

Pretend Baby Lab

Name _____ Class Period _____

Follow Up Questions

1. Write down all of the genotypes of your baby that were homozygous dominant in the space below.

2. Write down all of the genotypes of your baby that were homozygous recessive in the space below.

3. Write down all of the genotypes of your baby that were heterozygous dominant in the space below.

4. Write down 3 of your favorite phenotypes that your baby has.

5. What is the difference between genotype and phenotype?

Practice Problems

Scientists at Bikini Bottoms have been investigating the genetic makeup of the organisms in this community. Use the information provided and your knowledge of genetics to answer each question.

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? _____

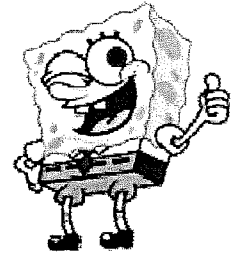
2. Determine the phenotype for each genotype using the information provided about SpongeBob.

Yellow body color is dominant to blue.

YY _____ Yy _____ yy _____

Square shape is dominant to round.

SS _____ Ss _____ ss _____



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

Section A (6 Points)

Identify whether the allele is dominant (D) or recessive (R):

1. B _____
2. b _____
3. X _____
4. A _____
5. f _____
6. m _____

Section B (8 Points)

Identify whether the gene is dominant (D) or recessive (R):

1. BB _____
2. aa _____
3. Xx _____
4. Gg _____
5. FF _____
6. pp _____
7. Aa _____
8. DD _____

Section C (8 Points)

Identify whether the gene is homozygous (Ho) or heterozygous (He):

1. HH _____
2. GG _____
3. Yy _____
4. yy _____
5. Ff _____
6. mm _____
7. JJ _____
8. Pp _____

Section D (10 Points)

Identify whether the gene is homozygous dominant (HoD), heterozygous dominant (HeD), or homozygous recessive (HoR):

1. KK _____
2. ll _____
3. dd _____
4. Tt _____
5. JJ _____
6. Hh _____
7. cc _____
8. RR _____
9. DD _____
10. Ww _____

Section E (12 Points)

Identify the phenotype

1. Brown eyes are dominant to green eyes. Fill in the blanks with "brown" or "green" eyes
BB _____ Bb _____ bb _____
2. A full head of hair is dominant to baldness. Fill in the blanks with "hair" or "bald"
Hh _____ hh _____ HH _____
3. Curly hair is dominant to straight hair. Fill in the blanks with "curly" or "straight"
cc _____ CC _____ Cc _____
4. Tongue rolling is a dominant trait, so rollers are dominant and nonrollers are recessive
Fill in the blanks with "roller" or "nonroller"
TT _____ tt _____ Tt _____