

# Sample space, events & tree diagrams

If we want to learn something about a random phenomenon we can collect observations or conduct an experiment on that phenomenon. The following two videos present the key terminology relating to this activity. They also explain how to use a tree-diagram to organise your thoughts and subsequently keep track of the observations when conducting such an experiment.

The first video explains that all the possible outcomes for the experiment form the so-called **sample space**, and that elementary or combined outcomes in the experiment are called **events**. It shows how all events can be organised in a **tree-diagram**, which helps to understand how events relate to each other. At the same time it provides a clear structure to **quantify** the **probabilities** relating to each of these events. The various probability calculations that can be conducted with support of a tree-diagram are further explained in the second video.

