Here is the information you will need to complete this assignment!

These characteristics DO follow the rules of Mendelian Genetics

CHARACTERISTIC DOM GENE (TRAIT) REC GENE (TRAIT)

Hair Length L (long) l (short)

Hair Texture B (bristly) b (silky)

Hair Curliness C (curly) c (straight)

Coat Pattern S (spotted) s (solid)

FEMALE Dog alleles: L b C S

MALE Dog alleles: l b C s

\*\*\* combine the female alleles with the male alleles for the puppy genotype!

\*\*\* Remember….if the organism has at least ONE dominant allele, it will show the dominant trait

\*\*\* Answer the following questions on a separate sheet of paper with your HEADING and “SPOT” as the assignment (we will use the back of the paper for something else!)

1. Would the puppy have a spotted coat? Explain.

2. Does the female dog have a spotted coat? Explain.

3. Does the male dog have a spotted coat? Explain.

4. What would the puppy’s hair texture be? (phenotype/genotype)

5. Would the puppy have curly or straight hair?

6. Does the female parent have curly hair? Explain.

7. Does the male parent have curly hair? Explain.

8. Would the puppy be a hybrid or purebred for hair length? Explain.