

Unit 8
M&M Activity

Do you think that colors evenly distributed in a package of M&Ms? Do you think the color distribution is consistent from one kind of M&Ms to another?

The following sheets are samples of M&M's that were recently purchased. You will create a two-way frequency table and a two-way relative frequency table to represent the distribution of types of M&Ms and their colors. You will then answer use your two-way tables to answer some questions about the distribution of M&Ms.

Page 3: Peanut

Page 4: Almond

Page 5: Milk Chocolate (plain)

Page 6: Dark Chocolate

Page 7: Mini's

Two-Way Frequency Table

	Red	Blue	Orange	Brown	Yellow	Green	Total
Peanut							
Almond							
Plain							
Dark							
Mini's							
Total							

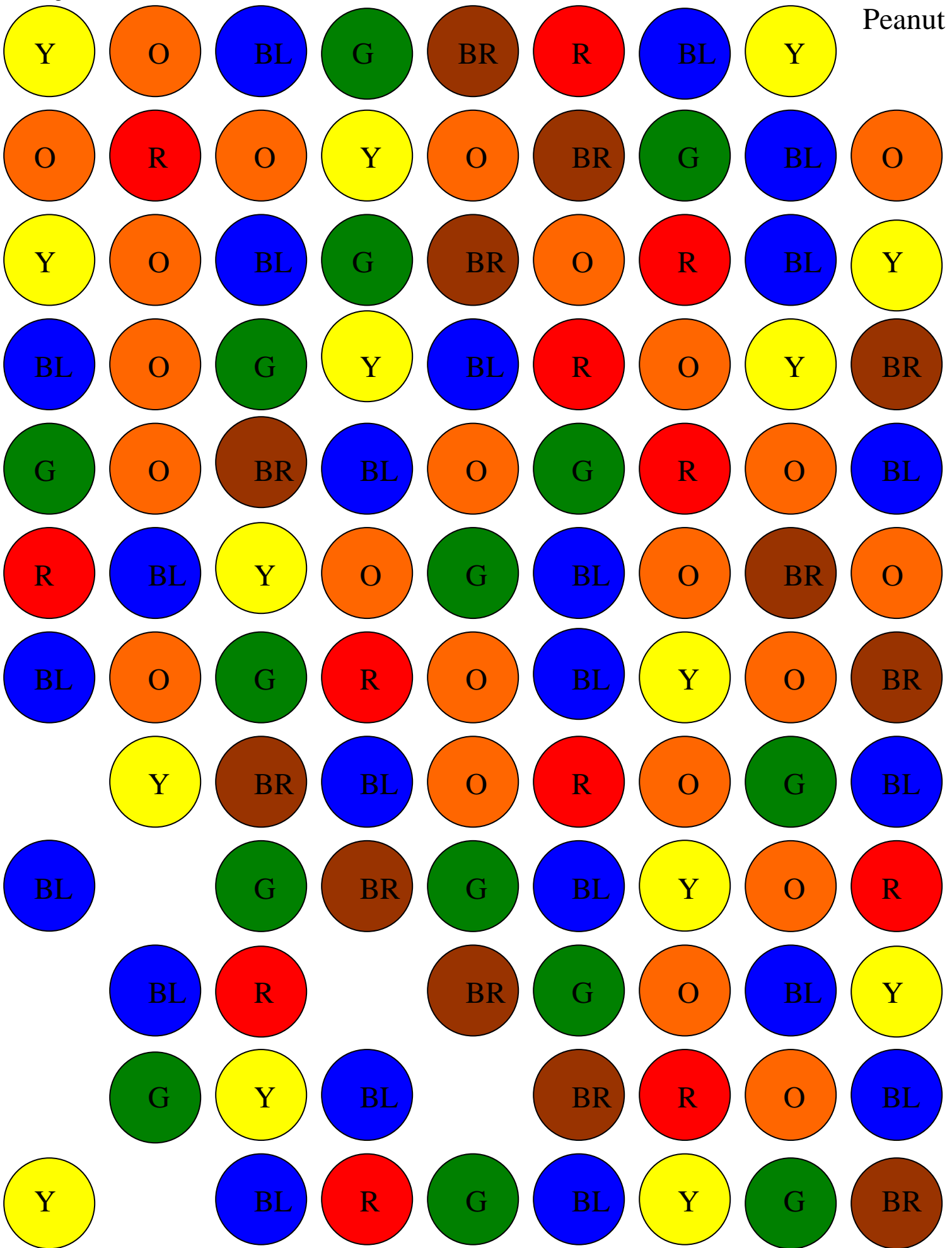
Two-Way Relative Frequency Table

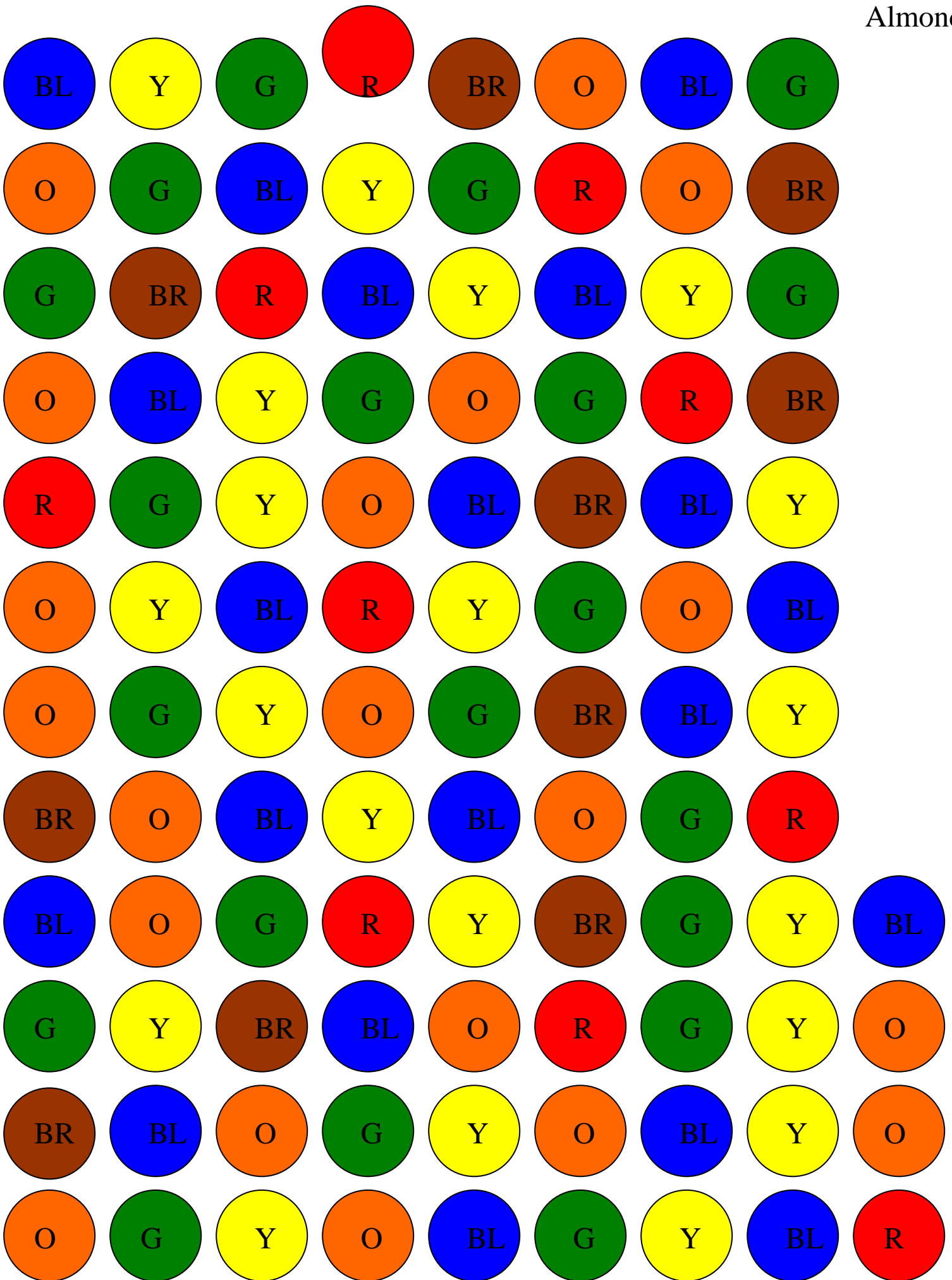
	Red	Blue	Orange	Brown	Yellow	Green	Total
Peanut							
Almond							
Plain							
Dark							
Mini's							
Total							

