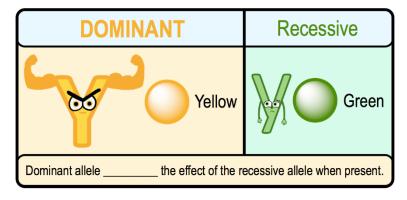
CONCEPT: GENOTYPE VS. PHENOTYPE

Dominant vs Recessive Alleles

•	(differ	rent <i>versions</i> of a s	specific gene) can be dominant or rece	essive.	
		Allele: exerts	its effects whenever present (symbol	=	_letter).
		Allele: has	effect if a dominant allele is prese	nt (symbol =	case letter).
	□ The allele for		peas is dominant to the allele for	peas (the	recessive allele).
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EXAMPLE: Dominant vs. Recessive alleles.



PRACTICE: An allele that exerts its effects whenever it is present is:

- a) Recessive.
- b) Heterozygous.
- c) Dominant.
- d) Homozygous.
- e) Homologous.

Genotype & Phenotype

●Genotype: the genetic	of alleles in an individual (written as a pair of letters).		
□ Homo zygous: 2	alleles for the same gene (1 YY or 2 yy).		
□ Hetero zygous: 2	alleles for the same gene (3 Yy).		
●Phenotype: the	expressed trait that results from the genotype (ex. yellow/green peas).		

EXAMPLE: Genotype vs. Phenotype of Pea Plants.

	Phenotype	
1	zygousominant	Yellow
2	zygousecessive	Green
3	zygous	Yellow

CONCEPT: GENOTYPE VS. PHENOTYPE

PRACTICE: If the two alleles for a particular gene are identical the gene pair is:

- a) Homozygous.
- b) Heterozygous.
- c) Recessive.
- d) Homologous.
- e) Dominant.
- f) Dissimilar.

PRACTICE: If an individual is homozygous for a particular trait:

- a) Each parent contributed a different allele for that trait.
- b) One parent contributed two different alleles for that trait.
- c) Each parent contributed the same allele for that trait.
- d) One parent contributed two copies of the same allele for that trait.

PRACTICE: Mendel's pea plants can have yellow peas or green peas. Mendel found the yellow pea color allele to be dominant over the green pea color allele. What does this mean?

- a) The yellow allele masks the effects of the green allele in an individual heterozygous for pea color.
- b) Both individuals who are heterozygous and homozygous dominant for pea color will have yellow peas.
- c) Only individuals who are homozygous recessive for pea color will have green peas.
- d) The green pea color allele can be found in some individuals but not expressed.
- e) All of the above.