**FIELDWORK ACTIVITY: WATER QUALITY**

Visit a local waterway near your school. Measure water temperature, acidity/alkalinity, and phosphates in samples from several different locations.

You will need:

* Thermometer
* pH test kit
* Phosphate test kit
* Lead pencil
* Blank paper

Create a table in your exercise book similar to the one below:

|  |  |  |  |
| --- | --- | --- | --- |
| Location and brief description | Temperature | Acidity/Alkalinity | Phosphates |
|  |  |  |  |
|  |  |  |  |

**Using the pH test kit:**

To determine the acidity or alkalinity place a testing strip into the water sample. The strip will change colour. Compare the strip to the colour chart to determine the pH (exact testing procedure may vary slightly depending on the type of kit you use – follow the instructions on your kit).

**Using the Phosphates test kit:**

Add about 6 drops of the testing solution bottle 1 to about 5ml your water sample. Shake vigorously. Add 6 drops of testing solution bottle 2 and shake again. Wait about 3 minutes and the water will change colour. Compare the colour of the sample to the chart to determine phosphate levels. Phosphate is measured in parts per million (ppm), (exact testing procedure may vary slightly depending on the type of kit you use – follow the instructions on your kit).

**Analysis:** Try to determine the human activities which would impact on water quality in your area. How would these activities influence temperature, pH and phosphate levels?