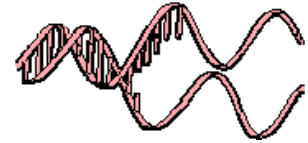


Name _____ Date _____

7 _____ Life Science
Dominant & Recessive 7B-2



Teacher:
Miss Stanley



(1-15) Karen who is purebred for the dominant trait of having a widow's peak hairline marries Jack who has a straight hairline. One of their daughter marries a man who is purebred recessive.

- _____ 1. Give the genotypic ratio of the second filial generation.
- _____ 2. Give the phenotypic ratio of the second filial generation.
- _____ 3. In the F_1 how many children have widow peaks?
- _____ 4. What is Jack's genotype?
- _____ 5. Name the recessive trait.
- _____ 6. Give the F_1 genotypic ratio.
- _____ 7. In the second filial generation, how many offspring are purebred?
- _____ 8. Which parent is purebred?
- _____ 9. Can Jack and Karen have children who do not have a widow's peak?
- _____ 10. Give the genotype of a person who has a widow's peak.
- _____ 11. Can Karen and Jack have grandchildren who do have a widow's peak?
- _____ 12. In the first filial generation how many children have straight hairlines?
- _____ 13. In the second filial generation how many children have straight hairlines?
- _____ 14. What will Karen and Jack's grandkids look like?
- _____ 15. In the first filial generation, how many offspring are hybrid?

(16-30) A farmer crossed a yellow pea pod plant with a hybrid green pea pod plant. Work the first and second filial generations.

- _____ 16. What will the farmer's crop look like the first year?
- _____ 17. What are the chances of this cross producing plants with yellow pea pods?
- _____ 18. If this cross produced 800 plants, how many of them are green?
- _____ 19. Give the genotypic ratio of the first filial generation.
- _____ 20. Give the phenotypic ratio of the first filial generation.
- _____ 21. Which parent is purebred?
- _____ 22. Name the recessive trait.
- _____ 23. Give the F_2 genotypic ratio.
- _____ 24. In the second filial generation, how many offspring are purebred?
- _____ 25. In the first filial generation, how many offspring are purebred?
- _____ 26. In the second filial generation, how many offspring are purebred dominant?
- _____ 27. In the second filial generation, how many offspring are hybrids?
- _____ 28. Can the offspring of the F_1 be purebred for a yellow pea pods?
- _____ 29. What percent of the offspring of the F_1 will have green pea pods?
- _____ 30. What is the probability of yellow pea pods in the F_2 ?