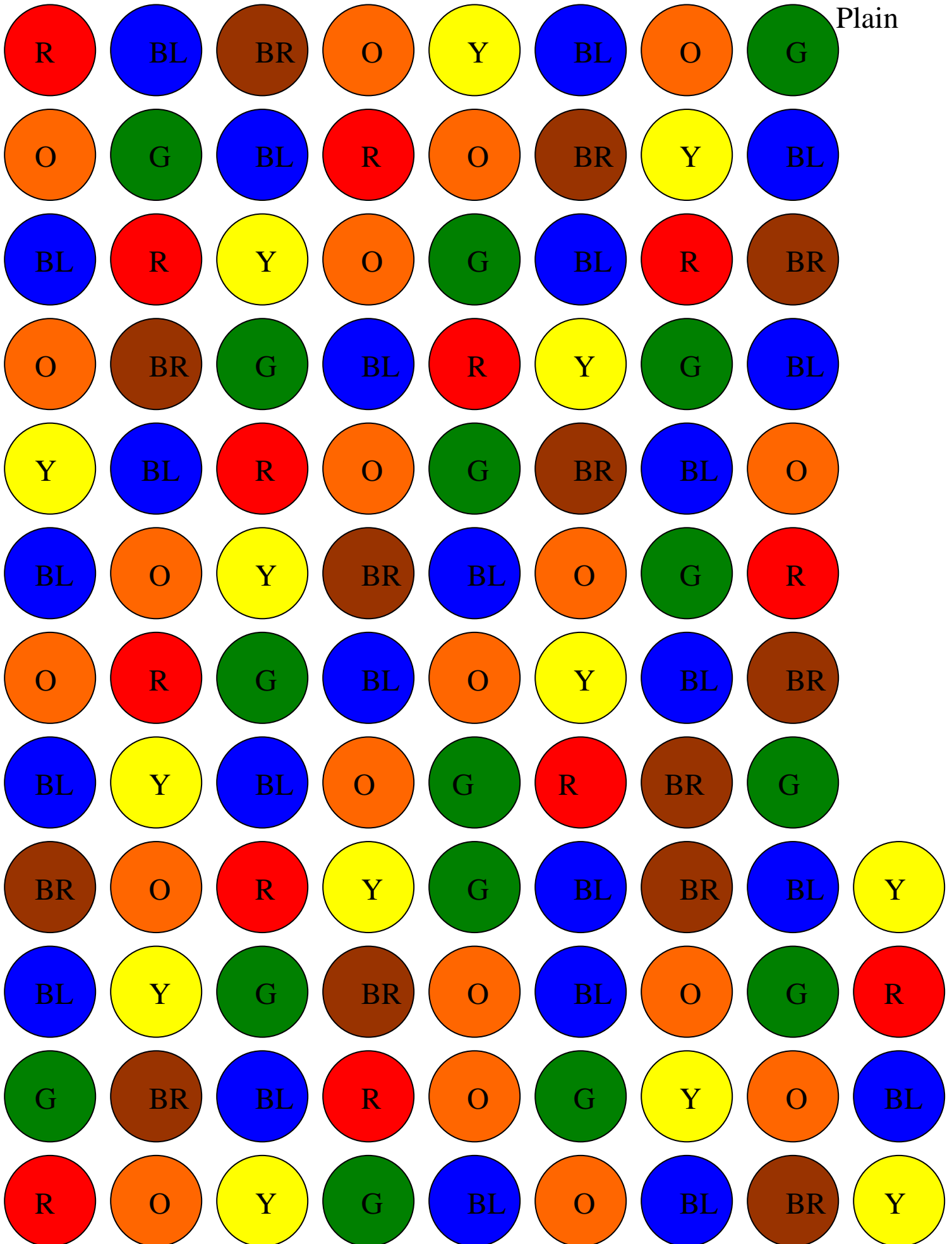
Use the the two-way tables to answer the following questions:

