

Name: _____

Date: _____

Picture

Phenotype/Genotype Table

Chromosomes

plant height
tall
short

bead color	trait (symbol)	phenotype (physical appearance) Hint: words	genotype (gene combination) Hint: letters
orange	leaf shape (L or l)		
green	plant height (T or t)		
red	root type (R or r)		
clear	flower color (W or w)		
blue	stem shape (S or s)		

For each trait tell whether the genotype is HETEROZYGOUS or HOMOZYGOUS:

Leaf Shape _____

Plant Height _____

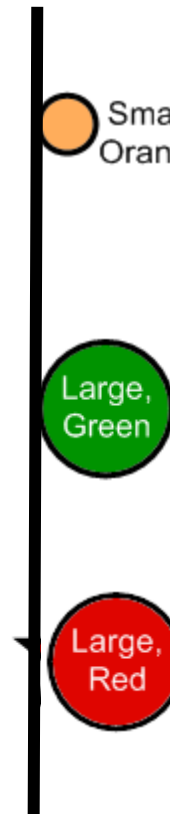
Root Type _____

Flower Color _____

Stem Shape _____

LONG BLUE

LONG PINK

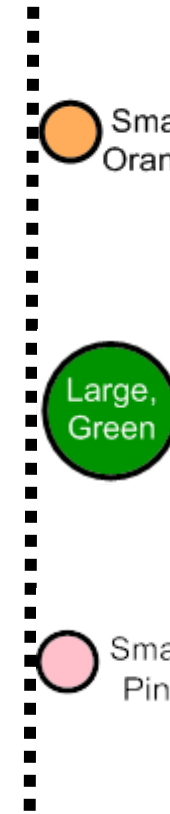


Small, Orange

Large, Green

Large, Red

Large, Blue



Small, Orange

Large, Green

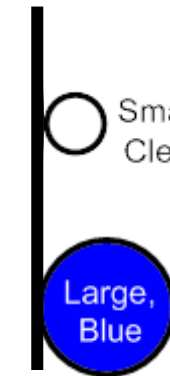
Small, Pink

Large, Clear

Small, Blue

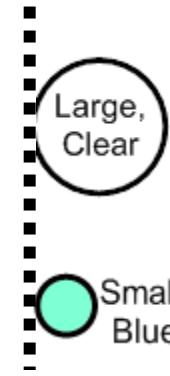
SHORT BLUE

SHORT PINK



Small, Clear

Large, Blue



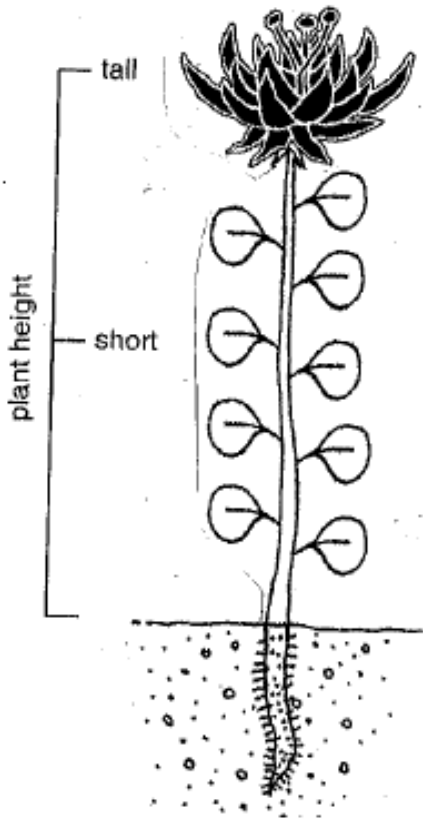
Large, Clear

Small, Blue

Directions:

1. Use the ALIEN FLOWER KEY to figure out the genotype (based on the given chromosomes).
2. After you know the genotype, fill in the phenotype.
3. Based on the phenotype, draw a picture of the alien flower.
4. Fill in whether each genotype is heterozygous or homozygous.

Picture



Phenotype/Genotype Table

bead color	trait (symbol)	phenotype (physical appearance) Hint: words	genotype (gene combination) Hint: letters
orange	leaf shape (L or l)		
green	plant height (T or t)		
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For each trait tell whether the genotype is HETEROZYGOUS or HOMOZYGOUS:

Leaf Shape _____

Plant Height _____

Root Type _____

Flower Color _____

Stem Shape _____

Chromosomes

LONG BLUE

LONG PINK



SHORT BLUE

SHORT PINK



Directions:

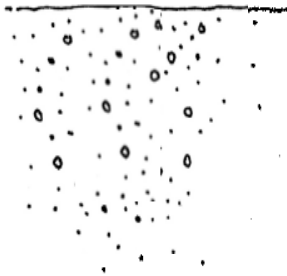
1. Use the ALIEN FLOWER KEY to figure out the phenotype (based on the given picture).
2. After you know the phenotype, fill in the genotype – if there is more than 1 option CHOOSE 1 (doesn't matter).
3. Based on the genotype, draw the correct alleles on the chromosomes – make sure you are using the right colors/sizes.
4. Fill in whether each genotype is heterozygous or homozygous.

Picture

tall

plant height

short



Phenotype/Genotype Table

bead color	trait (symbol)	phenotype (physical appearance) Hint: words	genotype (gene combination) Hint: letters
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clear	flower color (W or w)		
blue	stem shape (S or s)		

For each trait tell whether the genotype is HETEROZYGOUS or HOMOZYGOUS:

Leaf Shape _____

Plant Height _____

Flower Color _____

Stem Shape _____

Root Type _____

Chromosomes

LONG BLUE



LONG PINK



SHORT BLUE



SHORT PINK



Directions:

1. Create your own version of the Alien Flower activity. Make up your own flower and correctly fill in ALL the information (picture, genotype/phenotype table, alleles, and describing whether each genotype is heterozygous or homozygous).