

Name: _____

Bikini Bottom Genetics
Worksheet #1: Understanding Vocabulary & Punnett Squares

Complete the following practice activities...

1. For each genotype below, indicate whether it is a heterozygous (He) OR homozygous (Ho).

TT _____ Bb _____ DD _____ Ff _____ tt _____ dd _____
Dd _____ ff _____ Tt _____ bb _____ BB _____ FF _____

Which of the genotypes in #1 would be considered **purebred**? _____
Which of the genotypes in #1 would be **hybrids**? _____



2. Determine the phenotype for each genotype using the information provided about SpongeBob.

Yellow body color is dominant to blue.

YY _____ Yy _____ yy _____

3. For each phenotype, give the genotypes that are possible for Patrick.

A tall head (T) is dominant to short (t).

Tall = _____ Short = _____



Match each term with its meaning...

- | | |
|-----------------|--|
| 1. Allele | A Cell with one of each kind of chromosome |
| 2. Dominant | B Outward appearance of an organism, regardless of its genes |
| 3. Gamete | C Characteristic that is inherited; can be either dominant or recessive |
| 4. Genotype | D Trait of an organism that can be masked by the dominant form of a trait |
| 5. Haploid | E Observed trait of an organism that mask the recessive form of a trait |
| 6. Heredity | F Transfer of male pollen grains to the pistil of a flower |
| 7. Heterozygous | G Alternative forms of a gene for each variation of a trait of an organism |
| 8. Homozygous | H Passing on of characteristics from parents to offspring |
| 9. Phenotype | I Combination of genes in an organism |
| 10. Pollination | J When there are two different alleles for a trait |
| 11. Recessive | K When there are two identical alleles for a trait |
| 12. Trait | L Male and female sex cells, sperm and eggs |