

Acids and bases II

This task is about acids and bases.

The pH of a substance indicates whether it is acidic, basic, or neutral:

- Acidic substances have a pH of less than 7.
- Neutral substances have a pH of 7.
- Basic substances have a pH greater than 7.

Using the table of pH values below, answer the following questions.

Substance	pH
lemon juice	2
vinegar	3
milk	7
tap water	7
baking soda	9
milk of magnesia	11

a) i) Wasps stings are basic.

Name **one** substance from the table you would apply to a wasp sting to make it less painful.

ii) Why did you choose this substance?

b) A white substance is found on some nails in the garage. You scrape a little bit off and find its pH to be 8.

Name **two** substances from the table you could use to remove the white substance from the nails.

1.

2.

c) If the concentrations and volumes are equal, a **basic** substance will an **acidic** substance when they are **mixed** together, and the new substance will have a pH of 7.