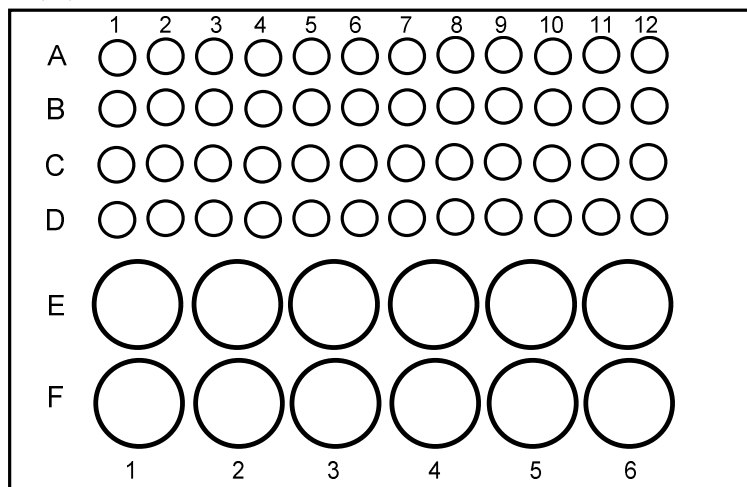
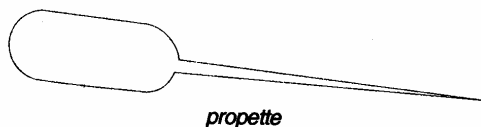


What is the pH of different household substances?

Apparatus required



microspatula



propette

METHOD

You are going to find the pH values of some household substances using Universal Indicator (U.I. for short). You will be testing the liquids and solids in the wells of the Comboplate.

Instructions (procedure)

1. You can store some U.I. and distilled water in some of the larger wells. For example, you could use wells E1 and F1.
2. If the substance is a liquid use your 'Propette' and put five drops of it into one of the wells.
3. Record the number of the well and the name of the substance.
4. Now add 2 drops of U.I. to the substance and record the colour in your results table.
5. If the substance is a solid, take the 'Microspatula' and using the thin end add a small amount to one of the wells. Add 5 drops of water to this substance.
6. Once again add 2 drops of U.I. to the substance and record the colour in your results table.
7. At the end of the experiment wash your apparatus with plenty of water.

Results and conclusions

Fill in the table below to show your results

Household substance	Colour of Universal indicator	pH	Chemical nature

Questions

- Why is it difficult to find the exact pH of the substance using Universal Indicator?

- What do you notice about the pHs of the substances that are used for shampoos or body lotions?

Explain why you think this is important.

- What do you notice about the pHs of the substances that are used for cleaning?

- Draw the hazard symbols that you would use for the following substances
a) battery acid b) window cleaner