b. A brown eyed man marries a blue eyed woman. The first child is blue eyed. What is the man's genotype?

Woman

-6 B Man b

Let:

The man must be heterozygous dominant (Bb) to be able to produce blue eyed children. He is a carrier.

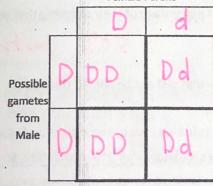
7. Define and state the difference between complete dominance, co-dominance and incomplete dominance? Use examples of each.

complete dominance

=If the dominant allele is present, it will be AA or Aa= red flower expressed, even if heterozygous

- 8. Describe the difference between the male and female karyotype (types of chromosomes).
- 9. A father is who is homozygous dimpled, and a mother who is heterozygous dimpled have children.
  - Show the two alleles carried by the father. (Use "D" for dimpled and "d" for smooth) ......
  - Show the two alleles carried by the mother. (Use "D" for dimpled and "d" for b) smooth) ......
  - Fill in the following Punnett Square showing the cross and show the combinations of genes possible in the children.

Possible gametes from Female Parent



- According to chance, what fraction of their children will have dimples? d)
- What fraction of the children should be homozygous smooth? e)
- What fraction of the children should be heterozygous dimpled?
- What fraction of the children should be homozygous dimpled? g)