Gobble Gobble Genetics

You are going to create a festive turkey for this holiday season. You will be determining the traits for your turkey. You will be flipping a coin to determine the traits of your turkey. The traits are listed below and each trait is specified which is dominant and recessive. Some traits have normal dominance, some are co-dominant, and some are incomplete dominant. Once you have finished determining the traits, draw a picture of your prized turkey.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Trait | Allele 1 | Allele 2 | Genotype | Phenotype |
| 1. Body Size | B b | B b |  |  |
| 2. Body Shape | D d | D d |  |  |
| 3. Body Color | B W | B W |  |  |
| 4. Neck and Head Color | B R | B R |  |  |
| 5. Beak Size | T t | T t |  |  |
| 6. Beak Shape | H h | H h |  |  |
| 7. # of toes on feet | F f | F f |  |  |
| 8. Feet color | O o | O o |  |  |
| 9. Size of feet | L l | L l |  |  |
| 10. Rows of Feathers | A a | A a |  |  |
| 11. # of Feathers per row | X Z | X Z |  |  |
| 12. Color of Feathers | R Y | R Y |  |  |
| 13. Eye Color | G g | G g |  |  |
| 14. Wing Size | Q q | Q q |  |  |
| 15. Neck Length | P p | P p |  |  |

1. Which traits (#) display normal dominance? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Which traits (#) display co-dominance? ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Which traits (#) display incomplete dominance? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phenotypes:

1. BB= Large Bb= Large bb= small 6.

2. DD= Circle Dd= Circle dd= Oval

3. BB= Black BW=Black and White WW= White

4. BB= Blue BR= Purple RR= Red

5. TT= Small Tt= Small tt= Large 7.

6. HH= Short Hh=Short hh= Long

7. FF= Four Ff= Four ff= Three

8. OO= Orange Oo= Orange oo= Yellow

9. LL= Small Ll=Small ll= Large

10. AA= Two Aa= Two aa= Three

11. XX= 10 XZ= 15 ZZ= 20

12. RR=Red RY= Red and Yellow YY= Yellow

13. GG=Green Gg=Green gg=Blue

14. QQ=Large Qq=Large qq=Small

15. PP=Long Pp=Long pp=Short