

Key

Part 1

1.
 - c. Homozygous recessive
 - d. Homozygous recessive
 - e. Heterozygous
 - f. Homozygous dominant
2.
 - a. Brown eyes
 - b. Blue eyes
 - c. Brown eyes

Part 3

1.
 - a. Ss x ss
 - b. Filled in Punnett Square
 - c. Filled in Punnett Square
 - d. 1 Ss : 1ss
 - e. 1 smooth : 1 wrinkled
 - f. 25

2 Should have a filled in Punnett Square

- a. 25% or 1/4 or 1:3
- b. 25% or 1/4 or 1:3
- c. 50% or 1/2
- d. 25% or 1/4 or 1:3

3 Should have a filled in Punnett Square and the answer is No

4 Should have a filled in Punnett Square

- a. WW, Ww and ww
- b. 3 Widows Peak : 1 Straight

Part 4

1. Yy x yy
2. Yy x Yy

Part 5

- 1a. 2 Punnett squares should be filled in.
- b. Bb or heterozygous
- c. There were too few offspring to form a conclusion

Part 6.

1.
 - a. **Should have a filled in Punnett Square**
 - b. Round Yellow : Round Green : Wrinkled Yellow : Wrinkled Green
 - c. **3 1 3 1**

2 Should have a filled in Punnett Square

Normal for both : Normal, Galactosemia : PKU; Normal : Have both disorders
9 3 3 1

Part 7

1.
 - a. **Should have a filled in Punnett Square**
 - b. 1 : 2 : 1
rr rw ww
 - c. . 1 : 2 : 1

red : pink : white

2.

3.

- a. **Should have a filled in Punnett Square**
- b. 50%
- c. CC

Part 8

- a. BB or BO
- b. OO
- c. AB

1.

- a. **Should have a filled in Punnett Square**
- b. Type A and Type B blood

2

- a. **2 Punnett squares should be drawn and filled in**
- b. **No**

3.

- a. **2 Punnett squares should be drawn and filled in**
- b. Mr. And Mrs. Smith

Part 9

1.

Nn x NY

- c. **Should have a filled in Punnett Square**
- d. **50%**
- e. **0%**
- c. No
- d. HY x Hh and hY x hh

Part 10

1.

- a. 1. ff 2. ? 3. Ff 4. Ff 5. Ff 6. Ff 7. Ff 8. Ff 9. Ff 10. ff 11. ? 12. ff 13. ? 14. ff
- b. **Ff and Ff**
- c. **No**
- d. **12 is** the grandson of 2

2.

1. bb 2. ? 3. Bb 4. Bb 5. Bb 6. Bb 7. Bb 8. Bb 9. Bb 10. bb 11. ? 12. ? 13. bb 14. ? 15 ? 16. bb

3.

1. nY 2. Nn 3. Nn 4. nY 5. nn 6. NY 7. Nn 8. NY 9. nY 10. Nn 11. NY 12. ? 13. nY 14. ?

4.

1. NY 2. Nn 3. nY 4. Nn 5. NY 6 ? 7. nY 8. Nn 9. nY 10. Nn 11. NY 12. Nn 13. nY 14. Nn 15. NY 16. nn