## Practice Problems: Probability

1. A coin is tossed 1000 times with the following frequencies:

Head: 445, Tail: 555
When a coin is tossed at random, what is the probability of getting (i) a head? (ii) a tail?
2. A die is thrown 100 times and outcomes are noted as given below:

| Outcome | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 21 | 9 | 14 | 23 | 18 | 15 |

If a die is thrown at random, find the probability of getting a/an
(i) 3
(ii) 5
(iii) 4
(iv) Even number
(v) Odd number
(vi)Number less than 3
3. A box contains two pairs of socks of two colours (black and white). You have picked out a white sock. You pick out one more sock with your eyes closed. What is the probability that you will make a pair?
4. Two coins are tossed simultaneously 500 times, and the outcomes are noted as given below:

| Outcome | Two Heads (HH) | One Head (HT or TH) | No Head (TT) |
| :--- | :--- | :--- | :--- |
| Frequency | 105 | 275 | 120 |

If same pair of coin is tossed at random, find the probability of getting (i) Two heads (iii) One head (iii) No head.
5. There are 10 marbles in a box which are marked with distinct numbers from 1 to 10 . A marble is drawn randomly from the box. What is the probability of getting a prime numbered marble?
6. A dice is rolled. What is the probability of getting an even prime number?
7. Find the probability of drawing a red face card from the well shuffled deck of 52 cards.
8. A coin is tossed 100 times and head is obtained 56 times. What is the probability of getting a tail.
9. A bag contains 20 green balls, 15 red balls and 5 blue balls. If a ball is drawn at random from the bag, what is the probability of getting neither red nor blue ball?
10 . What is the probability of getting a red card from the well shuffled pack of cards?

