Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_

Draw a Punnet square with genotype and phenotype.

* Can I identify examples of inherited traits ?
1. Color vision is dominant over color blindness

 C c Male = cc Female = CC

1. Tongue Curling (T) is dominant over non tongue curling (t). Male=Tt Female=t t
2. Extra fingers (F) are dominant over 5 fingers (f). Very rare allele Male = Ff Female = Ff
3. An allele that is quite common in many African populations – is recessive and causes normal blood cells to collapse – reducing ability to transport O2 . This is called sickle-cell anemia.

S = normal RBC Male= Ss normal Female = Ss normal

s = sickle cell

1. A recessive allele that does not form clotting proteins in the blood is responsible for a condition called hemophelia. Male = hh Hemophilia Female = HH normal clotting

H –Normal clotting factor

h - Hemophilia

1. Brown hair is dominant to blonde. Brown eyes are dominant to blue.

Male = HhBb

brown hair &

brown eyes

Female = HhBb

brown hair &

brown eyes

Brown hair = H

Blonde hair = h

Brown eyes = B

Blue eyes = b

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HB | Hb | hB | hb |
| HB |  |  |  |  |
| Hb |  |  |  |  |
| hB |  |  |  |  |
| hb |  |  |  |  |