

**National Institute of Open Schooling (NIOS)**  
**Senior Secondary Course**  
**Lesson – 18: Random Experiments and Events**  
**Worksheet -18**

1. A box contains 1 red and 3 identical white ball. Two balls are drawn at random succession without replacement. Write the sample space for this experiment.
2. A coin is tossed and then a die is thrown. Write the sample space for this experiment.
3. Out of 5 players X, Y, Z, P and Q, two players are to be selected for the match. Write the sample space for experiment.
4. Differentiate between independent and dependent events with appropriate examples.
5. A coin is tossed and then a die is thrown. Write the sample space for this experiment.
6. Three coins are tossed. Describe the following
  - (i) Two events which are mutually exclusive.
  - (ii) Three events which are mutually exclusive and exhaustive.
7. A coin is tossed two times. Find the total number of elementary events and total numbers of events associated with the random experiment.
8. Differentiate between an elementary event and a compound event. List out two examples from each event.
9. A die is thrown: Describe the following events:
  - (i) A: number less than 7
  - (ii) B: a multiple of 3
  - (iii) C: a number not less than 3
10. If three dice are thrown together. How many outcomes would be the sample space? Identify the events when all dice come up with same number.