**Rules of multiplication and addition practice problems**.

For each problem state which rule applies and show your working.

1. What are the odds of you having 5 children, all boys?

2. If you flip 4 coins, what is the likelihood of you rolling 4 tails?

3. If you roll 6 dice, what is the probabilitiy of you rolling a 1, a 2, a 3, a 4, a 5 and a 6?

4. What is the probability of you picking an ace out of a deck, returning it to the deck and then picking a 5 out of the deck?

5. In a cross between 2 pea plants heterozygous for flower color (Pp), what is the probability that their offspring will be homozygous recessive?

6. In a cross between AaBbCc x AaBBCC, what is the probability that the offspring will be AaBbCC?

7. What is the probability of rolling a 1 or a 6 on a dice?

8. What is the probability of picking an ace or a queen out of a full deck?

9. In a cross between 2 pea plants heterozygous for purple flower color (Pp), what is the probability that their offspring will be heterozygous?

10. In a cross between AaBbCc x AaBBCC, what is the probability that the offspring will be AABbCc or AABBCC?