

Name _____

Date _____

Punnett Squares

| | | | | | |
|-----------------------------------|--------------------------------------|----------------------------|--|-----------------------|--|
| 1. HTxHT | 2. TTxtt | 3. TtxTt | 4. ttxTt | 5. XYxXX | 6. Bbxbb |
| (Heads and tails, like two coins) | Mendel's tall plant and short plants | Mendel's second generation | Test-cross between true short and tall | Male and female cross | Brown-eyed heterozygous with blue eyes |

| | |
|--|--|
| | |
| | |

| | |
|--|--|
| | |
| | |

| | |
|--|--|
| | |
| | |

| | |
|--|--|
| | |
| | |

| | |
|--|--|
| | |
| | |

| | |
|--|--|
| | |
| | |

Part 2: Double Cross! Cross two plants which are heterozygous for height and pea color. (TtYy x TtYy)

- * First, fill in the left side with the same information found at the top.
- * Then, fill in the boxes. The top-left of the child boxes will be TTYy

| | TY | Ty | tY | ty |
|--|----|----|----|----|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Reminder, that tall is dominant over short, and yellow over green.
 Now, shade the squares in as follows:

- Tall and yellow = color it **Red**
- Tall and Green = color it **Green**
- Short and yellow = color it **Blue**
- Short and green = color it **Yellow**

Finally, count the numbers:

Ratios: Red _____ Green _____ Blue _____ Yellow _____