***What is pH and how do we measure it?***

Aim: To use a range of indicators to measure pH.

Starting questions to get you thinking:

1. What does pH measure?
2. How do we measure pH?
3. What substances have high and low pH?

Materials:

* Range of indicators (see results table).
* Variety of liquids to test: seawater, tap water, coke, milk, soda water, lemon juice, vinegar, milk of magnesium, laundry detergent.

Method:

1. Test each solution using each type of indicator.
2. Record results in a table (colour, pH number).

Results:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Substance | Red litmus | Blue litmus | Universal paper | Universal indicator | Special indicator  6.4 - 8 | Special indicator 9 - 13 |
| Seawater |  |  |  |  |  |  |
| Coke |  |  |  |  |  |  |
| Vinegar |  |  |  |  |  |  |
| Milk of Magnesia |  |  |  |  |  |  |
| Laundry detergent |  |  |  |  |  |  |
| Lemon juice |  |  |  |  |  |  |
| Soda water |  |  |  |  |  |  |
| Milk |  |  |  |  |  |  |
|  |  |  |  |  |  |  |