

## Sample Spaces

### What is a Sample Space?

The sample space of an experiment is the set of all possible outcomes.

**EXAMPLE:** Tossing a coin once has a sample space of {H, T}.

**Instructions:** Find the sample space for the experiments below.

**Note:** Use tree diagrams to help you find the sample spaces.

1

Three discs are numbered 1, 5 and 10.  
Two cards are numbered 1 and 2.  
A disc and a card are randomly selected.

2

A single 6-sided die is rolled with numbers from 1 to 6.  
A red or black ball is selected with equal chance.



3

Sarah arrives at the soccer game early, on time or late.  
Sarah tries to score a soccer goal.

4

A coin and a single 6-sided die are rolled.

5

A three-course meal is chosen.

**Entrees:** prawns, bread and chips

**Mains:** chicken, beef and lamb

**Desserts:** cake, pie and fruit