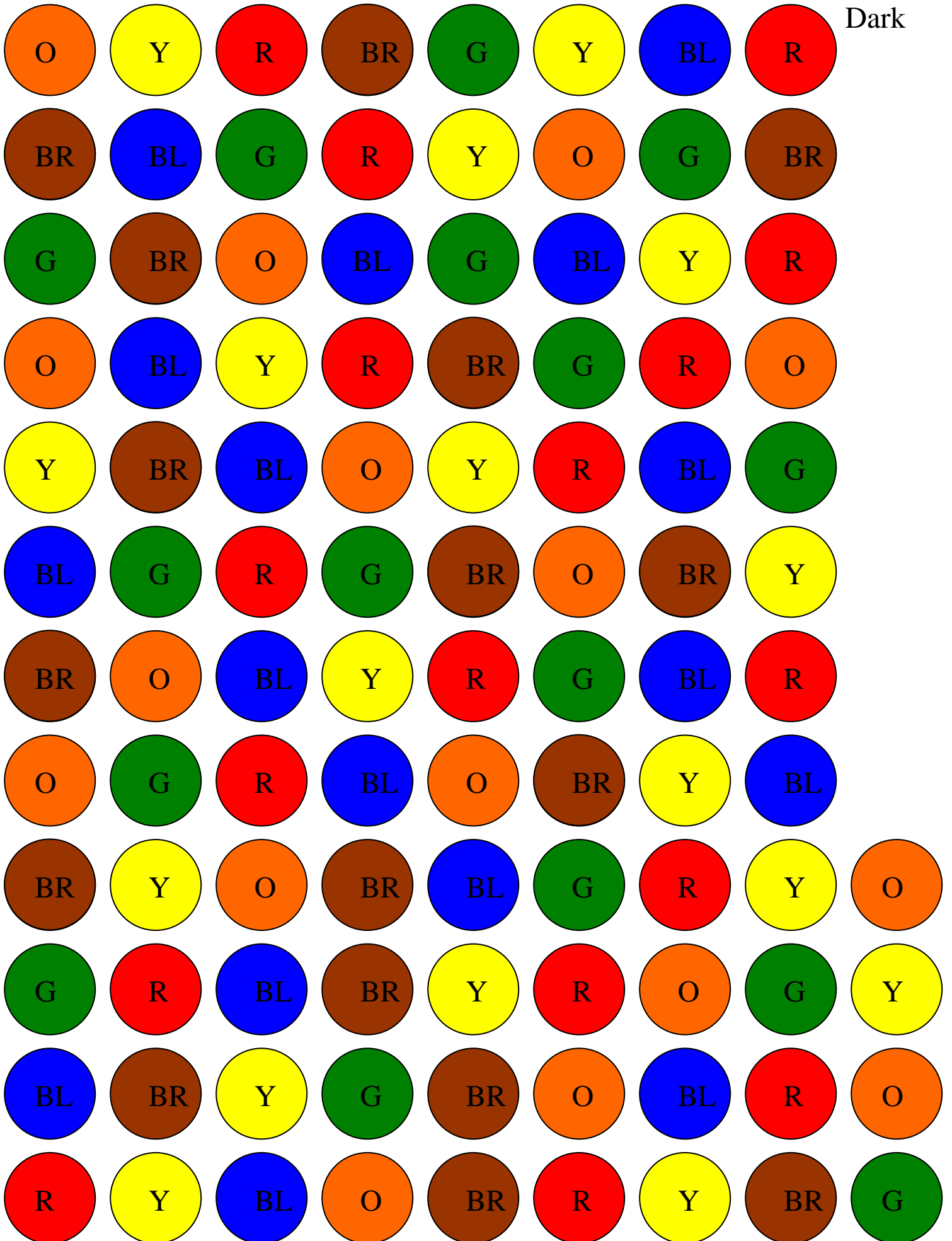
1. How many Dark Chocolate M&Ms were blue?
2. How many M&Ms were yellow and Peanut?
3. How many green M&Ms were there?
4. How many Plain M&Ms were there?
5. What percent of M&Ms were both Almond and Orange?
6. What percent of M&Ms were Minis?
7. What percent of M&Ms were brown?
8. What is the probability that an M&M will be both red and Plain?
9. What is the probability that an M&M will be both orange and Dark?
10. What is the probability that an M&M will be Peanut?
11. What is the probability that an M&M will be green?
12. What is the probability that an M&M will be yellow given it is a Plain M&M?
13. What is the probability that a blue M&M will be Peanut?
14. What is the probability that if an M&M is Mini it will also be orange?
15. Based on the two-way tables, do you believe that colors are evenly distributed in a package of M&Ms? Justify your answer.

16. Based on the two-way tables, do you believe that color distribution is consistent from one kind of M&Ms to another? Justify your answer.









Minis

