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| **Unit 9 Placemat (Foundations skills needed for Unit 9)** |
| **Part I:** **A jar of marbles contains 8 blue, 3 red, 6 green and 1 yellow marble. Determine the probability of the following.**1. P(yellow):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. P(blue) :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. P(green and red) :\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. P(black) :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. P(primary color) :\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | **Part II: You are given a die. Answer the following questions**1. P(number divisible by 2):
2. P(odd number):
3. P(number greater than 6):
4. P( number divisible by 3)
5. P(prime number)
 | **Part III: Complete the chart and answer the following:**

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|  | **Juniors** | **Seniors** | **Total** |
|  **Boys**  | **300** |  |  |
|  **Girls**  |  | **450** |  |
| **Total** | **450** |  | **1150** |

1. P(not girls):\_\_\_\_\_\_\_\_\_\_\_\_
2. P( Juniors):\_\_\_\_\_\_\_\_\_\_\_\_\_
3. P(Freshmen):\_\_\_\_\_\_\_\_\_\_\_\_
4. P(not boys):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | **Part IV**1. **Emily is waiting in line to order her lunch. She must choose a sandwich, side, drink and dessert. There are three types of sandwiches, four different sides, two drink options and 3 types of dessert. How many ways can Emily choose her lunch?**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**1. **You have finally saved enough allowance to by a new pair of sneakers. You can pick either high top or low top, leather, cloth, or suede, shoe strings or Velcro, and either red, blue, green, black or white. How many ways can you design your new shoes.**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
| **Given a standard deck of cards:**1. # of 7’s: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. # of 8’s : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. # of 9’s: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. # of 10’s : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. # of Jacks: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. # of Queens: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. # of Kings: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. List the face cards: : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. $2g\left(g+1\right)=7g-2$
10. Total # of cards \_\_\_\_\_\_\_\_\_\_\_\_\_
11. # of Suits: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Name the suits: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. # of Aces:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. # of 2’s: : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. # of 3’s: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
16. # of 4’s: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
17. # of 5’s: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
18. # of 6’s: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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