

Ch 4.2 Mendelian Genetics (Part 2)

I. Match the keywords to the correct description

Homozygous

Two different alleles for the same trait

Phenotype

allele that is always expressed

Dominant

Allele that can be hidden or skip generation

Heterozygous

The genetic make up – e.g.: *aa* (homozygous recessive), *Aa* (heterozygous)

Recessive

Physical appearance of the trait – e.g.: *black hair, blue eyes, curly hair*

Genotype

Two same alleles for the trait

II. Use the chart and new vocabulary to help you answer the questions below

Pea Plant Traits					
	Seed Shape	Seed Color	Pod Color	Flower Color	Plant Size
Dominant Traits	Round  R	Yellow  Y	Green  G	Purple  P	Tall  T
Recessive Traits	Wrinkled  r	Green  y	Yellow  g	White  p	Short (Dwarf)  t

1. For each genotype below, select whether it is **Homozygous** or **Heterozygous**.

- a. TT
- b. Gg
- c. rr

2. Looking at the chart, identify the following genotype:

- a. Heterozygous Purple
- b. Homozygous short
- c. Round seed

3. Identify the following phenotype:

- a. PP
- b. Tt
- c. Yy
- d. rr