Name:_____ Date:_____

Directions: Write whether the genotype is heterozygous or homozygous

1.) Ff: _____

2.) SS: _____

3.) bb: _____

4.) Bb: _____

5.) Tt: _____

6.) ff: _____

Directions: Complete the Punnett Squares

	T	T
T	7.	8.
t	9.	10.

8.)	s	s
S	11.	12.
s	13.	14.

9.)	B	b
B	15.	16.
b	17.	18.

If the dominant trait for height is tall (T) and the recessive trait is short (t), tell the phenotypes for each genotype.

19.) TT:_____

20.) Tt:_____

21.) tt:_____

Straight hair is a dominant trait (S), while curly hair is a recessive trait (t). Jim is homozygous (SS) for straight hair. His wife is heterozygous (Ss) for straight hair. Fill in the Punnett square with their genotypes, then answer the questions.

22.		

23. What is the probability that the child will be **dominant homozygous** SS? _____%

24. What is the probability that the child will be **heterozygous** Ss? _____%

25. What is the probability that the child will be recessive **homozygous** ss? _____%

Directions: Circle the correct answer.

26. Genotypes in which both alleles are capital or both alleles are lower case are called…

a. Heterozygous
b. Homozygous
c. Zygote
d. Homo sapien

27. Which trait is more likely to be visible?

a. Dominant
b. Hybrid
c. Recessive
d. Good ones

28. If there is a mistake in DNA, it can lead to a mutation. Mutations can be…

a. harmful
b. beneficial
c. neutral (not harmful or beneficial)
d. all of the above

29. DNA is tightly packed inside of a _____.

a. nucleotide
b. chromosome
c. gene
d. mitochondria

30. Inherited _____ are passed on from parent to offspring, these include hair color and eye color.

a. traits
b. genes
c. characteristics
d. DNA

31. Only .1% of your DNA is different from anyone else's.

a. True
b. False