Chapter 11 study guide

Who was the Austrian monk that studied genetics in pea plants?

**Genes** –

**Alleles** –

The first generation of offspring (children) are called the \_\_\_\_\_\_\_\_\_ generation

The generation that are the PARENTS are called the \_\_\_\_\_\_\_\_\_ generation

Gregor Mendel concluded that genes and alleles are responsible for passing along genetic information…what else did he conclude about alleles?

Why would two parents that are tall have a child that is short? (Think about alleles separating)

R R

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| --- | --- |
|  |  |
|  |  |

r

r

R – round seed

r – wrinkled seed

Fill in this cross

What percent of the children will be HETEROZYGOUS?

How many will have round seeds?

Know:

Heterozygous

Homozygous DOMINANT

Homozygous RECESSIVE

What are Phenotypes?Genotypes?

Situations where one gene is not completely dominant over another is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ dominance

When we see BOTH alleles are in the phenotype (like two colors), we called that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are a couple examples of polygenic traits

It was later discovered that it wasn’t alleles that assort by themselves….it was actually \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The father apart two genes are located on a chromosome the ….

Know how incomplete dominance works (flowers)

Be able to make Punnett squares (single gene) and tell how many of the children will show the dominant or recessive trait (Practice here: make a cross or two for anything you’d like. Rrxrr or anything you would like…hand it to whoever is next to you to see if they could get it right)

Be able to insert the GENOTYPE (letters) into a dihybrid Punnett square (the big one) and be able to tell their phenotypes (tall/round short/round etc.)