1. Preliminary statistical analysis
   1. Can you count something interesting?... Yes.
      1. “result” (numeric) - result of each chemical test
      2. “sample.sampleDateTime” (date) – date of each sampling point
      3. “determinand.label” (categorical) – type of chemical test performed on sample
      4. “sample.sampledMaterialType.label” (categorical) – the type of source this sample was taken from
      5. “sample.samplingPoint.easting” (numeric) – easting
      6. “sample.samplingPoint.northing” (numeric) – northing
   2. Can you find some trends?... Some, but not very strong correlations.
      1. As expected, average water temperature increases in summer
      2. Solids suspended in water at 105C slightly increases in winter
      3. Amount of oxygen dissolved in water slightly has a slight peak in April-June.
      4. Some sample material types have much greater variance in result value than others
   3. Can you make a bar plot or histogram?... Yes (but not as meaningful as scatter).
      1. x-axis can be sample material types (categorical variable), with y-axis as the testing result, giving a visual comparison of how different material types have different testing results.
   4. Can you compare two related quantities?... Yes.
   5. Can you make a scatter plot?... Yes.
      1. Option 1: result vs. time, for each test type and testing material type.
      2. Option 2: geographical plot using easting and northing
   6. Can you make a time-series plot?... Yes
2. Conclusions
   1. Insights, interesting correlations
      1. Many testing results are affected by the time of year the sample is taken
      2. Variance of testing results are greater for some sample material types more than others.
   2. Potential future investigations
      1. What locations have the most and least clean water? This can be done by correlating different testing results to easting-northing coordinates and creating a heat-map to display areas with clean/dirty water.