Chapter 12 Notes

1. Inheritance of human traits
2. simple dominant traits
3. tongue curling
4. Hitchhiker’s thumb
5. free-hanging ear lobes
6. Huntington’s disease
7. usually causes death
8. deterioration of the nervous system
9. uncontrolled muscle movement., mental decline
10. disease shows itself between ages 30-50
11. if you had children before age 30, you may have passed it on to the children
12. no effective treatment exists
13. recessive autosomal heredity
14. cystic fibrosis
15. most common lethal disorder among white Americans
16. 1 in 20 are carriers; 1 in 2000 children have the disorder
17. thick mucus in lungs and digestive tract; frequent lung infections
18. poor digestion
19. diet, drug and physical therapy have raised life expectancy
20. sickle cell anemia
21. most common among blacks with African ancestors and whites with ancestors from the Mediterranean
22. 1 in 12 blacks are carriers (heterozygous)
23. RBC’s shaped like a sickle instead of an indented donut; may clog blood vessels
24. cells have a short life span and don’t carry oxygen well; person has anemia
25. impaired circulation
26. treatment includes blood transfusions and drug therapy
27. Tay-Sachs disease
28. affects CNS; absence of enzyme required to break down a lipid in the tissues of the CNS
29. build-up of lipid can cause blindness, progressive loss of mvmt., mental deterioration
30. symptoms begin 1st year, death before age 5; no treatment
31. affects Pennsylvania Dutch, Ashkenazic Jews; 1 in 60 carry gene
32. other population; 1 in 100,000
33. PKU (phenylketonuria)
34. absence of an enzyme converting phenylalanine to tyrosine
35. accumulation of phen. ; damages CNS
36. homozygous female can damage fetus with her high levels of phen.
37. healthy infant may be hurt by mother’s milk; cause mental retardation
38. treatment; biochem. Test can detect PKU, and the baby’s diet can be altered until their brain is fully developed
39. Polygenic inheritance
40. height
41. eye color
42. skin color
43. hair color
44. Multiple alleles
45. blood types
46. Sex-linked traits
47. color blindness
48. hemophilia
49. Aneuploidy
50. is the failure of chromosomes to properly separate in anaphase I or II as a result of non-disjunction; results in an abnormal number of chromosomes in daughter cells
51. Down syndrome
52. trisomy of chrom. #21
53. short, mentally retarded, thick tongue, heart prob., vision prob., distinct eye shape
54. Turner’s syndrome
55. XO females; short, lack ovaries and are sterile
56. 1 out of 2000 births
57. Klinefelter’s syndrome
58. XXY males; tall, sterile, long limbs, often retarded
59. 1 out of 500 males
60. XYY male
61. normal, fertile, TALL
62. 1 out of 1000 males