

**First Task: Setting the scene.**

- 1) Have students run around the class shaking hands with each other, and keeping track of who they have shaken hands with.  
  
(pen and paper can be helpful for keeping count).
- 2) Re-group. Have students each count how many different people they shook hands with.  
  
(keep their numbers secret!)
- 3) Ask the class: what is the chance that two of you have shaken the same number of hands?
- 4) Wait for all guesses, then start counting off numbers:  
  
anyone shake zero hands? One other person? Two other people? ... until you get two students put their hands up at the same time.
- 5) Repeat 1-4.
- 6) Break into smaller groups. Have them guess the likelihood of a match and repeat the experiment.