# Basic statistics - Correlations

In this workshop, we will learn about correlations. Correlations allow us to tell whether two things are related to each other.

1. With that in mind, which of the following questions could you use a correlation to answer:
   1. Are dogs taller than cats?
   2. Are there more dogs in the UK than Cats in the UK?
   3. Does the height of a dog predict its weight?

To answer the question above, please go to

<https://some-open-solutions.github.io/classroom-tracking/student.html?question_sheet=1sM9jD6Pe9fkXw9mn_vj-4D-lw1c6BPSNXeP0yVPiHcg&response_sheet=1mP1KPKptbeLn_6vpFOipmS6BNGG9zlBkHWt1kc966XY&script_url=https://script.google.com/macros/s/AKfycbzg2JLPy0-yrYAwnPRAdlCF4Wn2_2Nu8sHjuS7bf68njHDWOtA/exec>

Bar charts help us identify if there’s a difference between groups. Frequency tables count how many people are in different conditions. Scatterplots help us identify if two variables predict each other.

1. What type of figure would you use to represent a correlation?
   1. Bar chart
   2. Frequency table
   3. Scatterplot

Bar charts are good ways of representing t-tests. Frequency tables are good ways of representing Chi-Square tests. Scatterplots can be used to represent Pearson R or Spearman’s Rank tests.

1. What type of tests would you use to see if the correlation is significant?
   1. T-test
   2. Chi-Square test
   3. Pearson or Spearman’s Rho

If you haven’t already, to answer the question above, please go to

<https://some-open-solutions.github.io/classroom-tracking/student.html?question_sheet=1sM9jD6Pe9fkXw9mn_vj-4D-lw1c6BPSNXeP0yVPiHcg&response_sheet=1mP1KPKptbeLn_6vpFOipmS6BNGG9zlBkHWt1kc966XY&script_url=https://script.google.com/macros/s/AKfycbzg2JLPy0-yrYAwnPRAdlCF4Wn2_2Nu8sHjuS7bf68njHDWOtA/exec>

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