**ANSWER KEY to Study Guide Problems**

1. Ll X ll – in order to get the recessive trait the ram must be heterozygous
2. Heterozygous
3. 75% will have antenna. All the females will as well as half the males.
4. They are heterozygous.
5. Ab = 45%, aB = 45%, AB = 5%, ab = 5%
6. Son = IBi rr; Father = IBi \_\_ r
7. Cross is PPcc X ppCC
Geno Ratio: 16:0
Pheno Ratio: 16 purple: 0 white
8. Give the ratios = 4:4:4:4 or 25% each or 4 each
9. 1:2:1
10. BB x BB
11. Give Ratios:
WwTT:WWTt:wwTt:Wwtt
25 % of each
12. Male’s genotype is Green/Spotted
13. 1/16
14. a) 1/32 b) 1/32 c) 0
15. a) Dd b) Dd c) dd

Classification:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Organism | Nucleus | Multicellular | Specialized Tissues | Cartilagenous Skeleton | Bony Skeleton | Protected Egg |
| Bacteria | - | - | - | - | - | - |
| Amoeba | + | - | - | - | - | - |
| Sponge | + | + | - | - | - | - |
| Jellyfish | + | + | + | - | - | - |
| Shark | + | + | + | + | - | - |
| Frog | + | + | + | - | + | - |
| Lizard | + | + | + | - | + | + |

Liz

Bac Am Sp Jell Sh Fr

Bacteria

Lizard

Frog

Shark

Jellyfish

Sponge

Amoeba