mendel crossed pea plants with different traits. Then he examined the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Each plant must have something inside that makes the right color. In my time, we call that special something a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

When I crossed yellow pod and green pod plants, all the offspring were green! The green gene must be stronger than the yellow gene. Exactly! Green is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and yellow is

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A plant has two copies of each gene. These copies are called \_\_\_\_\_\_\_\_\_\_\_\_. But it can only give one allele to each offspring. A few get the yellow allele from both \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Since yellow is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the plants need two copies of the yellow allele to have yellow pods.

Write down Mendel’s Findings here:

1.

2.

3.

4.

How many years did Mendel bred peas?

How many peas did he bred?

Mendel’s findings are the basis of the science we call \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.